



Book Reviews



ANTHROPOLOGY & ARCHEOLOGY

ALONE IN THE WORLD? Human Uniqueness in Science and Theology by J. Wentzel van Huyssteen. Grand Rapids, MI: Eerdmans Publishing Co., 2006. 365 pages, bibliography and index, 15 color plates. Hardcover; \$40.00. ISBN: 0802832466.

South African theologian J. Wentzel van Huyssteen is the James I. McCord Professor of Theology and Science at Princeton Theological Seminary and the author of many books. The book under review is the 2004 Gifford Lectures delivered at the University of Edinburgh. Wentzel van Huyssteen believes that scientists and theologians are both talking about the uniqueness of humans, so he sets out to explore what he considers the uncharted waters of the interdisciplinary relationship between theological anthropology and paleoanthropology. He accepts current evidence from paleoanthropology at face value and seeks to understand it from a theological perspective.

The author's theoretical persuasion is what he calls "postfoundationalism," which he believes allows for interdisciplinary dialogue between science and theology. "Postfoundationalism" resembles the concept of post-modernism where reality is perceived and interpreted, not something that is fundamentally true or false. A post-foundationalist approach invites the theologian to acknowledge the contextuality of religious experience and the crucial role of one's own interpretation of that experience. Here he would be critical of an evangelical approach to biblical exegesis that takes the Word of God as true on its own terms.

Wentzel van Huyssteen is critical of historical theological conclusions which he considers to be abstract and esoteric. He wants theologians to interpret theology from the current physical lived experience of humans. He writes:

The most responsible Christian theological perspective on human uniqueness requires a distinct move away from esoteric and overly abstract notions of human uniqueness and a return to embodied notions of humanness where our embodied imagination, sexuality, and moral awareness are directly linked to the fully embodied self-transcendence of believers who are in a relationship with God.

Following the thinking of Pascal Boyer, van Huyssteen considers religion an example of humans over-detecting signs from the world around them, so that sensing the existence of God is actually a type of "false positive." He argues that religion is a result of human imagination as humans search for the meaning of their existence. The earliest religious experience was that of shamans, who received their perceptions through altered states of consciousness and recorded their experiences in the art they created during the Upper Paleolithic period 45,000 to 35,000 years ago on the walls of caves in Western Europe.

He uses an evolutionary epistemology to interpret all things. Religion is argued to be a result of human evolution that expressed itself through cultural evolution. He considers cultural evolution to be on par with and not entirely dependent on biological evolution, so here he parts ways with Richard Dawkins and Stephen Gould.

If our genes do not completely determine our culture and our rational abilities, then we are also freed from our genes determining our metaphysical (religious) faith. The author wrote:

... instead of asking what kind of mind is required to know the world, we should rather ask what kind of world the world must be to have been able to produce the sort of minds we have.

In this way human evolution is a product of the human genetic entity in interaction with the world in which it found itself, both the physical and the cultural (religious) world.

Chapter three, "Human Uniqueness and the Image of God," was of most interest to me, as he revisited the history and origins of the doctrine of *imago Dei*. However, he argues that Christian theologians' concept of the "image of God" is an overly complex theological abstraction, which he finds of limited value today. He considers most Christian doctrine out of step with modern science and calls these doctrines "pieces in a museum."

Van Huyssteen is an excellent writer, and this book is excellent according to his purpose and context. However, he would not qualify as a member of the ASA, holding to little or nothing of the ASA statement of faith, and this book would be of limited interest to most ASAers. It would be of most interest to anthropologists and archaeologists, or those interested in the history of evolutionary biology. Few evangelical theologians I know would appreciate this book.

Reviewed by Mark A. Strand, Shanxi Evergreen Service, Yuci, Shanxi, China 030600.



ENVIRONMENT

AN INCONVENIENT TRUTH: The Planetary Emergency of Global Warming and What We Can Do About It by Al Gore. New York: Rodale, 2006. 321 pages. Paperback; \$21.95. ISBN: 1594865671.

Whatever one's political leanings, it is evident that Al Gore, the Democratic presidential candidate in 2000, is passionate about the causes he believes in—and one of these is the current world problem of global warming. Following the release of his documentary movie of the same name, this book has appeared. Partisan comments are few—his thesis is fourfold: (1) Global warming is real; (2) Global warming is a potential catastrophe to human civilization; (3) We *can* do something about it if we act both quickly and responsibly; and (4) We are all in this together. It is not (or should not be) a political debate.

This book is directed to a nonscientific audience, and, as such, is a quick read for one scientifically trained. It is a "pretty" book, including many color illustrations and

Book Reviews

photographs, but unfortunately it is printed on thick, glossy, colored paper and is poorly bound (seeing the text on inside margins is difficult without spine-breaking). This publishing choice has led to a book which is heavy enough to make reading uncomfortable, but it has also allowed many substantial illustrations, drawings, and maps. The melting glacier pictures are particularly impressive.

Gore argues forcefully and reasonably throughout the book for his claims. In spite of its printing problems, I highly recommend it, even to scientists, for it shows pictorially just what all the fuss is about. Go ahead, break the spine.

Reviewed by John W. Burgeson, 36633 Road P.8, Mancos, CO 81328.



