



Book Reviews



FAITH & SCIENCE

GOD FOR THE 21ST CENTURY by Russell Stannard, ed. Philadelphia: Templeton Foundation Press, 2000. 194 pages. Paperback; \$12.95. ISBN: 1890151394.

This book contains very short summary-length papers (three to five pages each) from fifty contributors. They are gathered into eleven groupings on important topics: Origins; The Universe as a Home for Life; Evolutionary Biology; Life in the Universe; Genes and Genetic Engineering; Faith, Medicine, and Well-being; The Mind; Personhood and the Soul; Quantum Physics and Relativity; Limitations to Science; Science/Religion Dialogue.

Under these categories, a wide variety of interesting material is available. Many of these provide informative summaries and short arguments about current discussions and debates. For example, ASA Fellow Owen Gingerich, professor emeritus of astronomy and the history of science at Harvard University, recounts arguments about the Big Bang and the possibility that it “spawned a vast number of sister universes.” Some argue that in the “multiuniverse model,” humans find themselves in the one universe that just happens to be right—accidentally right—for intelligent life. Atheists argue that such an accidental home among so many possibilities does not count as evidence for God’s creativity or providence. But Gingerich notes there is more that needs to be said.

The theists point out that any other such universes would be forever invisible. We could only accept them on faith because there would be no possible way to observe them. So, say the theists, everyone must accept something on faith, and it’s an interesting choice to make (p. 20).

As with this example, many contributors took complicated discussions and cut through stacks of books and articles to lay before us the basic arguments in very readable, understandable language.

Here is another example. Writing on the human genome project, ASA Fellow Elving Anderson, professor emeritus of genetics at the University of Minnesota, discusses the question of determinism. Is it possible that humans and human behavior are solely determined by their genes? Such claims are sometimes made.

Several lines of evidence, however, contradict these claims. For a start, complex adaptive systems (including those formed by genes) are not fully predictable, even in principle. Identical twin pairs do not show identical behaviors. Furthermore, genes always act within a context, so that gene discovery and the development of effective treatments require a careful examination of the whole individual” (p. 81).

Most of the contributions were from scientists and theologians, scholars and educators, people of solid

achievement in their field of study. Their short contributions are reliable and fit well into the book. Most but not all. A couple of the contributions seemed second rate and not worthy of inclusion. For example, Barbara Smith-Moran, of Boston Theological Institute, writes:

Could it be that God and people coevolved? ... The coevolution of orchids and bees suggests that God and people might be creators of each other. Neither would have a monopoly on the creative power ... God and people have a need for each other (p. 53).

Something more is needed to make this coherent. Did God exist before humans were created, or is God a mere projection of human imagination? What does it mean to create? Should we distinguish between the God who actually exists and changing human perceptions of God? As the article stands, there is such looseness in language and logic that it makes serious ontological discussion about God rather difficult.

Be that as it may, the overall quality of the majority of contributions is very good. They present important aspects of the interrelationship between science and religion. I find this book to be helpful on the level of presenting good, short overviews of current discussion. Relevant books by the contributors are noted along with biographical information at the end of each piece, which is helpful to any who may want to read more on that subject. Not every piece will appeal to every reader, but among the various chapters there are some real gems. My one wish is that some of these gems were longer and came with extended bibliography.

Reviewed by Mark Koonz, Emmanuel Lutheran Church, Walla Walla, WA 99362.

JACOB’S MIRROR: A Reconciliation of Science and Religion by Bill McKee. Philadelphia: Xlibris Corporation, 2006. 48 pages. Hardcover; \$20.00. ISBN: 142723276. Paperback; \$10.00. ISBN: 142723268.

Bill McKee is a 1974 graduate of the University of Texas School of Law and currently practices law in San Antonio, Texas. He is the author of “A Test of the Scientific Method” (*Philosophy of Science* 69 [September 1993]: 469).

This book is a third edition. The previous editions were published under the title *Is Objectivity Faith? A Reconciliation of Science and Religion* (Kearney, NE: Morris Publishing, 1995, 1997). The current edition is very similar to the first edition except for the deletion of three chapters that were in the first edition: “The Nature of God,” “The Nature of Ethics,” and “There is No Evil.”

Although there are a total of forty-eight pages, the book has only about sixteen and one-half pages of text plus six pages of notes and a one and one-half page bibliography. There is no index. In fact, the author covers at least 30% of the book in his four-page summary on the Internet at www.jacobsmirror.com.

The author’s thesis is that science and religion cannot both be correct. He states:

If the universe originated in the Big Bang, with stars and planets slowly coalescing from the dust of the explosion, and life arising and evolving from the

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brew, then we humans are nothing more than late-arriving accidental products of physical and chemical processes. We are not children of God (p. 12).

It seems to me that this statement ignores the possibility that God could have guided the process. The author then states:

... if religion is right, then science must be mistaken. If prayers are ever answered, then events are not at the mercy of objects. If God's hand is at work in the world, then the world cannot be fundamentally physical. Physical laws that are contingent on the will of God are not laws ... I came to believe that science must be flawed because it cannot account for the ability of faith to manipulate events (p. 12).

The author's solution is to "question a most basic scientific assumption: that the universe exists external to and independent of us. I don't think it does."

The author's hypothesis is "that the perception of externality, that the world is external to and independent of us, is merely the subjective reflection of our original sin, the preconception of autonomy, what we call the ego" (p. 33).

The author then offers three reasons for challenging externality: (1) a thought experiment (chapter 4): "the ability of an internal act of faith to change the seemingly external world would prove that the world was not external," (2) personal experience (chapter 5): solving problems by means of faith has worked better for the author than solving problems by acting on them, and (3) testimony of the mystics (chapter 6), in which the author quotes Joel Goldsmith (a Christian Scientist), Franklin Merrell-Wolff (a Hindu), the Upanishads, Krishna, Sankaracharya, and Lao Tsu, in addition to Meister Eckhart, Jacob Boehme, and St. Teresa of Avila.

The author's conclusion (chapter 7) is that "faith would not work if the world were external ... Thus, we can reconcile science with religion by renouncing science's allegiance to externality."

It seems to me that unless the reader is willing to accept assumptions like "science must be flawed because it cannot account for the ability of faith to manipulate events," this book does not add much to the study of the relationship of science and religion.

Reviewed by Paul R. Bruggink, 143 Hummingbird Lane, Clarington, PA 15828.

EDEN'S GARDEN: Rethinking Sin and Evil in an Era of Scientific Promise by Richard J. Coleman. Lanham, MD: Rowman & Littlefield Publishers, 2007. 301 pages. Paperback; \$26.95. ISBN: 074255239X.

Coleman is a retired minister in the United Church of Christ. He is a graduate of Johns Hopkins University, Princeton Theological Seminary, and a participant in the pastor-theologian program sponsored by the Center for Theological Inquiry in Princeton, New Jersey. His book is an attempt "to restore some sanity to what otherwise is a future seen through rose-tinted glasses. As such, the book is a theological gloss on the posthuman debate about the nature of being human" (Foreword).

As the book's subtitle suggests, Coleman is interested in the meanings of sin and evil in an increasingly materialistic and science-driven society. After a short introduction, the book's content is divided into three parts. The first and third parts of the book deal with science's meteoric rise and future trajectory, respectively, while the second part is a meditation on sin. Embedded in the center of the book is an exposition of Genesis 3, though Coleman freely admits his concerns are sociological and theological, not exegetical.

In Part 1, the author focuses on "how the creators of knowledge too powerful to be ignored become the engineers of knowledge too good not to be ignored" (p. 2). Using Oppenheimer as a case study, Coleman traces the beginnings of the military-industrial complex in the mid-twentieth century. While he recognizes a certain amount of presumption in his judgment, he nevertheless labels the Manhattan Project as the stirrings of sin in the professional scientist. The close of World War II brought a newfound political importance to scientific questions, which resulted in the creation of Big Science under the aegis of Vannevar Bush. Coleman views that nascent alliance between science and the commonwealth as potentially hazardous, however inevitable it may have been.

From the atomic bomb, the author turns his attention to biotechnology as the new threat, where the public expects returns from their significant investment in science without due regard for the social consequences of such returns. He is (justifiably, in my view) concerned about the potential social and ethical consequences of blithely employing stem cells, cloning techniques, genetic screening and "enhancement," and behavior-altering pharmaceuticals. His treatment of this material is somewhat desultory but suitably wide-ranging; and it is peppered with helpful literary examples, from several genres, of the fruits of technology gone amok.

Yet Coleman seems even more alarmed at the emergence of public-private partnerships and university technology transfer offices. This is a persistent and recurring theme in the book: in Part 3, he yearns for the day when "the communal sense of ownership is restored and the eroding nature of market forces is countered" (p. 261). While he cites the false demarcation of basic and applied science, as well as long tradition of patronage in science, as evidence against his naiveté, I am not convinced. His view of the days prior to Big Science seem romanticized, a halcyon world of disinterested "pure" scientists and ingenious lone inventors. If the intrusion of private funds into medical research is to be resisted on moral grounds, a comprehensive discussion should also consider the moral argument for the enormous regulatory hurdles on the results of such research. Coleman's discussion is thus incomplete on this point.

Coleman is at his best in Part 2, an insightful treatise on the past (evolution), present, and future of sin. In his view, the Fall is to be understood as "the prototypical act of overreaching" (p. 25); he points out that Adam and Eve must have already had some capability to make good or bad decisions, else the snake's offer would be futile. Sin, then, is the deliberate transgressing of boundaries set for us. It is original because we have the capacity to transgress those limits, and the atrocities and humanitarian disasters of the past century clearly assert sin's relevance even

today. As we make the world in our own image with the tools of science, Coleman holds that we have a duty to individually and corporately guard these limits. My summary cannot do justice to his profound argument, so I would recommend this book to anyone who desires to better understand that duty.

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HISTORY OF SCIENCE

MYSTERIES OF THE MIDDLE AGES: The Rise of Feminism, Science, and the Arts from the Cults of Catholic Europe by Thomas Cahill. New York: Nan A. Talese/Doubleday, 2006. 343 pages, index. Hardcover; \$32.50. ISBN: 0385495552.

This is the fifth installment in Thomas Cahill's projected seven-volume *Hinges of History* series, begun over a decade ago with *How the Irish Saved Civilization*. The ambitious series has been wildly popular, no doubt because Cahill is such an engaging writer and because he offers readers what many academic historians do not: lively, accessible stories of how key people at pivotal moments in the past "contributed immensely to Western culture and the evolution of Western sensibility" [from his official web site]. This is a worthy goal, especially at a time when the historical guild probably overemphasizes the complexity of the past, which in turn rewards overspecialization and leads to an unfortunate fragmentation of historical knowledge. But it is a project fraught with conceptual potholes, and Cahill does not escape them. This is especially evident in *Mysteries of the Middle Ages*.

Cahill wants his readers to appreciate how the Middle Ages was so much more than a period of cultural and intellectual decline. Far from being merely the Dark Ages, this was a time of rebirth in scholarship, art, and science; indeed, here was the dawn of Western civilization. He invites the reader to take a pilgrimage through the Middle Ages highlighting several key people—"gift givers" in his words—and places. Hildegard of Bingen and Eleanor of Aquitaine, for instance, illustrate not only the cult of the Virgin Mary and courtly love—fairly standard topics when discussing the medieval period. But they also point to attitudes that one day will find expression in feminism: treating women with dignity and welcoming their entrance into arenas of power dominated by men. And, more to the interests of the readers of *PSCF*, Cahill uses Roger Bacon as his point of entry into a very brief discussion of the impact of Aristotelean thought, the practice of accumulating natural knowledge by means of observation, and the alchemist's quest. From these intellectual seeds modern science will eventually grow.

