A Shifting Stance

Erich Robert Paul. *Science, Religion, and Mormon Cosmology.* Urbana: University of Illinois Press, 1992.

Reviewed by David H. Bailey, a computer scientist at NASA Ames Research Center in Mountain View, California.

THIS IS NOT JUST ANOTHER BOOK ON science and Mormonism. Mercifully absent, for example, are inconclusive and dubious attempts to harmonize different scriptural versions of the Creation with each other and with modern scientific research. Also absent are attempts to apologize for various LDS doctrines in light of trendy scientific theories.

The premise of this book is that Mormonism from its inception has not only distanced itself from mainline Catholic and Protestant movements in classical areas of doctrine, such as the nature of God, the fall of Adam, and predestination, but it has also fashioned a unique, positive scientific philosophy, in keeping with the best tradition of Greek rationalism. The author proceeds to discuss this philosophy in an ambitious and authoritative work.

From our modern perspective, where most mainline Christian churches have made their peace with modern science, it may be difficult for us to appreciate fully the freshness of the approach taken by early LDS writers. Largely for this reason nineteenth-century Mormonism was free of the strife between science and religion that marred other movements of the time. Typical of nineteenth-century LDS writers was George Reynolds, secretary to the First Presidency, who wrote in 1882, "[T]he Bible . . . was not written to teach men science by scientific methods," and another writer who declared, "[T]rue science is as divine in its sphere as religion." A third progressive thinker was B. H. Roberts, one of seven presidents of the Seventy, who noted that the name "Adam" means "many" and then argued that pre-Adamites implied in the theory of evolution could be comfortably accommodated in LDS thought.

Robert Paul describes the intellectual environment of Joseph Smith's time, pointing out that the country was alive with discussions about a plurality of gods. Many were discussing Thomas Paine's challenge to Christianity: "From whence, then, could arise the solitary and strange conceit that the Almighty, who had millions of worlds equally dependent on his protection, should quit the care of all the rest and come to die in our world, because, they say, one man and one woman had eaten an apple? And, on the other hand, are we to suppose that every world in the boundless creation had an Eve, an apple, a serpent, and a redeemer?"

On page 113 Paul summarizes the themes of early Mormon science. These include notions that matter is eternal, that millions of worlds are needed for God's offspring, that there is a hierarchy of gods and a corresponding hierarchy of worlds, that Kolob is the central controlling sphere, that every world needs

an Adam and a redeemer, that resurrected humans will minister to other worlds, and that there is communication among worlds. Paul documents in detail how these and other concepts were taught by nineteenth-century church leaders, including Brigham Young, Parley P. Pratt, Orson Pratt, B. H. Roberts, James E. Talmage, Joseph F. Merrill, John A. Widtsoe, and Richard R. Lyman. Paul, for perhaps the first time in modern LDS literature, describes in detail Orson Pratt's scientific writings, including his "law of planetary motion" and his book *Key to the Universe.* Pratt's mathematical writings on the solution of cubic and quartic are also mentioned.

Paul then discusses changes in the LDS philosophy of science during the twentieth century. Beginning with the First Presidency's "Origin of Man" statement in 1909, LDS leaders started to withdraw not only from their earlier free-wheeling speculations but also from their generally positive stance toward secular science. This trend intensified with publication of Joseph Fielding Smith's book, *Man: His Origin and Destiny,* and with the incorporation of this literalist philosophy in Bruce R. McConkie's popular *Mormon Doctrine.* Paul also describes material in recent LDS Church Education System manuals that favors a 7,000-year age of the earth and questions the scientific age of 4.5 billion years.

Paul is quite direct in stating the dangers of such teachings. Not only does this philosophy run afoul of increasing well-established scientific results, but "when neoliteralist Mormons adopt these ideas, they must realize they place themselves squarely into the evangelical Christian camp." One positive development mentioned by Paul is a 1987 *Ensign* article by Morris Petersen, professor of geology at Brigham Young University, on fossils and the age of the earth.