ETHICS

CHRISTIAN ETHICS AND THE MORAL PSYCHOLOGIES by Don S. Browning. Grand Rapids, MI: Eerdmans Publishing Company, 2006. 254 pages, index. Paperback; \$30.00. ISBN: 0802831710.

Can Christian ethics and the social science of evolutionary psychology be allies, and not enemies? That is central question motivating this deeply thoughtful book.

Don S. Browning, Alexander Campbell Professor Emeritus of Religious Ethics and the Social Sciences at the University of Chicago Divinity School, has crafted a complex and perceptive portrayal of the way that a significant trajectory of traditional Christian thought can successfully interact with a dominant contemporary scientific practice—in this case, the practice of psychology.

The “moral psychology” that Browning is most committed to is evolutionary psychology. The author argues that evolutionary psychology contains insights into human nature that can strengthen traditional models of Christian ethics. In particular, Browning points to the growing literature in evolutionary psychology demonstrating that the moral beliefs and conduct of individuals are shaped by the narrative traditions of “authoritative communities.” Browning rightly argues that a prime example of such an “authoritative community” is the variety of Christian church bodies, which all possess in assorted ways the fundamental faith stories that can inform and govern genuinely ethical lives.

Some people will think that, for all of Browning’s desire to create a “thick” version of Christian ethics by absorbing evolutionary psychology into it, his presentation of the “Christian” aspect of his proposal is noticeably “thin.” It consists largely of the injunction to heed the significance of the *imago Dei*, which reveals that all human persons are equally loved by God. Browning eschews any sort of divine command theory of ethics, substantially rejects the notion of a sacrificial ethic, and insists that a Christian love ethic only makes sense in relation to its purported origins in a primeval “kin altruism.” He does invoke Christian theologians like Reinhold Niebuhr, Paul Ricoeur, and the Roman Catholic Louis Janssens, but offers their various contributions as Christian adumbrations of basic observations of evolutionary psychology. Perhaps Browning too easily assumes his readers’ prior acquaintance with the traditional formulations of Christian ethics, or perhaps

he is simply wary of the incoherence into which much modern thought on Christian ethics has fallen.

Browning does provide an interesting discussion of the value for Christians of science as a social practice. He speaks of science as expressing “distanciation,” which means that science posits a separation between the observer and the object observed. The natural world is not received as a sacred object fit only for worship; rather, the natural world is to be treated as a collection of objects suitable for study and assessment. Science thus serves a critical function, and this critical attitude pervades scientific cultures such as ours. Browning argues that the influence of “distanciation” in our culture also contributes to a proper understanding of ethics, including Christian ethics. Just as an attitude of critical scrutiny is necessary in science, so is it also necessary in ethics, lest our moral convictions become a misguided fanaticism.

In the end, what makes Browning’s work so valuable is his insistence that Christian ethics needs to be practical and realistic, formative and critical, an ethic that guides everyday judgments rather than an ethic that merely invokes abstract ideals. In that sense, Browning’s arguments here are part of the recent tradition of “embodied morality” (or, in Christian parlance, of “incarnational morality”) that includes thinkers like Niebuhr and Ricoeur, Mark Johnson and Owen Flanagan. At a time such as our own, reading the works of contemporary Christian ethicists makes one despair that Christian ethics any longer exists. Browning’s salutary encouragement of an ethic that is rigorously rooted in the science of human nature as it seeks to approximate a divine moral goodness, is refreshing indeed.

But the general reader should be warned—this is a dense book, with a host of abstruse arguments and analyses of myriad moral philosophers and theologians, as well as of those engaged in the endeavors of evolutionary psychology. It may be best suited for those readers who have some background in philosophical or theological ethics, and a familiarity with the basics of evolutionary psychology.

And so the question remains: Can Christian ethics and evolutionary psychology consummate a successful marriage? Don Browning makes the best case I have seen yet for an affirmative answer to that question.

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



FAITH & SCIENCE

PERIL IN PARADISE: Theology, Science, and the Age of the Earth by Mark S. Whorton. Waynesboro, GA: Authentic Media, 2005. 233 pages. Paperback; \$16.99. ISBN: 1932805230.

Whorton (Ph.D., aerospace engineering) formerly worked for NASA and once held a young-earth creationist (YEC) position. His book discusses what “very good” in Gen. 1:31 means—and *does not* mean. The book is divided into four parts.

Part I (“A House Divided”) notes how charged the age of the earth issue is for some Christians who view anything but young earth as unbiblical and compromising.

There are two paradigmatic approaches to what “very good” means. The YECs assert it means absolutely perfect with no death/pain (animal or human) until after the Fall, which shattered God’s ideal; so God instituted a plan of redemption to restore all things to his original intent (“Perfect Paradise Paradigm”). The other (“Perfect Purpose Paradigm”) sees a *planned obsolescence* in a very good (but not fully-perfect, permanent) creation; God will transform this into a permanent new heavens and earth—complete with resurrection bodies and no animal death. (Compare the “good” Mosaic covenant [Rom. 7:12]—a deliberate forerunner to the new covenant.) The Lamb’s being slain from *before* the earth’s foundations reveals a higher purpose beyond the Fall—not a “Plan B,” to which God had to resort after human sin in idyllic Eden.