Cahill's strength is his ability to bring his cast of historical characters and their environs to life. His descriptions of Paris, Padua, and Florence are wonderful, and the many illustrations that adorn the book are striking. But this remains a frustratingly curious book. It is a great read, but one that leaves the reader unsatisfied. This brings us back to those conceptual potholes. Historians must keep two things in creative tension: the need to understand the past

in its original context, to the extent it is possible to do so, and the responsibility to make sense of the past for the present. Overemphasis on the former leads to anti-quarianism, while too much of the latter yields an overly familiar and sanitized past. Cahill here offers up an essentially whiggish account of the Middle Ages, one that—to borrow from the great British historian G. R. Elton—frequently seems to forget that the past did not exist to provide us the present. He is so intent on bringing these medieval gift givers to life that he makes them too modern, too much like us. There is not enough otherness, strangeness to Cahill's Middle Ages. And he certainly does not help his cause by his breezy, presentist analogies—the most egregious example occurred when he likened one of Hildegard's letters to the dialogue from an episode of *Desperate Housewives*, followed by the unnecessary comment "Take that, bitch."—and his bitter critique of the contemporary Catholic Church and passing digs at George W. Bush.

All that said, Cahill does perform a service. *Mysteries of the Middle Ages* kindles interest in this rich and fascinating period of history. But readers desiring a deeper understanding of subjects like the medieval roots of modern science would do well to move directly to far more substantive works like Edward Grant's *The Foundations of Modern Science in the Middle Ages* or David Lindberg's *The Beginnings of Western Science*.

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ORACLES OF SCIENCE: Celebrity Scientists Versus God and Religion by Karl Giberson and Mariano Artigas. New York: Oxford University Press, 2007, 273 pages, index. Hardcover; \$29.95. ISBN: 0195310721.

Karl Giberson, physics professor at Eastern Nazarene University and an ASA member, is well known as the former editor-in-chief of both *Science and Theology News* and *Science & Spirit* which achieved global circulation in the field of science and religion studies. He couples his knowledge of this arena with that of his physics, philosophy of science, and Roman Catholic priest colleague, Mariano Artigas of the University of Navarra in Spain. The result is a splendid book that presents the writings of six contemporary science "oracles": biologists Richard Dawkins, the late Stephen Jay Gould, and Edward O. Wilson and physical scientists Stephen Hawking, the late Carl Sagan, and Steven Weinberg, to each of whom a chapter is devoted. On each Giberson focuses on his main ideas and how he pushes viewpoints that transcend science. The final chapter summarizes the similarities and dissimilarities of these oracles.

The authors do not delve into the many philosophical and theological responses that could be made to the various views expressed by these oracles, so readers should not expect to find references to the voluminous science and religion/theology literature. Rather, they concentrate on summarizing the views of each oracle, clearly indicating at which points and exactly how their views go well beyond science into the metaphysical. On this ground, these oracles are unreliable guides whose views should be

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given no more credence than anyone else. The antireligious bias of the majority of these oracles is well documented and described without, I think, misrepresentation.

The authors make a good case for how the misuse of science to advance philosophical and quasi-religious or antireligious ideas fails to reckon with the limitations of science. It is the polemics of these oracles and their chief antagonists, couched in what purports to be “scientific language” that obscure rather than illuminate the complex nature and meanings of human existence.

The book is highly recommended.

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NATURAL SCIENCES

A MEANINGFUL WORLD: How the Arts and Sciences Reveal the Genius of Nature by Benjamin Wicker and Jonathan Witt. Downers Grove, IL: InterVarsity Press, 2006. 257 pages. Paperback; \$18.00. ISBN: 0830827994.

A Meaningful World aims to show that the universe’s inherent intricacies require a meaningful existence pointing to an overall purpose for life. Surprisingly few times is this purpose explicitly equated with God. This acerbic attack on materialist reductionism is written by two non-scientists: Benjamin Wicker, who teaches theology part-time at the Franciscan University of Steubenville; and Jonathan Witt, who has a Ph.D. in English and is listed as a writer in residence at the Discovery Institute in Seattle. Both authors are fellows of the Discovery Institute, which features a “Dissent with Darwinism” and promotes intelligent design.

The book falls roughly into two halves: the first three chapters use Shakespearean literature to demonstrate that ideas are more than disconnected letters on a page; the following six chapters attempt to demonstrate that materialist reductionism eliminates an essential component of life. The opening linguistic analysis (chap. 2) begins with an experiment run in 2002 in which a computer left in the care of six Sulawesi crested macaques was used to gauge the success of Huxley’s proposition that given enough time, monkeys on computers could generate a Shakespearean play. Over ensuing pages the argument is made that random chance could not possibly produce the beauty of Shakespeare’s plays.

To imagine that Darwinian selection mechanisms could have seized upon a series of small but immediately beneficial genetic variations to produce a species capable of producing a Newton or an Einstein works no better than explaining Shakespeare by such means (p. 86).

Dawkins’ works are singled out for attack focusing on his use of Shakespeare in his cumulative selection analogy. The vitriolic style and the irrelevant linguistic analysis of Shakespeare make tiresome reading.

In short, we need to *experience* Shakespeare’s genius. Having done so, we will be immune to the materialist’s reductive treatments of the Bard and, to some

degree, immunized against the violently reductive treatments of nature and ourselves as well (p. 63).

After plowing through four chapters, the reader is presented with the first scientific evidence for a meaningful world. The authors develop Wigner’s “unreasonable effectiveness of mathematics” as pointing to an underlying order in creation instilled by the creator. Unfortunately a good portion of the chapter is devoted to Pythagoras’s mathematical proof for right-angled triangles in the belief that the conceptual elegance will demonstrate that the world is meaningful. The authors advance the unsubstantiated argument that a scientist’s search for understanding “couldn’t be the result of an indifferent and pointless cosmos” (p. 145). The assertion is contradicted by the authors’ quotes from *The First Three Minutes* where Steven Weinberg writes that “[t]he more the universe seems comprehensible, the more it seems pointless” (p. 13). Despite Weinberg’s belief in a pointless universe his scientific contributions were of such significance that he was awarded the 1979 Nobel Prize in physics.

Chapters 6–9 draw heavily from “The Privileged Planet” as evidence that the universe’s fine tuning is not a chance event. “It has been a great surprise that water, seemingly humble and humdrum, is so wonderful a solvent against the disanthropic materialist reductionism that has had us in its grip for so long” (p. 188). Given the availability of significantly better books such as *The Privileged Planet* (Regnery 2004) and *Rare Earth* (Springer 2003) one wonders if the intended market is for a less scientifically literate, and more easily swayed, Christian audience.

After being affronted for two hundred pages by a constant tirade against materialism and reductionism, the authors’ message is clear: they believe reductionism has completely failed. The authors interpret science’s inability to generate life as an implicit demonstration that God is somehow intricately involved in every cell in a new form of vitalism. The hidden intelligent design agenda is hinted at in the acknowledgments where “the fellows of the Center for Science and Culture [are thanked], for thinking we can win.” The book offers no new ideas and is likely to undo valuable work of the ASA and similar organizations to educate the public in complex issues of science and faith.

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ORIGINS & COSMOLOGY

EVOLUTION: A Scientific American Reader edited by Scientific American. Chicago, IL: University of Chicago Press, 2006. 355 pages. Paperback; \$22.00. ISBN 0226742695.

This volume consists of thirty-three essays that originally appeared in full in the pages of *Scientific American* over the period from 1993 to 2005. Several authors took advantage of this publishing opportunity to update their original essays. The editors have split the book into four sections of approximately equal length covering, respectively, the evolution of the universe, cellular evolution, dinosaurs and other monsters, and human evolution.

The first section has Jim Peebles, Martin Rees, Bob Hazen, and Steve Schneider, among others, providing eight excellent summaries of current thinking regarding the evolution of the universe including the first stars, the existence of multiverses, the fate of the universe, misconceptions about the Big Bang, and the evolution of Earth. Nobelists Christian De Duve and Manfred Eigen join other cellular biologists and immunologists like Sir Gustav J. V. Nossal in exploring via seven chapters the birth of complex cells, viral quasispecies, how cells respond to stress, cellular communication, the immune system, and cybernetic cells.

The late Stephen Jay Gould and other paleontologists explore in seven essays ocean life in the Jurassic period, *Tyrannosaurus rex*, Madagascar's Mesozoic life, and the origin of birds, etc. The final section features primatologists, paleoanthropologists, and anatomists such as Ian Tattersall, Meave Leakey, Alan Walker, and Tim White examining early hominid fossils from Africa, Neanderthals, the emergence of the human race, and ancient cannibalism. It concludes with a provocative piece by Olshansky, Carnes, and Butler about what humans would look like if they were "intended" to live over a century since the biomechanics of the human body pose enormous problems with the onset of aging.

The book is recommended for its crisp, accurate presentations of ideas on origins, evolution, and history of life on Earth. The black and white illustrations that accompany the articles greatly enhance the narrative, although one might wish that the publisher had reproduced the full-color images of the original *Scientific American* presentations. Readers of *PSCF* will, of course, diverge considerably from writers of these essays on particular points, but there is substantial food for thought in these stimulating essays.

Reviewed by Dennis W. Cheek, Vice President of Education, Ewing Marion Kauffman Foundation, Kansas City, MO 64110.

DARWIN'S NEMESIS: Phillip Johnson and the Intelligent Design Movement by William Dembski, ed. Downers Grove, IN: InterVarsity Press, 2006. 357 pages. Paperback; \$25.00. ISBN: 0830828362.

The contributions to this *festschrift* in honor of Phillip Johnson are diverse yet each relates in some way to the Intelligent Design (ID) movement. Included are testimonials showing that Johnson's analytic critique of neo-Darwinian claims, and exposure of the underlying commitment to philosophical naturalism, did have an impact on various scientists who once held a friendly disposition to evolutionary theory. Others had previous doubts validated by the books of Johnson and Michael Denton. The first four chapters tell how and why Johnson was able to change minds and redirect the focus of scientists and philosophers key to the ID movement.

Some contributions highlight the relevance of ID to specific contexts. Nancy Pearcey provides a good analysis of the fact-value split in Western thought. She notes that our civilization used to have a unified theory of truth and knowledge and argues, in agreement with her sources, that this unity began to unravel largely under the impact

of Darwinism and the rise of the naturalistic worldview. While her overall argument is sound, I would note that Darwinism, which may have added great impetus to the problem of these destructive dualisms, did not create them. They go much farther back into Enlightenment thought, and the possible demise of the neo-Darwinian Goliath may be helpful but not sufficient to eradicate them. T. F. Torrance has shown that, under the impact of Einstein and others, the science of physics has advanced by the rejection of dualisms deriving from Galileo and Newton, Descartes and Kant. Yet many still cling to invalid dualisms and retard progress and discovery. Long-held philosophical commitments are not easily dropped.

Michael Ruse is a contributor who is known for his criticism of ID. While he is not a Christian believer and does not seek to defend Christianity, he does disagree with Richard Dawkins on the necessity of holding an atheistic position as a scientist or philosopher. Hence he defends "the integrity of the Darwinian who wants to be a Christian."

J. Budziszewski provides a stringent critique of Larry Arnhart's effort to establish moral law on a naturalistic basis. An atheistic worldview cannot provide any concept of right and wrong which must be universally acknowledged and respected. Budziszewski's writing is as clear as his logic is sound.

ASA member William Dembski discusses the backlash against ID, and provides some interesting comments on theistic evolutionists, among whom must be numbered some vocal opponents of ID. Dembski notes:

Theistic evolutionists have now become marvelously adept at rationalizing not only how their religious faith makes sense in the light of evolution but also how evolution enhances their religious faith. Let's not play this game. The issue for us is not how evolution relates to religious faith but whether evolution, as currently understood by science, is true. If, as we argue, it is not true, then exploring its religious ramifications constitutes a vain exercise (p. 101).

Stephen Meyer's article on the origin of biological information and the Cambrian explosion is reprinted here. It first appeared in *Proceedings of the Biological Society of Washington* (2004), after it went successfully through the peer-review process. The editor, who has two earned doctorates and a position at the Smithsonian, was harassed and fired for publishing it. He "continues to face great persecution" (p. 313). There is no fair play when critics serve as gatekeepers forbidding ID contributions while they simultaneously claim ID is not supported in the peer-review journals.