One final topic Paul deals with is the search for extraterrestrial life (SETI) and the anthropic principle of cosmology. Many scientists have speculated on these topics, of course, but recently NASA has initiated a serious effort to search the radio frequency spectrum for signals from distant intelligent societies. Paul discusses in detail, again probably for the first time in LDS literature, the Drake equation that estimates the probability that life exists elsewhere in our galaxy. Paul mentions how scientists, once optimistic about such a possiblity, are now increasingly pessimistic or at least neutral. Paul points out that if SETI explorations continue to come up empty-handed, this may pose a serious problem for Mormon cosmology which has embraced pluralism in such an essential way.

Paul concludes that Mormonism needs to divest itself of any obligation to natural theology: "Properly conceived, science is not, and should never become, an intellectual partner of theology—including Mormon theology. . . . One can say that genuine faith can only be sustained outside the dimension of historical and scientific evidence."

If there is a weakness in Paul's book it is that it understates the strength of the current neoliteralist movement in the LDS church. In my opinion, this trend deserves more attention than Paul has devoted to it. For if it continues much of the discussion in Paul's book may be moot. In addition, many young LDS scientists who already experience a degree of pain and ostracism for their scientific beliefs may be further marginalized by the church. Finally, the church may lose credibility among educated people generally.

One example of this modern-day

literalism is Boyd K. Packer's 1988 talk at Brigham Young University entitled "The Law and the Light." In this speech, Elder Packer stakes out a position sharply opposed to certain fields of modern science, such as evolution. Although the published version of this speech is prefaced by a clearly worded disclaimer, it is being cited by some as justification for an antagonistic stance toward modern science. In Paul's book, this influential talk was given only fleeting mention in a note.

In spite of this, *Science, Religion, and Mormon Cosmology* is a much needed and very well executed piece of modern Mormon scholarhip. I heartily recommend it for thinking Latter-day Saints.

A Question of Perspective

Marjorie Newton. *Hero or Traitor: A Biographical Study of Charles Wesley Wandell.* Independence, MO: Independence Press, 1992.

Reviewed by Lance D. Chase, professor of history, Brigham Young University—Hawaii.

MARJORIE NEWTON'S 60-PAGE BIOGraphy of Charles Wesley Wandell, *Hero or Traitor,* inaugurates the John Whitmer Historical Association's scholarly monograph series. Those who have read her prize-winning *Southern Cross Saints: The Mormons in Austrailia* will be especially interested in Wandell who could be considered a founder of both the LDS and RLDS churches in Australia and the RLDS church in Tahiti.

Born in 1819, Wandell joined the LDS church in New York in 1837. He served as a Mormon missionary and in the church historian's office in Nauvoo, Illinois. When the majority of Saints went west after Joseph Smith's death, Wandell remained behind, becoming inactive in the church. By 1849 he was in California where he renewed his Mormon church activity. Two years later he and John Murdock opened Australia to Mormon missionary work, and by 1853 Wandell led the first group of Australian Saints to Utah. He lapsed again into inactivity upon his return to California but later filled positions of responsibility in the LDS church. He subsequently lived in Beaver, Utah, and Pioche, Nevada, by which time he was again inactive in the church. He then moved to California where by March 1873 he had begun his association with the RLDS movement. The following November he and missionary companion Glaud Rodger sailed for Australia, stopping in Tahiti where they converted apparently abandoned LDS members to the RLDS church before continuing their work in Australia in 1874. By March 1895 Wandell was dead and his body was buried in Sydney.

While Newton was hampered by a lack of primary documents on Wandell—his journals were lost in a fire—her careful work is in evidence. She uncovers discrepancies pertaining to Wandell in the work of Juanita Brooks and Robert Cleland and discusses Wandell's own inconsistencies in his attempts to explain his disaffection from the RLDS church. "Minor character"