Part II (“Theology of an Ancient Creation”) elaborates on the differences between these paradigms. Whorton points out, for instance, that prophecies about creation’s restoration (wolves with lambs, calves with lions [Isa. 11:6]) are not a *literal* return to Eden, as YECs maintain. Indeed, Isa. 35:9 declares that *no* lion will be there! Such passages should be viewed *figuratively* (especially Isa. 65:20: “the youth will die at the age of one hundred”!). Scripture paints a picture of peace, tranquility, and harmony. The food chain and animal predation *were* part of the original creation, as depicted in Psalm 104 (a creation psalm) and Job 38–41, not the result of the Fall.

Part III (“The World before the Fall”) sees the garden in Eden, unlike the world around it, a haven without weeds, thorns, or harmful animals; these were kept outside the garden. Only with the Fall did God withdraw his protective care. Ample scientific indicators show that the world before humans appears to have operated by the same natural laws as today. Also, the world God created is ancient; God did not create things with an appearance of antiquity (e.g., light from an exploding star 169,000 light years away reaching the earth in 1987). Tornadoes, hurricanes, earthquakes, and volcanoes—though now dangers for post-Fall humans—occurred before humans appeared and actually play a part in keeping the earth habitable. Physical pain was also part of God’s original creation, serving as protection from further injury.

Interestingly, YECs who believe that all animals were herbivores before the Fall, like to point to the bombardier beetle’s defense mechanism as an indication of design. However, this defense mechanism makes sense in a world of *predation*. And did the Fall completely transform the digestive system of animals that “turned carnivorous,” which would require dramatic anatomical and biochemical (i.e., total systemic) changes?

Part IV (“Suffering, Death, and the Fall”) discusses the YEC assumptions that “very good” could only mean perfection and thus no pain, animal death, or extinction before the Fall. Yet Scripture speaks of *human* death coming with sin (Rom. 5:12), not *all* death. (Do we want to count *plants* here?) No, the garden in Eden *was not* the best of all possible worlds, but a *means* to it. Pre-Fall animal immortality should not be a litmus test for orthodoxy, as YECs often suggest.

Whorton sees the curse as limited not to all animals, but to “the evil one embodied in the serpent” (p. 159); eating dust is a picture of humiliation. The woman’s pain would *increase* in childbearing. Toil would be added to human labor, making it far less productive outside the garden.

Significantly, the curse in Genesis 3 does not mention animal death at all. Romans 8 suggests an in-built perishability to creation, vulnerable to suffering and futility.

Whorton’s irenic, balanced book, though making some minor assumptions and claims with which I disagree, deftly addresses crucial issues and helpfully corrects a number of problems and faulty assumptions in the YEC paradigm.

Reviewed by Paul Copan, Palm Beach Atlantic University, West Palm Beach, FL 33401.

SCIENCE AND NONBELIEF by Taner Edis. Westport, CT: Greenwood Press, 2006. xxii + 287 pages, bibliography, index. Hardcover; \$65.00. ISBN: 9780313330780.

Nonbelief, the belief that there is no God, is under attack from believers in God; they use arguments that include some based on science. To defend nonbelief, this book has been written by theoretical physicist Taner Edis, associate professor of physics at Truman State University (Kirksville, MO), whose extensive prior publications on the secularist tradition in science contrast it especially with ideas from Islam and Christianity.

This book, in the series Greenwood Guides to Science and Religion, opens with the series editor, Richard Olson, stating a goal: to explore interactions between the scientific and the religious across space, time and culture, in volumes, each with three supplements. The first supplement is a chronology of events, which includes the names or writings of prominent scholars, but not those of Jesus and Mohammed. The second is a set of primary documents, for which Edis has chosen six, which generally argue that in the light of modern science, belief in religion or the paranormal is mistaken or harmful. The third is an extensive annotated bibliography, which includes 236 works, each with one or two sometimes critical sentences summing up their content. Many of the works support nonbelief or liberal theology; others by Christians or Muslims oppose evolution or advocate creationism or intelligent design. However, a formidable challenge to nonbelief is ignored, by the exclusion of writers such as Darrell R. Falk, George L. Murphy, or Richard T. Wright, who integrate sound science and Christian faith.

The seven chapters, illustrated by eleven photographs, ten diagrams, and four cartoons, begin with the history of “Science, philosophy and religious doubt,” from antiquity through medieval times to today. Edis asserts that the top-down view of nature being controlled by a deity has been replaced by a bottom-up description in which physical processes determine biological ones, which in turn are a sufficient cause for human thoughts, emotions, and behavior. Three chapters follow, focusing on physics, biology, and science of the human mind. The Big Bang is not regarded as the moment when the universe began but as a point in continuous spacetime. Law and randomness interact to make apparent anthropic coincidences not remarkable. In biological evolution, order forms spontaneously in the universe, a system far from equilibrium; its maximum possible entropy grows, an idea in conflict with a fixed maximum in entropy for an isolated system attaining equilibrium. Likewise, to explain thought and activity of the human mind without invoking anything spiritual like a soul, an analogy with a computer is useful, but in it,

Book Reviews

the distinction between hardware and software blurs for a mainframe compared to a microcomputer, and algorithms for artificial neural networks differ greatly from people learning.