ASA Fellow Walter Bradley, joint-author of *The Mystery of Life's Origin*, provides the interesting observation that the ID "beachhead is greatest in physics and least in biology." He claims that the field of physics is more open to new ideas.

Speaking of physics, Wesley Allen and ASA Fellow Henry Schaeffer III contributed "Complexity, Chaos, and God." They connect a helpful primer on chaos theory to a discussion on free will, determinism, and providence.

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One can only hope they will turn their article into a book-length discussion.

Twenty authors make this book varied and informative, and of interest to students and teachers. The contributions are readable because they are well written and because they lack vitriol. It is a fine testimony to the human quest for truth, and also a reminder that those who question a dominant theory, and its underlying philosophy, may face relentless hostility for some time. I recommend this book both to friends and critics of ID.

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UNDERSTANDING GENESIS: Contemporary Adventist Perspectives by Brian Bull, Fritz Guy, and Ervin Taylor, eds. Riverside, CA: Adventist Today Foundation, 2006. 195 pages; index. Paperback; \$19.95. ISBN: 0978614119.

Written in plain, accessible language, *Understanding Genesis* will appeal to readers interested in exploring the historical and pre-scientific contexts of the biblical creation and flood narratives. The editors and contributors, all with appropriate expertise, carefully and concisely articulate their positions, providing documentation for those interested in digging deeper into the issues.

Some potential readers, as was this reviewer's initial impression, might suppose that this text is written exclusively to Christians in the Adventist traditions or that the Adventist traditions have a unique perspective regarding these issues. And indeed, the text was written by Adventists to fellow Adventists for the purpose of trying to provide some clarity on important issues. However, the quantity of "in-house" denominational conversation is minimal and not distracting to those outside the Adventist traditions.

The central goal of the text is to convince readers of two things: (1) that the young-earth position is not supported by scientific evidence; and (2) that historically-informed hermeneutics also do not support a young-earth position. In pursuing this goal, they explore a range of issues including the "red in tooth and claw" quality of nature, the theological purpose of Scripture, and the so-called flood geology. A discussion of scientific integrity and the role of the professional Christian scientist is particularly significant: "If the data for a young earth is as obvious and compelling as we have been led to believe by some creationists, to what do we attribute this deafening silence?" (p. 108).

Another highlight was the extensive discussion of ancient worldviews and the challenge and importance of trying to see natural events through another's culture:

What we can do ... is read the ancient texts, not as poetic expressions of our world's understanding, but as literal expressions of the biblical world's understanding. Only by so doing can we hear the text of Genesis as it came to the ears of those who first heard it thousands of years ago (p. 62).

For readers who consider themselves "on the bubble" about whether the earth is ancient or young, this is an excellent text providing a broad and convincing discussion. Readers who find themselves convicted of a need to

defend a young-earth position will likely not be moved by the book. For such readers, the authors rightly caution that the young-earth position has no scientific basis and should be recognized as being a "faith statement based on textual authorities we trust" (p. 109). Readers firmly convinced of an ancient earth may not gain as much from discussions about the physical issues surrounding the creation and flood narratives, but there are excellent discussions about ancient worldviews and the Bible.

This is a weak point in the book: the authors propose a strong separation between the domains of science and the domains of theology. They suggested that "fences make good neighbors" (p. 25), and that the apparent conflict between science and faith originates in a failure to maintain a proper perspective about their distinct roles, functions, and expertise. The authors might consider that such a strong separation could reinforce the notion that one perspective trumps the other, thus intensifying an "us versus them" mentality.

I am pleased to recommend *Understanding Genesis* to a variety of readers from a variety of backgrounds. It is informative reading and well written. Additionally, it has the potential to find a wide audience among those looking for suitable material on creation and flood topics. The editors are to be commended for the book's clarity, level of presentation, and respectful tone.

Reviewed by Sean M. Cordry, Associate Professor of Physics, Northwestern College of Iowa, Orange City, IA 51041.

COSMIC JACKPOT: Why Our Universe Is Just Right for Life by Paul Davies. Boston: Houghton Mifflin, 2007. 295 pages, index. Paperback; \$26.00. ISBN: 0618592261.

The book was published in the UK with the title *The Goldilocks Enigma*. Davies is a well-known physicist and cosmologist who is now at Arizona State University. He was the recipient of the 1995 Templeton Prize. His previous books include *The Mind of God* and *The Fifth Miracle*.

Recent spectacular advances in observational cosmology have led to serious consideration of the possibility that the laws of physics might be fine-tuned for life, and many big questions of existence are now on the scientific agenda. The present book is a discussion of these matters. In the early chapters, Davies sets out the basic concepts of modern physics and cosmology and then describes the multiverse theory and the arguments for and against it. Later he takes a critical look at the various responses to the fine-tuning issue. He says that in spite of the emphasis on the deep and meaningful, he intends his book to serve as a straightforward nontechnical introduction to modern cosmology and physics.

In successive chapters, Davies discusses the big bang, modern high-energy particle physics, grand unified theories, dark matter and dark energy, and the origin of the elements that make the universe fit for life, with emphasis on the Goldilocks "just right" aspects. He then discusses whether the Goldilocks enigma might be solved by the idea that our universe may be a fragment of a vast and heterogeneous system, the multiverse, with the laws of physics and the initial state varying from one "universe" to another.

The last two chapters, titled "Intelligent and not-so-intelligent design," and "How come existence," comprise one-third of the book. Here Davies sees Paley's watchmaker argument as one of the "God-of-the-gaps" variety, which in the Intelligent Design (ID) movement in the US is making a comeback. For Davies, ID in biology is magic, not science. The ID argument strikes Davies as not very intelligent at all.

Davies examines the Christian doctrine that God is a necessary being whose existence needs no explanation in terms of something outside itself. That requires a reconciliation of a necessary God with a contingent universe. Davies says that he is not an accomplished enough philosopher to evaluate the arguments, which are abstract, subtle, and convoluted. If the concept of God runs into a logical and existential quagmire, then the multiverse fares little better. One can ask why the multiverse exists and who or what designed it. To make this point, Davies questions the many assumptions that underpin the multiverse theory.

In his final chapter, Davies discusses the two routes that he favors. The first route involves the acceptance of a life principle that constrains the universe/multiverse to evolve toward life and mind. It builds purpose into the workings of the cosmos at a fundamental level, without positing an unexplained pre-existing purposive agent. Davies recognizes that by thus introducing teleology one is making a decisive break with traditional scientific thinking. The second route involves the acceptance of a self-explaining universe (but we are still left not knowing why *this* self-explaining system is the one that exists).

Reviewed by Donald Nield, Associate Professor of Engineering Science, University of Auckland, Auckland, New Zealand.

LIVING WITH DARWIN: Evolution, Design, and the Future of Faith by Philip Kitcher. New York: Oxford University Press, 2007. 192 pages. Hardcover; \$20.00. ISBN: 0195314441.

The author, Philip Kitcher, is John Dewey Professor of Philosophy at Columbia University, and he has written several books including *Abusing Science: The Case against Creationism* (1982).

Kitcher's first chapter is introductory. He states that from the perspective of almost the entire community of natural scientists worldwide, the continued resistance to Darwin is absurd. He asks how can the allegedly massive evidence in favor of Darwin's central claims be overlooked? Why is there such a vehement opposition? He sets this in the context of the claim that Intelligent Design (ID) is not a religious perspective but a genuine scientific alternative to Darwinian orthodoxy. ID makes two major claims. The negative thesis is that some aspects of life and its history cannot be understood in terms of natural selection. The positive thesis is that these aspects must be understood as the effects of an alternative causal agency, one that is properly characterized as "intelligent." Some people argue that ID is not science. Kitcher takes a different view. He argues that ID is "dead science," a doctrine that has had its day but is now rightly discarded.

Chapters 2 and 3 present briefly some of the scientific evidence in answer to critics of Darwin such as Phillip

Johnson. The pattern of fossil evidence and the geological and physical data rule out "Genesis creationism" based on a literal reading of Genesis. The biological data rule out "novelty creationism" (separate creation of major novelties). Recognizing a single tree of life can account for innumerable details of the organic world that creationism can only regard as the whimsy of intelligence.

In chapter 4 Kitcher responds to Behe's claims that certain molecular machines could not have been built up in stages by natural selection. He says that at the heart of the ID movement are two types of argument, both designed to question the thought that natural selection scales up, from microevolution on a short time scale, to macroevolution on a large time scale. The "concrete case" argument selects a collection of evolutionary changes, discusses them in detail, and tries to show that there is no conceivable process of natural selection that could start with the original group of organisms and end with the finally modified group. The "computational" argument abstracts from the details of individual cases, presents them in terms of a more skeletal description, which is used to assign some basic probabilities. This then allows the calculation of the probability that the transition could have come about by the action of natural selection. Since the estimate is tiny, the conclusion is that causation by natural selection is, to all intents and purposes, impossible. Neither argument is original to contemporary ID advocates. What is new is that an "intelligent" agent is involved.

The arguments are flawed in that the intermediate forms are specified (e.g., that the proteins in the bacterial flagellum must have been added one at a time). Since Darwinians have no commitment to simpleminded stories of sequential addition of components, there is no reason to accept Behe's description. The computational argument depends on successive events being statistically independent and the principle of indifference, but in the biological situation these assumptions do not hold. On the positive ID thesis there are two issues to be considered: (1) on what grounds should we apply the label "intelligent," and (2) what help can ID provide in understanding the phenomena in question? On the first question, Kitcher says that it is a fallacy to suppose that because a particular structure or mechanism appears to be complex, then the casual agent that brought it about must be appropriately characterized as having "foreseen" or "planned" or "designed" the outcome. Even if the IDers were right in supposing that the phenomena they indicate could not have evolved by natural selection, they would then need to more explicitly identify the causal mechanism before they could justify the conclusion that the mechanism is intelligent. On the second question, neither in Behe's writings nor those of any other IDer is there the slightest indication of how intelligence performs the magic that natural selection cannot do.

In his fifth and concluding chapter, Kitcher discusses religious beliefs. He sees Christianity in retreat and ID as something being put forward by desperate people. In my opinion, this is a superficial discussion. The possibility of a theistic evolutionist position is ignored. However, the first four chapters are well worth reading.

Reviewed by Donald Nield, Associate Professor of Engineering Science, University of Auckland, Auckland, New Zealand.



PHILOSOPHY & THEOLOGY

THE ORDER OF THINGS: Explorations in Scientific Theology by Alister E. McGrath. Malden, MA: Blackwell Publishing, 2006. 255 + xxix pages, bibliography, index. Paperback; \$37.95. ISBN: 1405125551.

This is a continuation of McGrath's scientific theology project. The previous major works in this project are "*A Scientific Theology*" in three volumes, entitled *Nature* (2001), *Reality* (2002), and *Theory* (2003). Previous books by McGrath reviewed in *PSCF* include *The Science of God: An Introduction to Scientific Theology* and *A Scientific Theology: Nature*. McGrath is a prolific writer on theology, and his current scientific theology project promises to be one of the most important of this era.

McGrath begins this book with a long preface in which he describes much of the background for his project. He then briefly introduces each of the ten essays which comprise the remainder of the book. Chapter 1, written by Benjamin Myers, entitled "Alister McGrath's Scientific Theology," is a review of the 3-volume Scientific Theology series. Chapter 2, which was my favorite chapter, is entitled "Is a 'Scientific Theology' Intellectual Nonsense? Engaging with Richard Dawkins." McGrath responds (superbly, in my view) to five misguided ideas presented in Dawkins' writings. In chapter 3, "A University Sermon: On Natural Theology," McGrath explores whether the wonders of the world that we see can lead us to a recognition of the possibility that the physical world is not all there is. In chapter 4, "Towards the Restatement and Renewal of a Natural Theology: A Dialog with the Classic English Tradition," he discusses some of the problems with the natural theology that were developed in the eighteenth and nineteenth centuries, including problems with the natural theology developed by William Paley and the challenges of Darwinism. He also interacts with some of Karl Barth's criticisms of natural theology.