Three final chapters relate broadly to the social sciences. "The fringes of science" criticizes beliefs in scriptural miracles, parapsychology, and unidentified flying objects. Next, materialistic explanations of religion are offered, but none is satisfactory for why "humans seem to be predisposed to believe in powerful supernatural agents." To close, Edis shows how nonbelievers' understanding of science should influence their actions, both individually in morality, and collectively in politics; neither science nor religion leads to a definite set of moral principles, moral rules of the religions being different. "Separate spheres" for science and religion (non-overlapping magisteria) is indefensible intellectually, but useful politically to ally secularists and liberal believers against the undermining of integrity of science education or freedom in research, by religious conservatives.

This book, which defends nonbelief effectively from some attacks based on science (particularly those using intelligent design, anthropic principles or paranormal phenomena), could influence an inquirer to think that the claims of Christianity are false. Edis seeks to protect the scientific community's ability to benefit society, both against restrictions coming from religious conservatives, and against recognition of pseudoscientific ideas. The committed Christian reader could be helped to identify arguments to avoid in apologetics, and unresolved conflicts between science and faith.

Reviewed by Charles E. Chaffey, Adjunct Professor of Natural Science, Tyndale University College, Toronto, ON, Canada M2M 4B3.

IS BELIEF IN GOD GOOD, BAD OR IRRELEVANT? by Preston Jones, ed. Downers Grove, IL: InterVarsity Press, 2006. 158 pages. Paperback; \$13.00. ISBN: 0830833773.

Here is an e-mail exchange like few others. A lead singer/songwriter for a punk band, "Bad Religion," exchanges honest and deep reflections with a history professor in a Christian college (who is a fan of "Bad Religion"). They talk about religion and science and naturalism and Christianity. Added to their inviting dialogue are sidebars that give further insights and illuminate the material being discussed plus an occasional "inquiry box" which raises questions addressed to the reader. Finally the endnotes lead to further exploration and reflection. The chapter headings in this book are simply indicators of the main subject of the dialogue exchange in the e-mails. For instance, the chapter titles include "Getting Acquainted," "Inquisitions," "Hating God," "Theism Versus Naturalism," "Freedom and Environment," and "Christianity and Violence."

Preston Jones, the John Brown University Professor of History, started the exchange of e-mails with a fan letter. To his surprise, Greg Graffin, the songwriter, wrote back, and they found many things in common. But, of course, the deepest thing found them on opposite ends of the spectrum. I wrote in the margins after the conversations, "Good format. Fascinating exchange. Fair to the positions taken." It opens my mind to another world and gives new insight to part of the world of those under 40 years of age.

Preston Jones seems a bit more sour on the world than I am. The punk songwriter, a recent Ph.D. in zoology under Will Provine at Cornell University, struck me as having been damaged by contacts he has had in the past with the Christian faith. I found him to be amazingly dependent on a rather naive faith in natural science. It is the only road to truth and the only hope for humankind, as he sees it. He seems to have read little in contemporary philosophy of science and not broadly in the history of science. I hope he stumbles across someone in his future who can expand his horizon. A summary of the book would be: "An honest exchange of a believer and an unbeliever chiefly focusing on science and Christianity with attempts to convert each other to their perspective positions." It ends before any changes are noted in either.

This book would make excellent reading for any college student in the sciences, for anyone studying for the pastorate, and for almost anyone who deals with young people in today's world. Those who are interested in apologetics would also find it stimulating. In fact, I would recommend it for anyone interested in how a Christian and an anti-Christian can intelligently and peacefully interact. Because it is an honest record of exchanged e-mails with very little editorial addition by Preston Jones, there really are no weaknesses to note. It is simply a factual account and a stimulating one. Reading this from a scientist's perspective, I had the itch to jump in and be part of the dialogue, because Preston does not use references to the nature of science, the history of science, and other disciplines which I think would have been appropriate responses to some of Greg's remarks. As, for instance, in the quote below:

God is an answer for people who have no idea how the physical world works. Now, if you combine knowledge of how the world works with fear induced through theological "education" during youth, you have religious scientists who can accurately identify the gaps in scientific knowledge and are compelled to fill them with God's wisdom or plan or whatever.

Perhaps some readers could start up a correspondence with Greg on the basis of the book.

Reviewed by Terry Morrison, Director Emeritus, IVCF Faculty Ministry, Madison, WI 53711.

SCIENCE & RELIGION: A Critical Survey by Holmes Rolston III. Philadelphia, PA: Templeton Foundation Press, 2006. xlv + 357 pages. Paperback; \$24.95. ISBN: 1599470993.

Holmes Rolston III is the University Distinguished Professor of Philosophy at Colorado State University. He is associate editor of the journal *Environmental Ethics*, author of six books (primarily in the area of environmental ethics), and winner of the Templeton Prize in 2003 and the Mendel Medal in 2005.

This is a re-publication of the original 1987 edition of the same title, with a new 35-page introduction. The book has numerous notes and a comprehensive index, but it has no bibliography other than a list of references at the end of the introduction.

The Introduction focuses on the rising importance of information in the past twenty years and on the unique-

ness of humans. Chapter 1 (Methods in Scientific and Religious Inquiry) focuses on the thesis that

in generic logical form science and religion, when well done, are more alike than is often supposed, especially at their cores ... Science operates with the presumption that there are causes to things, religion with the presumption that there are meanings to things.