Chapter 5, "Stratification: Levels of Reality and the Limits of Reductionism," includes a discussion of the stratification of reality and its emergent properties. McGrath also argues against methodological uniformity in the study of reality. In chapter 6, "The Evolution of Doctrine? A Critical Examination of the Theological Validity of Biological Models of Doctrinal Development," McGrath discusses several evolutionary topics that might be related to development of theology, including Darwinian vs. Lamarckian evolutionary patterns, Dawkins' memes and Gould's evolutionary contingency vs. Conway Morris' islands of stability.

In chapter 7, "Assimilation in the Development of Doctrine: The Theological Significance of Jean Piaget," he includes Piaget's model of assimilation and accommodation in a discussion of how specific cultural settings have influenced theological developments relating to Ebionitism, Pelagianism, and the Anglo-Saxon "Hero" model. Chapter 8, "A Working Paper: The Ordering of the World in a Scientific Theology," includes a discussion of a variety of ways that the universe is ordered, including creation, redemption and righteousness. In chapter 9, "A Working Paper: Iterative Procedures and Closure in

Systematic Theology," McGrath proposes and describes how an iterative process has been and can be used to develop theology, with the actuality of the church as the starting point. The final chapter, chapter 10, "The Church as the Starting Point for a Scientific Dogmatics," argues that an empirical Christian theology begins with the existence of the church.

McGrath is an extremely thoughtful writer; he draws from an exceptionally wide background. He received a doctorate in molecular biophysics from Oxford and one in historical theology from Oxford. He is currently the President of the Oxford Centre for Christian Apologetics and also holds a Senior Research Fellowship at Harris Manchester College. Also, he will be presenting the 2009 Gifford Lectures.

This book is not for the faint-hearted. It is one of the more challenging that I have read, but in the end, it definitely was worth the effort. The title may be a bit misleading. The focus of the book is primarily on the development of theology, rather than whether there is conflict or concordance between some aspect of science and theology, such as the typical creation/evolution debate.

I am eager to read the results of the effort described in this book—the Scientific Theology itself. I am confident it will be a significant contribution to our understanding of theology in this scientific age. While this book seems to be written primarily for theologians, scientists and other laypersons with a serious interest in the interactions between science and theology will benefit from reading it.

Reviewed by James Behnke, Professor of Chemistry, Emeritus, Asbury College, Wilmore, KY 40390.

UNCERTAINTY: Einstein, Heisenberg, Bohr, and the Struggle for the Soul of Science by David Lindley. New York: Doubleday, 2007. 260 pages, index. Paperback; \$26.00. ISBN: 0385515065.

David Lindley, an astrophysicist and former editor of *Nature*, *Science*, and *Science News*, is well qualified to write this book having to his credit such successful works as *The End of Physics* and *Boltzmann's Atom*.

In his account of the fast-paced development of physics in the first half of the twentieth century, Lindley does a clean job of characterizing the ideas, personalities (Bohr, Einstein, Sommerfeld, Rutherford, Schrödinger, Pauli, Planck and Heisenberg, among others), and intellectual bantering that transpired over this remarkable period in the history of science. The reader is taken from a masterful explication of the atom in classical physics through the maturation of nuclear and quantum mechanics, into relativity theory and out the other side to a "precise" explanation of Heisenberg's principle and quantum indeterminacy. Probabilists of all stripes will appreciate Lindley's description of the palpable angst experienced by many of the principals as they contended with the realization that the scientific method was abandoning them only to be superseded by a disquieting uncertainty.

Lindley weaves a tale through eighteen readable chapters beginning with "Irritable Particles" where he recounts how Brownian motion failed to be understood by the gen-

eral scientific community leading to its being ignored for decades. Next he illustrates how statistical reasoning crept into the understanding of the atomic nature of matter through Boltzmann's work on the random nature of atomic motion concluding with Rutherford's declaration that the atom possesses a dense nucleus and the subsequent proclamation of the birth of nuclear physics. Bohr then ushered in the quantum era with what Lindley describes as "a mix of physical reasoning and inspired guesswork." Eventually Heisenberg, characterized by the author as the impudent newcomer to 1920s physics community, ceremoniously unveiled his uncertainty principle.

Lindley's skill in effortlessly communicating confusing ideas is exceeded only by his ability to capture the truly human side of the personalities engaged in this scientific struggle. The story has all of the qualities of a good drama with name-calling, petty jealousies, and unhealthy competition. Once the uncertainty principle began achieving traction, Lindley makes it clear that

the Copenhagen interpretation was crystalliz[ed] into the standard view of quantum mechanics. It has been over the decades as elusive as it has been influential. Those who subscribe to it talk of its profundity and power while acknowledging they can't easily put it into words. Precisely the problem, say its critics. It has acquired de facto authority even though no one seems to be able to say quite what it is.

As an example of the frustration felt by some of these pioneers of early twentieth century physics, Einstein is quoted as having told Schrödinger that "the soothing Heisenberg-Bohr philosophy—or religion?—is so nicely contrived that for now it offers the true believer a soft pillow from which he is not easily roused. So let him lie."

Not content to address only the historical facts of the development of uncertainty, Lindley skillfully summarizes the philosophical upheaval this new paradigm engendered in the physics community. Although the uncertainty principle dealt a body blow to logical positivists, Lindley describes the length to which "more traditional philosophers" such as Karl Popper went to disprove quantum theory on philosophical grounds, all of this despite Einstein's pronouncement that "the experiment that Popper had proposed [to disprove the uncertainty principle] wouldn't do the job." But, as Lindley adroitly concludes: "Nowadays most physicists ... are belligerently uninterested in what philosophers make of their theories."

The book ends with a chapter appropriately titled, "Anarchy at Last." It is clear, as Lindley points out, that "Heisenberg's paradoxically precise uncertainty principle has ascended to a remarkable level of intellectual celebrity," one might even say, infamy. The author lampoons nonphysicists as far-ranging as journalists and fictional television politicians for attributing cultural fuzziness (as well as the belief of many folk in an apparent lack of absolute truths) to the uncertainty principle. What these modern day Heisenberg groupies fail to grasp, but what Lindley makes clear, is that "even in physics, the uncertainty principle is by no means of ever-present relevance."

Certainly, physicists would find much of the history laid out in this book familiar. However, I suspect most others with an interest in the sciences (including physi-

cists) would find Lindley's account of the clashes resulting from intellectual protectionism, simple envy and philosophical predispositions, not to mention the surprisingly wide-ranging impact of the uncertainty principle outside the realm of physics, both enlightening and insightful.

Reviewed by Thomas W. Woolley, Professor of Statistics, Samford University, Birmingham, AL 35229-2306.

PANENTHEISM: The Other God of the Philosophers—From Plato to the Present by John W. Cooper. Grand Rapids MI: Baker Academic, 2006. 368 pages, name index, subject index. Hardcover; \$34.99. ISBN: 9780801027246.

Classical theism, the standard mainstream doctrine of God until the twentieth century, was based on the Bible and honed by Catholic and Protestant scholars from Augustine to Warfield along with their Muslim and Jewish counterparts.

... God in himself in maximal Being—is absolutely self-sufficient, eternal, immutable, omnipotent, omniscient, completely active, and most excellent in every way ... God eternally and freely chooses to create the world from nothing and sustain it through time. He is immanent in the sense that he is supernaturally present to all beings and events at all times and places ... empowering creatures and effectuating his eternal knowledge and will through their natural existence and free actions. But God in himself is utterly transcendent, all-determining and changeless, eternal and immutable even in relation to his creation (pp. 14–5).

Classical theism based these attributes on scriptural grounds. However, in the last century a rising number of theologians—non-Christians, liberal and conservative Christians—have modified the classical doctrine to a greater or lesser extent to meet social, scientific, and religious challenges of the day. Because classical theism borrowed from Greek philosophy, modern critics dubbed it the "God of the philosophers." Aptly, Cooper argues that panentheism finds deep roots in Neoplatonism and thus deserves to be called "The other God of the Philosophers."

Panentheism today is defined: "The Being of God includes and penetrates the whole universe, so that every part exists in Him, but His Being is more than, and not exhausted by the universe" (p. 27). Panentheistic theologies fall somewhere between the classical theism of conservative Christianity and pantheism where God and the world are one. The term was first used by Karl Krause (1781–1832) to distinguish his theology from these categories. Charles Hartshorne brought it into popular use in the late 1940s. Those who embrace panentheism are not at all agreed on what it is or whether it fits their views. It finds application in liberal theology and more recently among evangelicals who speak of a relational God, involved in real time, one who takes chances.

Cooper has produced a landmark historical overview of this field. Professor of Philosophical Theology at Calvin Theological Seminary since 1985, he has written an accessible and well-organized introduction to a complex subject. Early readers of his work praise his evenhanded and thorough treatment.

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Today's prominent cosmologies are linked to earlier thinkers. These writers accept the current scientific perspective of an evolving universe and find a panentheistic approach to offer the best synthesis of theology and science. Concordist schemes are eschewed in favor of broad pictures that emphasize the immanence of God and a different view of redemptive history. Classical theism views sin and the Fall as *distinct* from the basic structure of the world and the culmination of the kingdom of God as a gracious undertaking that is not a mere outcome of a natural process. Panentheism, however, typically views creation and the Fall as *part* of the cosmic process as are redemption and consummation. Christian panentheists view the earthly existence of Jesus Christ as either the *central cause* of the outcome of the process (Teilhard, Pannenberg, Moulton) or a *primary symbol or example* of the process (Tillich, Cobb). Each approach is at odds with classical theism.

Chapter 13 considers the thought of Ian Barbour (qualified process panentheism), Paul Davis (uniformitarian panentheism), Arthur Peacocke (naturalistic sacramental panentheism), Philip Clayton (emergent personal panentheism), and John Polkinghorne (eschatological panentheism).

Polkinghorne seems closest to a classical position in choosing to modify overzealous transcendence.

In the kind of dipolar theism that I am seeking to espouse, God is understood to have chosen to possess only a current omniscience, temporally indexed ... God does not yet know all that will eventually become knowable (quoted, p. 316).

He espouses a panentheistic future where "God's ... creatures ... [will] ... enjoy fully the experience of the unveiled divine presence, and so share in the divine energies" (p. 317).

Cooper mentions, all too briefly, two Christian theists (William Lane Craig and Nickolas Wolterstorff) who find theological space for an eternal or everlasting God who changes with time.

The closing chapter "Why I am not a Panentheist" offers a brief study of why he rejects panentheism. It is essential reading for all conservative Christians who wish to analyze the leading current options for a Christian cosmology. What is sadly lacking today is an evangelical position that has credibility and about which a consensus can be drawn. Can one strike a more judicious balance between transcendence and immanence focusing on Jesus Christ, divine and human, Creator and Savior?

Reviewed by John W. Haas, Jr., Emeritus Professor of Chemistry, Gordon College, Wenham, MA 01984.

THE PASSIONATE INTELLECT: Incarnational Humanism and the Future of University Education by Norman Klassen and Jens Zimmerman. Grand Rapids, MI: Baker Book House, 2006. 208 pages, index. Paperback; \$13.25. ISBN: 0801027349.

This book explores the themes of whether, and how, Christians can develop a rich and passionate life of the mind. Although it is written for Christian students bound for

university, it is useful for any Christian who is serious about the intellectual life.

One of the authors' goals is to defuse the "warfare" mentality concerning faith and "secular" learning that some Christians, particularly those who are not very mature in the faith, often seem to develop. They propose to do this through the model of "Incarnational Humanism."

"Incarnational Humanism" takes the incarnation of Christ as a starting point for a Christian approach to learning. "In Christ," the authors state, "all fragmentation ends and a new humanity begins, a new creation in which all knowledge is united (or taken captive, as Paul puts it) under the lordship of Christ because in him the divine and the human are firmly joined forever." The pattern of the incarnation suggests that we should expect to find that truth is not "an abstract, timeless concept," but rather is mediated through human language, culture, and tradition. Therefore, Christians should not be afraid of truth located outside the hermetically sealed world of their particular religious subcultures.

In short, the authors place a Kuyperian notion of "common grace," as mediated for generations of Christian college students by Arthur Holmes' famous dictum that "All Truth is God's Truth," into the postmodern context. While the authors thus acknowledge the postmodern turn, they firmly deny the destructive Nietzschean postmodernism, evident in figures such as Michael Foucault, that rejects any notion of classical humanism in favor of a heuristic of power relationships.

However, the authors suggest that the answer to Nietzsche and Foucault is not a resurgent Christian rationalism dusted off from the fundamentalist-modernist controversy. Rather, they hearken back to the sort of humanism that was evident in many of the Church's great minds, such as Augustine, Aquinas, Luther, and Calvin, prior to the Enlightenment. In this classical Christian humanism, truth is more than power—indeed, truth in many ways is the antithesis of power—because the divine Truth became man and *gave* himself for us.

There are many riches in this book. "Incarnational Humanism" is a beautiful phrase that deserves broad attention, and it is high time that "All Truth is God's Truth" be given a postmodern reading. There is also, however, a glaring weakness in the authors' arguments: they do not deal adequately with the effects of sin. A model of truth that hearkens back to Augustine, but that glides over any reading of Augustine's thoughts on sin, will not present a thoroughly *Christian* humanism. I wish the authors had acknowledged the tension between the incarnation and human sinfulness, and had contextualized it, as Scripture and the Christian humanist tradition do, within the "already/not yet" of the Kingdom of God.

Nevertheless, this is a valuable addition to the literature on the intellectual life as a Christian vocation. Let us hope that a holistic, incarnational understanding of faith and learning once again infuses the Church, rather than the rationalist, atomistic, confrontational approaches that so often seem to dominate our thinking.

Reviewed by David W. Opperbeck, Associate Professor of Law, Seton Hall University School of Law, Institute of Law, Science & Technology, South Orange, NJ 07079.

THE EVOLUTION OF RATIONALITY: Interdisciplinary Essays in Honor of J. Wentzel Van Huyssteen by F. LeRon Shults, ed. Grand Rapids, MI: William B. Eerdmans Publishing Company, 2006. 426 pages. Hardcover; \$50.00. ISBN: 0802827896.

Nearly everyone recognizes the problem these days: you cannot get away with claiming to really “know” something any more. In science, in theology, in ethics, in every conceivable discipline, knowledge claims are in deep trouble. On the one hand, genuine knowledge has to be certain, stable, unassailable; “true” knowledge has to be anchored in a secure foundation that will not shift beneath us. But such foundations have become notoriously difficult to locate and to sustain. And so—on the other hand—our cultural default position on the question of what we can actually *know* in science, theology, ethics, and other domains, is an uneasy state of denial. There are no foundations, so there can be no real knowledge. There are only subjective and eccentric opinions and perspectives, constrained and transient judgments whose value is strictly local and immediate.

In a word, this is the modern problem of rationality. Rationality is a problem because no one is any longer quite sure where its center is, or what its limits are. Compounding the dilemma is the historical fact that so many philosophers, scientists, and various schools of thought have tried to co-opt rationality for their own special projects. Consider the logical positivists, who at the turn of the twentieth century sought to restrict the expressions of rationality to definitions (tautologies) and to observation statements, all in the name of cleaning up scientific language. But such a strategy leaves theological and ethical discourse outside the bounds of rationality. God-talk and moral norms are reduced to private, personal matters, and thus are not fit for reasonable and public conversation.

Contemporary philosopher and theologian J. Wentzel van Huyssteen has been working for more than three decades to mediate the extremes of foundationalist positivism and nonfoundationalist relativism when it comes to these core epistemological issues. Through a series of heralded books and articles, van Huyssteen has offered a number of penetrating insights into the nature of rationality as applied to both scientific and theological endeavors. His efforts—which have ranged from the original development of a “critical realist” methodology in theology (derived largely from the respective works of Karl Popper and Thomas Kuhn) to a more recent interest in evolutionary epistemology and psychology—have been directed toward the articulation of a model of rationality that is comprehensive enough to account for the common rationality of both science and theology.

The text at hand is a Festschrift of articles written to honor van Huyssteen on the occasion of his sixty-fifth birthday. The title, “The Evolution of Rationality,” seeks to capture the essence of van Huyssteen’s work over the past thirty-five years, and the articles are suitably divided into three categories: “Philosophical Explorations,” “Scientific Explorations,” and “Theological Explorations.” The list of authors is a litany of familiar names in contemporary philosophy and theology of science: Philip Clayton, Keith Ward, Holmes Rolston III, Arthur Peacocke, Neils Henrik Gregersen, Michael Ruse, Calvin O. Schrag, Mikael

Stenmark, and John Hedley Brooke are among the twenty-two prominent contributors to this volume.

Unlike many similar celebratory anthologies, the quality of the articles is consistently strong and their content appropriately diverse. The topics included range from Peacocke’s reflection on music as a measure of divine creativity to Brooke’s assessment of Darwin’s impact on the scientific study of the “knowing self” to Gregersen’s thoughtful theological critique of evolutionary psychology. Some of the articles directly utilize van Huyssteen’s work as a basis for further investigation (such as Stenmark’s analysis of different conceptions of science), while some do not even mention van Huyssteen at all (for instance, the careful and provocative piece by Holmes Rolston III on the five “looming questions” that must be addressed by science regarding the origin of life on earth).

For those interested in the philosophical, and specifically the epistemological, questions that are at the forefront of philosophy of science, and of the increasingly sophisticated dialogue between science and Christianity, this text cannot be recommended highly enough. It is thick with information, analysis, and proposals that will enrich those who seek to broaden their understanding of this field. And for those who are drawn to explore further the exciting and exacting work of van Huyssteen, pick up a copy of *Duet or Duel: Theology and Science in a Postmodern World* (1998) or *The Shaping of Rationality* (1999).

Reviewed by Thomas D. Pearson, Associate Professor of Philosophy, The University of Texas-Pan American, Edinburg, TX 78539.

ESCAPE FROM REASON: A Penetrating Analysis of Trends in Modern Thought by Francis A. Schaeffer. Downers Grove, IL: IVP Books, 2006. 123 pages. Paperback; \$8.00. ISBN: 0830834052.

Schaeffer is incredibly difficult to pin down. He has been described as a (compassionate, inconsistent and modified) presuppositionalist, an inconsistent empiricist and a verificationist—this is, I suspect, because he is more an evangelist and apologist than an academic philosopher. Schaeffer’s books have been incredibly influential, not least his trilogy originally printed in 1968 of which *Escape from Reason* is the second part—the first being *The God Who Is There* and the final part *He Is There and He Is Not Silent*. *Escape from Reason* is the shortest of the three and has sometimes been mistaken for the introduction to the trilogy.

Reading Schaeffer is a bitter-sweet experience. I rejoice at his desire to see the lordship of Christ expressed over every area of life, but get frustrated at his broad brush strokes that often over-simplify. Schaeffer is rarely subtle!

The villain of this piece is Aquinas. It is perhaps an understatement to say that Schaeffer is a little hard on Aquinas; a better Reformed analysis of Aquinas is found in Arvin Vos’s *Aquinas, Calvin, and Contemporary Protestant Thought*. Nevertheless, Schaeffer does highlight the problems scholastic dualism has caused Christianity.

He sees the most crucial problem facing Christians today as being rooted in the Middle Ages and in Aquinas in particular. It was Aquinas who opened the way for

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autonomous rationality. According to Schaeffer, Aquinas claimed that the human will but not human intellect is fallen. This assumption, once popularized, provided the fertile soil for the belief that humans could become independent, autonomous.

In *Escape from Reason*, Schaeffer examines the relationship between “grace” and “nature.” He argues that nature has slowly been “eating up” grace. Yet a “line” or “gap” exists between the supposed upper realm of grace and the lower realm of nature. Western society has gone below this line and it has led to despair. This despair is revealed first in philosophy; subsequently, it spreads to art, then music and general culture, before reaching theology.

Schaeffer had a way of communicating Christianity to modern culture—we need more like him today. He awoke his generation to the presence of secular humanism and showed that it was possible to think and be a Christian at the same time. This book provides an excellent introduction to his ideas, though it shows its origin in the lecture format: there are few footnotes and references. His analysis is often derivative of the Dutch Christian philosopher Herman Dooyeweerd. Schaeffer’s close friend Hans Rookmaaker once remarked that “*Escape from Reason* is Schaeffer’s version of what Dooyeweerd develops in *In the Twilight of Western Thought*.”¹

It is a shame that this book is not illustrated, for Schaeffer makes some excellent points regarding grace and nature using descriptions of art works and having them illustrated would have greatly enriched the reading experience.

This reprint has a brief foreword by James Moreland and a two-page index. It is a welcome addition to the IVP Classics series.

Note

¹Herman Dooyeweerd, “A Dutch View of Christian Philosophy” in *The Complete Works of Hans Rookmaaker* 6, Part III, The L’Abri Lectures, ed. Marleen Hengelaar-Rookmaaker (Piquant, 2005).

Reviewed by Steve Bishop, City of Bristol College, Bristol, UK.



RELIGION & BIBLICAL STUDIES

THY KINGDOM COME: How the Religious Right Distorts the Faith and Threatens America by Randall Balmer. New York: Basic Books, 2006. 206 pages, endnotes, index. Hardcover; \$24.95. ISBN: 0465005195.

Randall Balmer describes himself as a “jilted lover,” and it shows. Balmer, a professor of American religious history and an evangelical Christian, wrote *Thy Kingdom Come* to protest the way the Religious Right has “hijacked” the faith that in earlier times would have cared more about the poor and less about political power. His writing sometimes displays the bitterness of one whose beloved has betrayed him.

Balmer begins by analyzing the formation of the alliance between evangelical leaders and the political right in the 1970s. Considerable space is devoted to “the abortion myth,” the popular story that the movement primarily

arose as a response to *Roe v. Wade*. Balmer shows that the catalyst was instead threats to the tax status of Christian schools that practiced racial segregation. This is enlightening material, spiced up by a pro-choice quote (endorsing *Roe v. Wade*) from conservative Southern Baptist patriarch W. A. Criswell.

Chapter 2 (“Where Have All the Baptists Gone?”) relates the long history of Baptist advocacy for church-state separation and liberty of conscience. Balmer laments how Baptist leaders have forsaken this heritage in favor of enforced orthodoxy and promotion of Christianity by government power. Chapter 3 describes what the author sees as efforts to undermine the public education system that he feels is vital to a healthy democracy.

Chapter 4 discusses creationism in various forms, particularly the Intelligent Design (ID) movement. Insights include placing ID in the context of a broader agenda to increase Christian influence in academia, and the observation that requiring science to legitimize faith “subjects religious belief to the canons of Enlightenment rationalism.” Sadly lacking is any mention of evangelicals who reject creationism and ID as not only bad science but bad theology. Someone needs to introduce Balmer to George Murphy, Keith Miller, or Francis Collins.

Chapter 5 concerns the environment. The Au Sable Institute and the Evangelical Climate Initiative are held up as positive examples. This is the least pessimistic section, as the author sees growing Christian support for creation care, even as he describes efforts by some to continue giving profits priority over God’s Earth.

Only briefly in the concluding section are suggestions given for improving the situation. Balmer advocates chipping away at the hegemony of the political right over evangelicals, starting with a few issues like environmental stewardship and opposition to government-sanctioned torture. Existing groups like Evangelicals for Social Action are not mentioned. Balmer also wants us to recognize the historical lesson that it is best for both church and state when the church speaks as a prophetic voice from outside the centers of political power, rather than grasping that power which leads to compromise and corruption.