Chapter 2 (Matter: Religion and the Physical Sciences) is a survey of explanations, from Aristotle's four causes to Newtonian mechanics to quantum mechanics and indeterminacy to relativity. Chapter 3 (Life: Religion and the Biological Sciences) draws an analogy between the creaturely suffering of evolution and the suffering of Christ, both of which were for the greater good. Chapter 4 (Mind: Religion and the Psychological Sciences) describes and critiques four schools of thought: Freudian psychoanalysis, behaviorist psychology, humanistic psychology and cognitive psychology. Chapter 5 (Culture: Religion and the Social Sciences) focuses on various sociological predictions of the end of religion and why each has gone wrong.

Chapter 6 (Nature and History) discusses and distinguishes between "hard naturalism" and "soft naturalism." Chapter 7 (Nature, History and God) describes and discusses three options within theism for overarching or accommodating the place of the natural: scientific-existential theism, process theism, and transscientific theism. The author also discusses what room the sciences leave for religion.

In summary, Rolston takes representative issues from the leading sciences and integrates them in a survey that begins with matter and moves through life, mind, culture, history, and spirit. Rolston's *Science & Religion* differs from similar books in its attention to the human sciences of psychology, sociology, and history. One point made in the Introduction and in the final chapter is that science cannot teach us what we most need to know and care about: "Science is a good servant but a bad master." It can leave us "with our material needs better provided for, but lost in meaninglessness and alienation, divisiveness and angst."

Rolston has accomplished a balanced survey of a very wide range of sciences and the room for religious belief after science in each area. Rolston's book is not an easy read. It assumes a broad knowledge of philosophy, theology, and the sciences. Philosophical terms and names are mentioned without definition or identification, so it is best suited for readers who already have some familiarity with the field of science and religion.

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

equipment design, research in materials science, and the application of science and technology to arms control and weapons dismantlement. He worked at Sandia National Laboratory (where I had the privilege and pleasure to work with him for eight years). Jack also spent time at the Pentagon and subsequently became Professor and Founding Director of Engineering Programs at Washington State University.

The book *Beyond Paradise* is the culmination of many years of research, dialogue and public discourse, through the 40-year career of Swearengen as a design engineer and materials scientist. The book is divided into eleven chapters followed by an extensive bibliography. Chapters 1-3 present a time-scale portrayal of technological civilization where technologies' origins and development are reviewed and its effects examined on civilization, other species and planet Earth itself. The title of chapter 4, *The Myth of Morally Neutral Technology*, presents the main thesis of the book and actually characterizes the content of chapters 4-9. Swearengen constructs three arguments for why technology cannot be viewed as morally neutral. In chapters 5 and 6 he shows that the course of technology is putting humankind on a collision course with physical, social, aesthetic and spiritual limits. In chapter 7 he shows how personal and group values enter the engineering design process. In chapter 8 Swearengen explores the roots of technological worldviews and in chapter 9 addresses the mixed blessing brought by personal mobility, graphically exemplified in the use of the private automobile. Chapters 10 and 11 then present a biblical foundation for technology as the "platform from which technological civilization may be redirected toward four-fold sustainability" (spiritual, social, ecological, and aesthetic).



GENERAL SCIENCES

BEYOND PARADISE: Technology and the Kingdom of God by Jack Clayton Swearengen. Eugene, OR: Wipf and Stock Publishers, 2007. 312 pages, bibliography, index. Paperback; \$40.00. ISBN: 1597528420.

Jack Clayton Swearengen is an ASA Fellow and Secretary-Treasurer of the Christian Engineers and Scientists in Technology, an affiliation of ASA. His career has included

Book Reviews

Swearingen deals with a very timely topic, mostly overlooked by the Christian community: the fact that technology is shaping our culture and controlling our lives—for better or for worse. We are all becoming aware of critical issues generated by human activity, such as increased energy demand, dwindling supplies, need for clean fresh water, congestion, environmental overload, surveillance and loss of privacy, etc. The inevitable question that emerges is whether technology can provide solutions for all these problems when *technology itself* is the cause of these problems. After doing extensive reading, dialoguing and thinking, Swearingen makes a credible case that it is secular values that are driving innovation and thus creating an idolatrous worship of science and technology. He challenges Christians to counteract this trend by helping shape technology (or even limiting it, when warranted) by using biblical guidelines.

In his prologue, Swearingen states the purpose of his book as follows: (1) to convince Christians that technology assessment is worthy of inclusion in discipleship; (2) to explain how the Church can use biblical values to confront the scientific-technical worldview and influence contemporary technological “culture.” In my opinion, Swearingen achieves the purpose for which the book was written. He does all this with deep conviction and a contagious passion, while recognizing with characteristic modesty, that this is only the beginning of an emerging process in the “theology of technology.” It will take a significant change in the Christian community’s outlook before it can take the lead in helping to manage the consequences of technology and/or acknowledging its limits.

Every ASA member would benefit immensely from reading this book. It is an extremely valuable resource and could even serve as a reference volume. I recommend the book without reservation. (See advertisement on page 151 for ordering information, discounts available.)

Reviewed by Kenell J. Touryan, National Renewable Energy Laboratory (retired), Indian Hills, CO 80454.

THE GOD EFFECT: Quantum Entanglement, Science’s Strangest Phenomenon by Brian Clegg. New York: St. Martin’s Press, 2006. 245 pages, notes, index. Hardcover; \$24.95. ISBN: 0312343418.

The quantum entanglement phenomena, now firmly established, clearly demonstrates that our common sense perception of reality is—simply stated—wrong. Specifically, the property of “locality,” which holds that all events are necessarily the result of “particles hitting particles” has been disproved. Clegg takes us on a historical journey through the arguments and experiments which have established this, taking time to point out the strange implications of this counter-intuitive view of reality. He does this in the form of an entertaining, readable, and exciting story.

Albert Einstein once (many times, actually) said, “God does not play dice with the universe.” Disbelieving quantum mechanics, Einstein was responsible for a short (four pages) paper in the May 1935 *Physical Review* (a copy of the paper is at www.burghy.50megs.com/epr.htm). In the thought experiment described in that paper, he showed that, if quantum mechanics was “true,” then the principle of locality must be false. This he considered absurd. Alain Aspect, in the early 80s, showed that locality was, indeed, false.

It is a marvelous story, and Clegg tells it well. Other books of a similar nature include *The Ghost in the Atom* by Paul Davies, 1986, where eight physicists argue eight different QM models; *Schrödinger’s Kittens* by John Gribbin, 1995; *Time’s Arrow* by Huw Price, 1996, on the nature of time; and *The Fabric of Reality* by David Deutsch, 1995, which argues for the multiple universes model. The world we inhabit is created both strange and wonderful, stranger than we can possibly imagine and so wonderful we can only stand in awe of its Creator. Highly recommended to all my ASA colleagues, particularly those who are not physicists.

Reviewed by John W. Burgeson, 36633 Road P.8, Mancos, CO 81328.

BEAUTY IN SCIENCE AND SPIRIT by Paul H. Carr. Center Ossipee, NH: Beech River Books, 2006. 194 pages. 37 illustrations including 16 color plates, index. Foreword by Philip Hefner. Paperback; \$18.00. ISBN: 0977651479.

In this age of conversation and conflict between science and religion, between reason and faith, it is seldom that we hear about the aesthetic dimensions of life and thought. And yet, ultimately, as Keats reminded us, “Truth is beauty and beauty truth.” Beauty, whether visual or conceptual, touches us deeply and moves us to elevated levels of experience. There is much in the world around us to admire, appreciate, and marvel for their sheer symmetry and grandeur, from colorful flowers and patterned butterflies that nature has wrought to magnificent cathedrals and meaningful mandalas that humans’ spiritual yearnings have created. Those who have tasted science and are sensitive to humanity’s religious heritage will see in all this an unfathomable mystery that no amount of rational analysis can deconstruct.

In this delightful little volume, ASA member Paul Carr has brought together for the reader a variety of examples of such beauty. With photographs and reflections he gives us a guided glimpse of so much of aesthetic value in the world, reminding us that there is much to be grateful for in life, beyond palatal pleasures and creature comforts. The work is clearly the result of considerable reading and reflection as revealed in the numerous quotes and extensive bibliography that are part of the book. Any reader is bound to be enriched by its pages and pictures.

Reviewed by V. V. Raman, Professor of Physics and Humanities Emeritus, Rochester Institute of Technology, Rochester, NY 14623.



HEALTH & MEDICINE

HEALTH AND HUMAN FLOURISHING: Religion, Medicine, and Moral Anthropology by Carol R. Taylor and Roberto Dell’oro, eds. Washington, DC: Georgetown University Press, 2006. 284 pages. Paperback; \$29.95. ISBN: 1589010795.

Taylor is director of the Center for Clinical Bioethics, a senior research scholar at the Kennedy Institute of Ethics, and an assistant professor of nursing at Georgetown University. Dell’oro is assistant professor in the Bioethics Institute and the graduate director of the Master of Arts Program in Bioethics at Loyola Marymount University in

Los Angeles. The fifteen contributors come mainly from secular and Roman Catholic universities. Each chapter has endnotes and the book concludes with a detailed index.

The book's five sections define theological anthropology, bioethics, and the human person; address human dignity and integrity; speak about human vulnerability, especially with respect to health issues; deal with gender and relationality; and discuss the practice of theological anthropology in health care, health policy, and science.

Part 3 was the most helpful, as it moved from theory and addressed the real experience of people living with disease and chronic illness. Chapter 7 by S. Kay Toombs described her experience with multiple sclerosis and the value of living in a Christian community. She spoke of the robust spiritual community shared by these quite physically disabled people.

Part 3 also contained a chapter on the practice of anointing the sick with oil. It was a beautiful synthesis of the theological (the power of God to heal) and the anthropological (the symbolic value of rituals like anointing with oil). Toombs described the role anointing plays in reminding the entire body of Christ that a believer is sick and needs help from the Christian community. One of the ways to extend this help is by placing our hands on the sick person's body.

The editors took on a very large task, hoping to explain what humanity is, and then to use this definition to guide bioethics. The book is innovative and covers material that is new to me. Some of the chapters are effective on their own. However, the complexity of the book results in the chapters not always leading to a unified and coherent argument.

Evangelical Christians take sin seriously, in both its general and specific effects to bring about disease, pain, and suffering. James 5:13–16 indicates the value of prayer in healing the body and forgiving sin. Sin was not presented as substantive to the issue. Therefore, it was given short shift and only mentioned four times in passing.