I liked this book less than I expected to. I share the author’s frustration that our faith has been co-opted by political forces who favor the rich over the poor, who would entangle church and state, and who promote arrogant nationalism. While I am not as far to the left as Balmer, I found his critique of the Religious Right convincing, enlightening, and often insightful.

So why was it a disappointment? Balmer offers little to appeal to the many politically moderate evangelicals who are uneasy with the tactics and stances of Dobson, Falwell, et al. He seems to adopt uncritically all the positions of the political left. The book is mostly complaint, with little evidence of Christian hope. Perhaps most troubling, the tone seems unworthy of a Christian scholar, often using demonizing language not much better than one might find in a Christian Coalition mailer or an Ann Coulter rant. For more constructive and less vitriolic coverage of similar ground, I recommend Stephen Carter’s *God’s Name in Vain* and Tom Sine’s *Cease-Fire*.

Reviewed by Allan H. Harvey, 1575 Bradley Dr., Boulder, CO 80305.

THE NIGHT IS FAR SPENT by Thomas Howard. San Francisco, CA: Ignatius Press, 2007. 355 pages. Paperback; \$16.95. ISBN: 1586171321.

Thomas Howard, an English professor for thirty years, is the author of *Evangelical Is Not Enough*, *Lead Kindly Light*, and *Chance or the Dance*. His book *On Being Catholic* written ten years after his conversion from an evangelical background to a communicant of the Roman Catholic Church, offers insights on Catholic dogma, spirituality, and practice.

This volume is a collection of thirty-one of Howard's writings on a wide range of topics selected by Vivian Dudro. In the first section, he writes of things literary with articles on such luminaries as C. S. Lewis, Malcolm Muggeridge, and Charles Williams. The second section contains articles on the sacred including the cross, sacraments, spirituality, and orthodoxy. The third and final section is devoted to "Self, Society and God," and includes articles on identify, gender, honor, fatherhood, and worship.

His comments about his conversion to the Roman Catholic Church are all irenic and benign. He appears to feel a need to explain his switch, but he succeeds in being warm and congenial when he is dissecting his faith, as in his article on "Catholic Spirituality," a talk delivered to mostly evangelical students at Gordon College.

A few observations: the use of British punctuation in placing the comma after the quotation mark seems somewhat unique for an American writer; the print size was challenging for my aging eyes; and I am curious how the article selection might have varied if it had been done by Howard rather than Dudro.

One of the most poignant articles was the last one entitled "Being Forgotten." It is about oblivion and what we leave behind at death. Howard, who works in the emergency room at Massachusetts General Hospital, observes that he (we) should not expect to escape the hair-raising suffering and daily death that parades through the hospital. Also, Howard acknowledges that he is supplied with the necessities of life: anything else, a Bentley, a royal dwelling, etc., "would obstruct most inconveniently my efforts to climb the heavenly steps" (p. 355). In this article, Howard states that, although having written a dozen books, "I threw in the sponge on writing books many years ago, not solely in a fit of pique, but also because I realized I had nothing more to say ..." (p. 334). But he has plenty to say in this book. Howard has been a popular Christian writer for decades. Read this book and it will become obvious why!

Reviewed by Richard Ruble, John Brown University, Siloam Springs, AR 72761.

RELIGION IN SCHOOLS: Controversies around the World by R. Murray Thomas. Westport, CT: Praeger, 2006. 234 page, bibliography, index. Hardcover; \$49.95. ISBN: 0275990613.

Education researcher R. Murray Thomas, professor emeritus at the University of California Santa Barbara, examines twelve representative cases of religious conflict in schools

in this schematic, precise study that offers several frameworks for comparative analysis in the so-called "culture wars." Thomas masterfully negotiates the research and conceptualization hurdles set by this task. Establishing a careful methodology, defining terms, and offering useful and varied summaries of the relevant information, Thomas is a model of the thorough scholar. He has no particular expertise in the religious issues (as opposed to the educational issues) involved in the cases he chooses, but his treatment of them is accurate. Readers looking for insight into the peculiar challenges posed by religious doctrines and forms of *communitas* will not find it here; Thomas focuses on empirically available externals and stated motivations, not theological niceties.

The study is divided into three sections. The first outlines the methodology to be used to study the twelve cases at hand. Thomas' thesis is that conflicts involving religion and schooling involve four factors: "the nature of belief constituencies"; "the influence of cultural tradition"; "critical events" that bring those traditions into view through perceived threats, regulation, or attempts to change them; and power relationships among these constituencies. His method, then, is to identify the belief constituencies involved in a controversy; examine the relevant traditions found in these constituencies; describe the critical events that led to the conflict; and analyze the power relationships that affected the outcome.

In the second section, the bulk of the book, Thomas methodically applies this framework to twelve selected cases. They were chosen to achieve a balance between Eastern and Western religious traditions (six each), and for their newsworthiness, currency, and variety. Thomas examines headscarf regulations in French schools; teachers' refusal to participate in nationalistic ceremonies in Japan; the addition of nonreligious belief systems to the recommended religious education curriculum in England; the inclusion of pro-Hindu material in history textbooks in India; required Catholic or comparative religion classes in Spain; illegal imports of the Bible into China; crucifixes on classroom walls in Italy; curriculum reform in schools in Pakistan; a proposal to eliminate the word "evolution" from state curriculum standards in the US; government-run Islamic schools in Thailand; science standards that included respect for indigenous beliefs in Australia; and the arrests of foreigners accused of teaching Christianity in Saudi Arabia. At least two of these cases stretch the meaning of "education" beyond schooling to include Sunday schools or proselytizing classes—those from China and Saudi Arabia. While it is unfortunate for the unity of the book that no more rigorous examples could be found from these important cultures and traditions, it is understandable given the total government control and lack of meaningful dissent or dialogue in the educational systems of those countries.

A final chapter that comprises the book's third section proposes ways in which diverse controversies can be fruitfully compared and notes broad trends illuminated by the case studies. Of significance here is the short-term, incomplete nature of the resolutions of these twelve crises. Thomas concludes that tensions are rarely eased through the controversies. Instead, a new administration reverses policy, a compromise is reached, or one side is forced to back down. The underlying structure of pluralism and

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its implications for education are not exposed to the light and thought through. Perhaps this is to be expected in the heat of these conflicts, but Thomas' conclusion cannot help but provoke regret that these opportunities for resolution are lost.

The strength and weakness of *Religion in Schools* is its unwavering rigor. Thomas refuses to speculate beyond his data, which makes his book highly valuable as a resource work for students interested in making their own analyses of the topic, but will disappoint others looking for cultural analysis and commentary, perhaps even a proposal for managing such conflict. The cases treated in the book are so fascinating and rich that one could hope for a set of twelve books elaborating on each in a more lively, interdisciplinary style.

Reviewed by Donna Bowman, Assistant Professor, Honors College, University of Central Arkansas, Conway, AR 72035.

THE WELL AND THE SHALLOWS by G. K. Chesterton. San Francisco: Ignatius Press, 2006. 203 pages. Paperback; \$12.70. ISBN: 1586171267.

Gilbert Keith Chesterton (1874–1936) was an Englishman whose prolific writings included philosophy, history, poetry, biography, fiction, and theology. He is perhaps best known and appreciated by Christians for his apologetic arguments. Chesterton was converted in 1922 to the Roman Catholic Church, an experience he described as “the chief event” of his life. Like C. S. Lewis, he is appreciated by conservatives and liberals, both Romans Catholics and Protestants.

Chesterton authored one hundred books over a period of thirty-five years. This is a reprint of a volume first issued in 1935 in London, one year before Chesterton's death. It contains a series of short articles on a variety of subjects which Chesterton described as “autobiographical and grotesquely egotistical” (p. 13). Dale Ahlquist notes in his introduction that it is amazing that no discernible difference exists between Chesterton's pre-conversion and post-conversion writings, because he was defending the values of the Church long before he became a Roman Catholic.

In *The Well and the Shallows*, Ahlquist notes that Chesterton “defends the Catholic faith from all angles, from all attacks, which means writing about anything and everything” and “these essays are more specifically Catholic than his other works” (p. 7). Chesterton believed that cultures falling away from Roman Catholicism fall into falsehood (p. 197), and that the Protestant Reformation continues to mislead and bewilder Christendom (p. 30). Although Chesterton is critical of Protestantism, he defends Christianity as the “Well.” Everything else is the “Shallows.” Thus the title of this book! (In the light of present day ecumenism, Chesterton's view that the only factor Protestants share in common is their anti-Catholicism seems somewhat antiquated, p. 9). Chesterton was accused of being anti-Semitic, but he said he would die defending the last Jew in Europe.

Chesterton always offers opinions which stimulate. For example, Protestantism tends to prohibit rather than to curtail or control (as in alcoholic prohibition, p. 195).

Capitalism has destroyed the family (p. 112). Communism is the only complete and logical working model of capitalism (p. 173). Erotic religion exalts lust and forbids fertility; it narrows love merely to enjoying sex (pp. 172–3).

Chesterton thought that birth control is a scheme for preventing birth in order to escape control (p. 38). “[M]oral movements are much more utterly and ruthlessly repressive than the past forms of mysticism or fanaticism that commonly affected only the few” (p. 94). He cautioned that Christians should not be too impressed with the findings of science. He believed geologists treat fossils, “the Testimony of the Rocks,” like sacred hieroglyphics (p. 30).

Chesterton exerted substantial influence on the culture and religion of his day and his impact continues to be felt today. Ahlquist observes that Chesterton “is more important now than he was in his lifetime—and he will be even more important in the future” (p. 10). Good enough reason to become acquainted with this influential Christian through his writings. This book is a good starting place.

Reviewed by Richard Ruble, John Brown University, Siloam Springs, AR 72761.

THE AGE OF REASON by Meic Pearse. Grand Rapids, MI: Baker Books, 2006. 457 pages, including index. Hardcover; \$29.99. ISBN: 0801012783.

The years 1570 to 1789 were tumultuous years for Christianity throughout the world. There is the triumph of the Great Awakening led by George Whitefield and the Wesley brothers, the great Welsh revivals, and missionary advance to the Far East. On the other hand, there are the Huguenot wars, conflict among Protestants and Eastern Orthodox, and the rise of Enlightenment rationalism. Meic Pearse, assistant professor of history at Houghton College, has taken to the task of narrating the story of global Christianity here in Volume Five of the “Baker History of the Church Series.”

Pearse covers the period starting from the Wars of Religion in Europe to the eve of the French Revolution. He manages to cover many facets of church history, including the growth of Pietism and other Protestant movements in mainland Europe and the British Isles, Catholic and Eastern Orthodox Christianity in the shadow of Turkish Islam, and Jesuit activity in Latin America. He even includes a chapter on the arts and music during the time period. Pearse jumps around in his narrative, leaving one story to go to another and then returning back to pick up where he left off. This is forgivable simply because of the complex breadth of Christianity from the late sixteenth to the eighteenth century.

The Age of Reason reads somewhat like an introductory college textbook to church history, which is probably intended. Pearse includes a handful of helpful black and white maps and illustrations. Nevertheless, it is sometimes difficult to hold the story together with all of the players involved with just the text and the sparse illustrations. However, if you already have some knowledge of the historical time period, then Pearse is a wonderful guide to help you dig deeper. At the back of the text there is a time line, a useful index, an annotated bibliography, and endnotes. Unlike many textbooks, Pearse interjects

his own analysis at various points, offering to bust provocative myths along the way. For example, the most influential American founding fathers were Deists, not evangelical Christians. Pearse later argues that the immense social changes associated with the Great Awakening have been grossly exaggerated. Pearse, who recently also authored a contemporary evangelical Christian analysis of Islam and America in *Why the Rest Hates the West*, gives the reader plenty to ponder.