This book would be of interest to chaplains, ethicists, medical anthropologists and Roman Catholic philosophers. As an evangelical Protestant trained in biochemistry and public health, I found many of the chapters difficult reading. In the Conclusion, the author made an appeal for universities to train up "gray zone" people who are practicing scientists but theologically trained so they can speak competently in both fields. This is a goal affirmed by the ASA. This book is such an attempt, but the theological content is not as robust or evangelical as what I am accustomed to find in ASA publications and discussions.

Reviewed by Mark A. Strand, Shanxi Evergreen Service, Yuci, Shanxi, China 030600.



HISTORY OF SCIENCE

SCIENCE AND RELIGION, 1450–1900 by Richard Olson. Baltimore, MD: The Johns Hopkins University Press, 2006. 292 pages. Paperback; \$19.95. ISBN: 0801884004.

Science and Religion is a historical survey of the rise of modern science. Richard Olson stresses the cultural influences

occurring during the period 1450–1900, reflecting the author's interest in the interaction of culture with science. Olson is currently a professor of history at Harvey Mudd College and has published *Science Deified and Science Defied* (1990) and *The Emergence of the Social Sciences* (1993). His undergraduate degree is in physics and his Ph.D. is in the history of science.

Science and Religion, 1450–1900: From Copernicus to Darwin is a companion volume to *Science and Religion, 400 BC to AD 1550: From Aristotle to Copernicus* by Edward Grant. Collectively these provide a historical survey from the fourth century BC to the twentieth century. The second volume is as thorough in addressing topics as the companion volume but written in a more academic tone and covering several less general topics.

The first chapter bridges the two books by using Galileo's interaction with the clerical authorities as a case study for the interaction of science and religion. The historical analysis then begins, showing the transition from natural magic to experimental science:

With rare exceptions, medieval science was not intended to be applied — except to the understanding and appreciation of God's creation and as a background to medical training (p. 25).

The following two chapters address quite specific topics: "Science and Catholicism in the Scientific Revolution, 1550–1770" (chap. 3), and "Science and Religion in England, 1590–1740" (chap. 4), particularly Anglicanism. These chapters show the personal side of science but will probably appeal mainly to adherents of these Christian traditions. A chapter on Newton's influence in the seventeenth century (chap. 5) and Kant in the eighteenth century (chap. 6) is followed by a survey of geology and Lamarckian biology. The final chapter, "What to do about Darwin?" (chap. 8), concludes the historical survey with religious responses to Darwin from Anglo-American Protestant, Catholic, and Jewish perspectives.

The book should appeal to aficionados of science and religion interested in the interaction of culture with the development of science. The book is impressively researched with an extensive list of primary sources and annotated bibliography making this a valuable resource for experts and a potential library acquisition.

Reviewed by Fraser F. Fleming, Associate Professor of Chemistry, Duquesne University, Pittsburgh, PA 15282.

MY EINSTEIN: Essays by Twenty-Four of the World's Leading Thinkers on the Man, His Work, and His Legacy by John Brockman, ed. New York: Pantheon Books, 2006. 259 pages. Hardcover; \$25.00. ISBN: 0375423451.

It has been over one hundred years since Albert Einstein changed the world's understanding of reality. As both a scientist and a humanist, he dominated the first half of the twentieth century and, as these essays reveal, continues to influence physics and philosophy well after his death in 1955. John Brockman, a writer and publisher of the "third culture" website, www.edge.org, has done an outstanding job of creating a word picture of Einstein, as two dozen modern thinkers perceive him.

When I was a young physics student in the early 1950s, Einstein was both my hero and an unattainable target.

Book Reviews

My professors and fellow students likewise held him in awe. The essayists in this fine book unanimously tell this same story. It is to the author's credit that he orchestrated the book as well as he did. Like the classic "Five blind people describing an elephant," the writers each describe Einstein from a different perspective; the result is a composite and ultimately satisfying portrait of the man. Readers who know him only as an icon (possibly on a T-shirt) will gain an appreciation for both his genius and his humanity. Every writer "sees" a different person behind the ironic smile and the shock of unruly hair that has come to be the world's picture. More importantly, most of the essayists write in detail how his example has led them into fruitful careers in physics.

One of the book's failings, if it can be called that, is that only one of the writers, John Archibald Wheeler, actually knew Einstein personally. It would have been good to have included comments from those who knew him, particularly Niels Bohr, Heisenberg, Rosen and Podolsky. But Brockman has chosen, rather, to illustrate Einstein's influence on the researchers that have come after him. In this, he has succeeded. It instantly reminded me of another classic, Alan Lightman's 1993 novel, *Einstein's Dreams*. I found reading these two books together greatly enhanced my appreciation of the man.

This is a great book—particularly for the physicist-Christian. It is a "keeper," and I heartily recommend it to all my ASA colleagues, of whatever profession. For non-physicists, some of the mysteries of relativity and quantum mechanics are unfolded, and the power of a scientific legacy is skillfully described.

Reviewed by John W. BURGESSON, 36633 Road P.8, Mancos, CO 81328.

THE INTELLIGIBILITY OF NATURE: How Science Makes Sense of the World by Peter Dear. Chicago, IL: The University of Chicago Press, 2006. 242 pages, bibliographical essay, notes, index. Hardcover; \$27.50. ISBN: 0226139484.