Probably the most disturbing aspect of Pearse's narrative covers the horrific amount of bloodshed associated with the Thirty Years War and many other interreligious conflicts. This culminates in Pearse's chapter on "Reason and Power: Rationalist Theology and the Divine Right of Kings." Knowing the sad story of how so many were killed in the name of church and state, it is easier to see how Enlightenment thinkers sought to ground ethics and republican politics in the natural philosophies of Galileo and Newton instead of the contentious arena of biblical revelation. The challenge for Christians today is to faithfully appropriate biblical revelation in a genuinely Christ-like way marked by forbearance and civility without falling into the snare of Enlightenment rationalism.

Reviewed by Clarke Morledge, College of William and Mary, Information Technology: Network Engineering, Jones Hall (Room 18), Williamsburg, VA 23187.

PAUL MEETS MUHAMMAD: A Christian-Muslim Debate on the Resurrection by Michael R. Licona. Grand Rapids, MI: Baker Books, 2006. 175 pages. Paperback; \$13.99. ISBN: 0801066026.

Mixing science-fiction, history, and apologetics in this fictional debate between the apostle Paul and the prophet Muhammad, Michael R. Licona tackles the deeply emotional and eternally significant topic of the veracity of the resurrection of Christ. Licona's credibility as a resurrection apologist is based on his career as an itinerate apologetic's speaker and Director of Apologetics Evangelism for the Southern Baptist North American Mission Board. He is also a Ph.D. candidate and co-author of *The Case for the Resurrection of Jesus* with Gary R. Habermas. He delivers his resurrection research results with the clearly stated intent to assist Muslims and Christians in making a personal, informed response to Christ based on his evidence. He achieves his purpose by presenting four, carefully researched and cited, evidence-based arguments for the veracity of Christ's death and resurrection.

Licona's main strength as a Christian apologist is that he never attacks the Islamic faith. The fictional holograms of Paul and Muhammad are strong in their own beliefs, yet remain courteous and respectful to others at all times. Christian or Muslim readers, while taking offense at the beliefs of others, do not have any reason to take offense at Licona's presentation of those beliefs. Another strength of his writing is how he answers common Muslim arguments. He does not presuppose all readers believe the Bible contains truth, but uses logic and reason to show how the Qu'ran contradicts itself regarding Christ. He only offers the Bible as a proof once, and never regarding the resurrection itself. Paul's hologram explains that using the Bible as evidence is only useful if all parties believe the Bible.

The debate format allows Licona to present his evidence for Christ's resurrection alongside popular Islamic arguments against that evidence and gives Christian readers ready answers for many of the questions that Muslims may raise. Paul, as the one who bears the burden of proof, begins the debate with his opening statement. Muhammad continues with his opening statement. Paul and Muhammad are then each given a chance for rebuttal. Seven chapters follow in which the moderator asks specific questions of both men, allowing them greater depth in their responses. The book finishes with closing remarks from Muhammad, Paul, and the moderator. The result is entertaining and makes this book a quick read and hard to put down. Readers will find themselves pushing on to see how Paul refutes Muhammad's arguments.

The weakness in this style of presentation is its tendency to confuse readers in the same way listeners to a live debate are often left confused. Upon the first read, the reader is left wondering if Paul and Muhammad even argued the same issues. Upon the second read, the reader may be left choosing "the winner" based on previous biases; a debate winner is not chosen in the story. Upon the third read, armed with a notebook as the chapter notes suggest, Paul's argument becomes clearly evidence-based, not relying on a subjective belief in holy writings. Muhammad's arguments, on the other hand, presuppose the Qu'ran is truth from God.

This book will appeal to the scientific community as Licona's arguments are based on evidence, not blind belief in scripture. Yet, this book is written in nontechnical and "non-religious" terminology so that all readers can understand the arguments presented. It does require careful study, though. With increasing confrontation between the followers of Christ and the followers of Allah, this book is a solid base on which to base peaceful and loving inter-religious dialogue about the Christian claim of a living Christ.

Reviewed by Lisa Cutforth-Anderson, Learning Resource Technician, Alberta Bible College, Calgary, AB, Canada, T2K 3J6.

DOUBTING: Growing through the Uncertainties of Faith by Alister McGrath. Downers Grove, IL: InterVarsity Press, 2006, 156 pages. Paperback; \$13.00. ISBN: 0830833528.

McGrath is president of the Oxford Center for Christian Apologetics and professor of historical theology at Oxford University. He was the keynote speaker at the 2007 joint meeting of the Christians in Science and the American Scientific Affiliation held in Edinburgh, Scotland. He has published numerous books on Christian theology and apologetics. This book had its origins in some talks that McGrath gave to students from Oxford University in 1988 and the first edition of the book was subsequently published in 1990. He states in the preface of this edition that two factors caused him to rewrite it in 2005. These factors include the major cultural changes that have occurred since that time and his own deepened experience of engaging with the questions that trouble so many people.

In the first few chapters, McGrath explains "as simply and clearly as possible" what doubt is and how it arises. Since he once was an atheist, he devotes one chapter to the

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place of doubt within atheism. This is followed by a chapter on the main images and analogies of doubt that are contained in the New Testament. He then moves on to deal with a series of specific doubts and anxieties that many Christians experience, often in the first few years of their lives as believers. These include doubts about the gospel message, the resurrection of Jesus Christ, the existence of God, and the possibility of a personal relationship with God. The book concludes with a chapter that provides practical guidelines for handling doubt and another that suggests ways of putting doubt in proper perspective.

The main theme of the book, which is stated in the preface, is that “doubt is an invitation to grow in faith and understanding, rather than something we need to panic about or get preoccupied with. We must all learn to grasp and value what Alfred Lord Tennyson calls the sunnier side of doubt.” According to McGrath, doubt is not a sign of spiritual weakness, rather it is an indication of spiritual growing pains. While admitting that doubt is probably a permanent feature of the Christian life, he argues convincingly that faith and doubt are not mutually exclusive. Instead of suppressing it, or becoming overwhelmed by it, Christians need to view doubt from a more positive perspective by focusing on the spiritual benefits that it can provide. Doubt should be seen as an opportunity to rediscover the full depths of faith and as a way of strengthening the foundations of our relationship with God.

McGrath writes in a conversational manner which makes this book accessible to a wide variety of readers. Helpful illustrations, quotes from well-known authors, and an abundance of biblical references are included throughout the text. While there are no endnotes and the book lacks an extensive bibliography, a short “for further study” section directs the reader to other books that deal with Christian apologetics. The Ravi Zacharias International Ministry website is also recommended as a valuable resource. (Zacharias authored the forward to this book.) This book could easily be used as a discussion guide in a small group setting. While it appears to be written mainly for college students who have doubts about their Christian faith, anyone with questions about the veracity of Christianity should benefit from reading this book.

Reviewed by J. David Holland, Biology Instructor, Benedictine University at Springfield College, 1500 North Fifth Street, Springfield, IL 62702.



SOCIAL SCIENCE

WHERE GOD AND SCIENCE MEET: How Brain and Evolutionary Studies Alter Our Understanding of Religion by Patrick McNamara, ed. Westport, CT: Praeger Publishers, 2006. Three volumes, 862 pages, indices. Hardcover; \$275 set. ISBN: 0275987884.

The intersection of religion and spirituality with the human sciences has witnessed remarkable growth in research over the past century with marked acceleration in the later part of the twentieth century. While scholars like Sigmund Freud were determined to rid the world of religion through pioneering psychiatric research, others such as Carl Jung became convinced by their studies that

psychology, religion, and spirituality are inextricably interwoven. This pioneering collection is part of a larger Praeger series on Psychology, Religion and Spirituality edited by J. Harold Ellens.

These particular volumes focus on the manner in which brain and evolutionary studies in the past decade have contributed to our understanding of three main areas—each of which is the subject matter of a single volume—evolution, genes, and the religious brain; the neurology of religious experience; and the psychology of religious experience. Over forty contributors from diverse disciplines such as cognitive psychology, theology, psychiatry, neurology, anthropology, radiology, philosophy, experimental psychology, social psychology, clinical psychology, religious studies, behavioral genetics, sociology, and pharmacology make for wide-ranging and informative reading. Authors are of varying religious persuasions or none and this provides some interesting ways for the perceptive reader to discern how belief systems influence interpretation of scientific or clinical findings. A variety of models, theories, systems, and methodologies are employed across the three volumes reflecting not only the diversity of disciplines but also the proclivities and interests of various researchers. Most of the authors are well published in their fields in elite peer-reviewed journals and this fact coupled with excellent editing provides high quality fare.

The majority of the contributors are sympathetic to spirituality and/or religious inclinations of human beings although not all would assert the transcendental nature of religious belief. The essays as a whole speak to the infancy of research in this area, the limitations of scientific methods to study matters that may go beyond the experiencing human subject, and the myriad variables that interrelate in complex psycho/social/spiritual phenomena. Some readers will object in principle to the idea that scientific methods and techniques should be employed in pursuit of deeper understanding of religious phenomena; others will adopt a cautiously optimistic view that some fruitful insights may emerge. Clearly the lure of reductionism is ever present as is the equal lure to declare something religious or spiritual and about which science can say nothing of any worth. Many of the contributors are well attuned to both of these dangers and most conclusions are appropriately couched in cautionary language. Most *PSCF* readers would benefit from these essays, especially those pertaining to their own expertise.

Reviewed by Dennis W. Cheek, Vice President of Education, Ewing Marion Kauffman Foundation, Kansas City, MO 64110.

THE MARKETPLACE OF CHRISTIANITY by Robert B. Ekelund, Jr., Robert F. Hébert, and Robert D. Tollison. Cambridge, MA: The MIT Press, 2006. 328 pages, index. Hardcover; \$29.95. ISBN: 026205082X.

Adam Smith, founder of economics, recognized early in his work that religious movements could be productively viewed through the lens of economics. Max Weber is perhaps the most famous historical exponent of this view with his work on how Protestantism spurred the rise of capitalism in what is now known as the Weber-Tawney thesis. The authors of this book, all economists, build on

the insights of Nobelist Gary Becker who showed how use of a utility-maximizing strategy based on full-price notions of supply and demand could be applied to various aggregate human behaviors within populations, including topics in crime and justice, family relations, altruism, and religion. This work is a sequel to their *Sacred Trust* (1996) on indulgences in the medieval church.

The current book builds on the pioneering work of Ekelund and Tollison in *Mercantilism as a Rent-Seeking Society* (1981). Combining their economic analysis with inputs from history, anthropology, sociology, and religious studies, they provide a fascinating way to view religion and how individuals choose to participate in modern religious life.

The Protestant Reformation is seen in this light as the successful penetration of a religious market formerly dominated by a monopolistic firm—the Roman Catholic Church. From Martin Luther onwards, they argue, Christianity is pushed toward a competitive process where various offerers within this market differentiate themselves from their competitors in doctrinal, organizational, worship, and other ways. This includes an analysis of the Counter-Reformation and its attendant results in response to the challenges raised by the Reformers. Individuals respond to these various market differentiators in diverse ways and select from an ever-increasing menu of choices that serve to further differentiate and segment the market. The end result is the plethora of viewpoints and allegiances that one can find in contemporary Christianity. The authors consider a wide ranging collection of examples and mini-case studies as they explore the ways in which various market pressures and market reforms operate within Christendom, including some attention to contemporary concerns such as gay marriages, gay clergy, science vs. religion, and clerical celibacy. They also discuss the views and approaches of a large number of other economists and social scientists and how these views relate to their own. It will no doubt emerge that these fairly early but serious attempts to apply economic theory and analysis to the marketplace of Christianity will prove misplaced at points and overdone, but the reader cannot fail to think more deeply and thoughtfully about the contemporary Church within society in light of the pioneering work of these three economists.

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WHY THIS NEW RACE: Ethnic Reasoning in Early Christianity by Denise Kimber Buell. New York: Columbia University Press, 2005. 257 pages, bibliography, indices. Hardcover; \$47.50. ISBN: 0231133340.

The twentieth century has witnessed several instances of science, ethnic reasoning, and religion intertwining with absolutely horrific results. The ethno-religious thinkers of the Third Reich, for example, defined the racial category of Jewish with a fixity that entailed the belief that Jews could not actually become Christians, that conversion to this religion—which had previously prided itself on its universality—was, for them, simply impossible. Bolstered by a supposedly scientifically rational way of defining race, and laden with centuries of a Christian ethnic reason-

ing that included the doctrine of supercessionism (the view that Christianity replaced Judaism as recipients of God's covenants), nearly a whole continent participated in the mass extermination of Jews.

Many books have been published examining the role that racist thinking has played in Christian discourse, usually in connection with the colonial or anti-Semitic enterprises that Christians have engaged in, but Buell's *Why This New Race* stands out for tackling how early Christians formulated their ideas through discourses of ethnic reasoning. Through a study of Christianity's first few centuries, it proves applicable to our modern era precisely because much of what she covers remains part and parcel of Christian rhetoric. Readers of this journal should find her book invaluable for demonstrating how socially fluid concepts such as religion have played a major role in defining race—especially because “[w]e are used to thinking of science, especially the biological sciences, as the site for authoritative knowledge about race” (p. 21).

Buell begins by exploring how race/ethnicity and religious practices were already linked in the Roman world and how Christians followed this pattern. She notes how genealogical claims functioned to support the notion of ethnicity as fixed even as certain documents, such as Caracalla's edict calling for the expulsion of Egyptians from Alexandria, link ethnicity to social habits. In the biblical narratives upon which early Christians drew, a similar fixity/fluidity dynamic was at work, as illustrated by Achior's conversion in the deuterocanonical book of Judith; Paul likewise claims that gentiles acquire Abraham as an ancestor upon conversion. “Assent to religious teachings,” Buell argues convincingly, “is imagined as the essence that constitutes a *genus*” (p. 46).

But more than that, early Christian appealed to history in order to stave off arguments against their supposed innovations, for such “innovation is particularly effective when framed as a restoration or reform by appeal to the past” (p. 67). Buell examines the writings of Clement of Alexandria, Origen, Justin Martyr, and more, uncovering how they identified Christianity as in continuity with the past. In some instances, it was by defining Christians as the true Israelites, and in others by claiming that Christianity restored the original universality of humankind. The latter bears particular relevance for the study of historical anti-Judaism in that Christians have often posited themselves as a universal, a non-people, in contrast to the supposed ethnic limits of Judaism, which is said to “define membership and salvation through flesh and blood lineages” (p. 95). Indeed, Christian rhetoric against other groups, be they Jews or Gnostics, often included the charges that said groups reckoned their identity in a fixed manner in contrast to Christianity's fluidity: “Ethnic reasoning is an effective rhetorical device for those seeking to gain authority for their visions of Christianness in part because they can use it to persuade readers to think of themselves and others using collective strategies” (p. 136). However, Christian collective self-definition that relied upon ethnic or racial terminology was made to serve a universalist purpose by positing Christianness “as the ideal or most authentic form of humanness” (p. 164).

Buell's book illuminates how early Christians used ethnic reasoning to develop the various binary discourses of Christian/Jew, orthodox/heretical, universal/particu-

lar, etc. At the end of her book, she writes that she hopes to encourage more studies of how modern interpretations of Christianity are racialized and how contemporary Christian claims to universality may encode racism or ethnocentrism. She has given us a worthy starting point. *Why This New Race* is set to challenge many of our assumptions about the intersection of race and religion, both in ancient and modern times. It is one of those books that serve to inform us, in clear and uncompromising language, just how it is that we arrived at this point in history; it will undoubtedly shape future studies of the subject for years to come.

Reviewed by Guy Lancaster, Assistant Editor, Encyclopedia of Arkansas History & Culture, Little Rock, AR 72201.

DARK AGES: The Case for a Science of Human Behavior by Lee McIntyre. Cambridge, MA: MIT Press, 2006. 121 pages, index. Hardcover; \$24.95. ISBN: 0262134691.

I obtained this book with the hope that it would build on the themes I encountered in another book that I am reading (*Destructive Trends in Mental Health*). As a practicing experimental psychologist, I have observed firsthand the strengths and weaknesses of the field of psychology. Unfortunately, McIntyre is prone to overstatement. He argues that social scientists often answer questions without data, their attempts are biased by political and perhaps religious ideology, and the field is not adequately scientific because social scientists avoid reducing the human condition to deterministic relations. As much as I might agree with some of these points, he overstates them and caricatures social scientists as ignorant ideologues uninterested in data.

While he idealizes the natural sciences as the model child, he fails to recognize some of the best scientific analogies for the condition of the social sciences: weather prediction, earthquake prediction, fluid dynamics, or population growth. For example, our inability to make anything more than general predictions about the weather more than a week in advance parallels our inability to predict with any degree of accuracy the behavior of an individual or group, and trying to predict a rare phenomenon like an earthquake is like predicting another Columbine. To ascribe these failures to a resistance to knowledge, a disdain for the scientific method, or ideological bias is as unfair for social scientists as it is for natural scientists.

McIntyre underestimates the challenges that are unique to the social sciences. First, if I had as much control over humans as physicists and chemists have over their subject matter, the application of the scientific method would be much easier. Social scientists have to obtain approval by review boards to insure that their experiments are ethical. Second, many of the social sciences (especially sociology and psychology) are heavily biased by a liberal ideology (e.g., see Redding's March 2001 article in the *American Psychologist*). McIntyre was more likely to use religious ideology as the scapegoat and seems to idolize Galileo and Darwin, but liberal political ideology is much more likely to be the problem in certain social scientific fields (e.g., studies of gun control, sexual orientation, race, and immigration) but less so in ones that are not so value-laden (e.g., studies of perception, basic learning phenomena, or

decision making). Third, I have encountered too much faddishness that results in the quick dispensing of old theories instead of building on them. These fads are often due to a lack of precision in theory development that makes it difficult to disprove the theory. The best theoretical "story," no matter how vague, is the one that wins out.

Despite McIntyre's diatribe against bias, he failed to recognize the log in his own eye. When he makes statements like "religion has been offered as a substitute for reason and has retreated only after suffering the most crushing defeats" (p. 52) and wonders how a rational person can "believe in a concept so patently implausible as God" (p. 53), his own ideological biases are manifest. In his concerns about a resistance to knowledge holding back the social sciences, I was left wondering whether the author would be willing to consider answers that would suggest that religious beliefs have positive consequences? McIntyre envisions a future utopia in which a properly conducted social science has eliminated poverty, crime, and war. This Heaven on Earth may or may not be possible, but he argues that we will never know until we try. I worry that McIntyre has not considered that this ideal may require that his utilitarian ethics would lead us to justify genocide (to eliminate war), parental licenses (to reduce poverty by preventing overpopulation), or a police state (to reduce crime) among other questionable solutions.

In sum, I believe that McIntyre failed to consider many of the real problems with the behavioral sciences, showed many of the biases that he fears might influence our judgment, demonstrated a disdain for the Christian worldview, and deified humankind. There are real problems in the social sciences, but the author provides caricatures that are of little practical utility. Unfortunately, despite its promising premise, I cannot recommend this book.

Reviewed by Michael Young, Associate Professor of Psychology, Southern Illinois University, Carbondale, IL 62901. ■

Amplification on Two Evolutionary Claims: A Response to Pattle Pun

Some of the points made in Pattle Pun's article (*PSCF* 59, no. 2 [June 2007]: 102-9) are contentious and widely debated in the context of the debate over ID. Rather than deal with those, I would like to point out two claims that can also be found in sources from a conventional evolutionary perspective, yet are incorrect.

The first is the claim that "the fossil [record] shows unicellular organisms such as cyanobacteria around three and one-half billion years ago and then suddenly the Cambrian explosion 530 million years ago, with nothing much appearing in-between." Older rocks have generally suffered greater alteration and are less common than younger rocks, and bacteria often have few distinctive fossilizable features. Nevertheless, there seems to be an increase in the diversity of bacterial forms over time.

Eukaryotes are typically more complex in structure and thus are easier to study in the fossil record. The first eukaryotes appear about two billion years ago or so. Algae and other protistan eukaryotes diversified through the Precambrian; there are also fossils of uncertain taxonomic affinity that show appreciable evolutionary turnover through this time interval.

In the latest Precambrian, beginning about 570 million years ago, the earliest animals appear. These include such simple animals as sponges and cnidarians, as well as probable very primitive representatives of other phyla. Exact affinities of many of them are uncertain; this reflects the preservation (often relatively coarse) but may also indicate that the species have not yet differentiated into the familiar post-Cambrian phyla. Within the Cambrian itself (beginning about 544 million years ago), there are forms transitional between phyla as well as the earliest clear representatives of many phyla. Although assignable to modern phyla, these typically are relatively primitive, as expected evolutionarily. The Cambrian is neither as explosive nor as exceptional as commonly claimed, though there remains much to do in areas such as testing competing evolutionary hypotheses by better documenting the exact patterns.

Secondly, although “survival of the fittest” is a well-established popular description of evolution, often depicted (especially in nature TV shows) as fierce competition, in reality it only takes being fit enough to survive. Cooperation and competition both are possible paths to adequate fitness. Thus, symbioses such as that envisioned in the endosymbiosis model of organelle origination fit within a normal evolutionary paradigm. It does not increase one’s fitness to kill a handy supply of food, shelter, transportation, etc.

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What the “Big Bang” Really Was!

The June 2005 issue of *Perspectives on Science and Christian Faith* contains an excellent article entitled “The Thrice Supported Big Bang” by Perry G. Phillips (*PSCF* 57, no. 2 [2005]: 82–96). It is a scholarly presentation covering fifteen pages, including references. In his opening paragraph, Phillips states: “One cannot dismiss ... the ‘hot Big Bang’ as the best model for the origin of the universe.”

I found Phillip’s article most interesting but his positive assumption that the universe came into being as the result of an unparalleled cosmic explosion troubled my finite mind. All explosions since then have been chaotic or destructive. How could anyone with any degree of intelligence come to a conclusion that this is the way the universe began? Yet the vast majority of scientists (astronomers, cosmologists, and astrophysicists) are in general agreement with this theory for its origin. I am one that does not accept it, although I do accept the theory that a “Big Bang” did occur—but not as the beginning or the

origin of the universe. Being a Christian, amateur astronomer, biochemist, nutritionist, food technologist and logician, I just could not accept the event called the “Big Bang” as a plausible explanation for anything as awesome as the origin of our magnificent universe!

On my office wall I have a picture taken with the Hubble Telescope in 1995 entitled “Hubble Deep Field.” The inscription at the bottom is:

Nearly every object in this image is an entire galaxy, each composed of billions and billions of suns taken by the Hubble Space Telescope. It is a random patch of sky near the Big Dipper, less than 100th the area of the full moon. The telescope, above the blurring effects of the Earth’s atmosphere, reveals colors, shapes and structures of galaxies to nearly 90% of the distance to the edge of the Universe.

I made a count of the galaxies within a one-inch width of several places on the picture and then computed from the average the number of galaxies on the picture and came up with 750. Thus, when extrapolated to cover the entire sky, the number of galaxies in existence at a relatively short time after the “Big Bang” was astronomical if I can choose a word to describe the number. How could this be? To me, a scientist who thinks scientifically, there is only one explanation—the universe was already in existence at the time of the “Big Bang” and that event was merely God’s way of announcing that the work was finished and that now the curtain could be opened and the marvel of his creation could be viewed for the first time!

I am so excited about this revelation that was given to me just shortly after the turn of the year that I want to share it with other scientists, especially those who believe in God as the Creator, to see how they react to my theory which, to me, is far more plausible and believable than the one that is so widely accepted by the vast majority of scientists today.

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Errata

The cover of the June 2007 was inadvertently printed with the list of articles in the December 2006 issue. Replacement covers with the correct titles were mailed to everyone who received the June issue.

In the manuscript guidelines and on p. 167, the incoming editor’s email address was published incorrectly. Please note Arie’s correct email address below.

We apologize for the errors and confusion.

Change in Manuscript Submission

Please submit all manuscripts (except book reviews) to:

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