Peter Dear, President Andrew White Professor of the History of Science at Cornell University, offers a work describing the struggle that participants in the scientific enterprise have had in understanding their task. As far back as the fourth century BC, Aristotle distinguished between *epistēmē* and *technē*—the knowledge of truth and practical know-how—or, more concisely, knowing and doing. This distinction has endured in various forms and combinations through the years to current debates over science in the Christian community. Can we clearly separate the practical and the theoretical? How deep is the truth we are so quick to publish? Will we ever know the First Cause?

Dear sets the stage for his discussion in "Introduction: Science as Natural Philosophy, Science as Instrumentality," wielding a broad brush through the achievements of modern science. Natural philosophy was originally understood in early-modern Europe as entirely separate from practical knowledge. This is illustrated by the two ways that people looked at the heavens. Natural philosophers were interested in the composition of the heavens, the source of the motions of the objects in the sky, the limits (if any) in the universe—the nature of the universe. Astronomy was interested in the positions and motions

of these objects and the application of mathematics in predicting future positions in order to construct calendars, dates of religious observations, and astrological predictions. Later, Isaac Newton was severely criticized as a natural philosopher, because he was unable to explain gravitational attraction, yet praised as a mathematician.

The distinction began to blur in the sixteenth century as Francis Bacon championed the goal of natural philosophy in practical matters of Christian charity and, more broadly, to legitimize the goals of the gentry to make money through improvements in agriculture, navigation, manufacturing, war, etc., ending in what Dear dubs "technoscience" which fuses science and technology as a "single enterprise" and produces a new kind of person—the twenty-first century scientist.

Six chapters follow offering lucid case studies of the interweaving of theory and practice from the sixteenth century to the present.

1. The Mechanical Universe from Galileo to Newton
2. A Place for Everything: The Classification of the World
3. The Chemical Revolution Thwarted by Atoms
4. Design and Disorder: The Origin of Species
5. Dynamical Explanation: The Aether and Victorian Machines
6. How to Understand Nature? Einstein, Bohr, and the Quantum Universe

Dear's stories cover well-worn paths. Happily, his apt quotes bring dry topics to life. The material is accessible for undergraduates who have a basic knowledge in science. Chemists will appreciate the struggle to find unity in their field. Taxonomy becomes interesting in the debate over the question of classification—whether according to similarities or differences, or how they might appear in God's mind. The quantum discussion has the greatest inherent difficulty and will need help from an instructor or a physics book.

It would have been interesting to see how Dear would have cast the "genetic revolution." Perhaps this is a topic for student papers.

Dear is following paths that others have considered—with sometimes conflicting opinions. He might have noted science was earlier seen as having moral value in producing a certain kind of person. The diverse ways in which these categories have been cast and multiplying disciplinary sub-cultures create barriers that prevent today's scientist from defining his or her discipline in concise terms. Perhaps the suggestion that "science is what scientists do" has some merit. He concludes with the rather unsatisfactory comment:

The natural-philosophical assertions made by science are not based simply on scientists' "proofs" about the way the world is. They are judged from the start on whether they make sense, and the controversies over the very issue, revealed again and again, in the history of science, show how that "making sense" depends on who is doing the judging, and in what cultural circumstances. The world pictures that we believe in owe much more to what we find plausible than to the way that the world "really" is: their acceptance, rather than being determined by the natural world itself, depends on the ways in which we choose to live in the world (p. 194).

The Intelligibility of Nature is a good read for anyone interested in science and as a component of an undergraduate course in the history and philosophy of science.

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

THE PERSON OF THE MILLENNIUM by Manfred Weidhorn. New York: iUniverse, 2005. 161 pages. Paperback; \$15.95. ISBN: 0595368778.

Is Galileo the most influential individual of the last thousand years, on science and on society? However controversial, Manfred Weidhorn's supporting thesis dovetails with a fruitful trend of extending the controversy on science and religion, centered on Galileo, in a direction accounting for its impact on civilization, not just for Galileo's troubles with theologians and philosophers. *The Person of the Millennium* insightfully identifies a paradigm shift of history with the Galilean revolution.

This generally meritorious work is marred in places by a tendency to oversimplify. It portrays Galileo as insistent that philosophy "has nothing to do with measurement." Galileo called himself a philosopher; his experiments on inclined planes had everything to do with measurement. Weidhorn charges that when Galileo refuted Ptolemy, he "incorrectly concluded that Copernicus had been vindicated." Galileo never asserted that he had achieved a Copernican demonstration.

Weidhorn writes that Galileo "did not definitively prove the validity of the Copernican theory (Foucault in the nineteenth century did)." Bradley's and Bessel's Copernican demonstrations predated Foucault's, the latter being an experiment which Galileo conceived but lacked the equipment to measure tiny angles in the sky. Galileo's own observations of the cycle of phases and angular diameters of Venus and Mars conformed to the Copernican hypothesis, not to the Ptolemaic. Because a series of demonstrations constituted "definitive proof," it is simplistic to isolate and remove any one of these scientists' achievements, and say that it did or did not constitute a proof.

Did the Church vindicate Galileo's science? Weidhorn writes that "on the central issue, he [Galileo] was right and the Church was wrong, as it finally admitted 350 years too late." That admission in 1992, however, was a theological "rehabilitation." On that occasion, Cardinal Poupard and Pope John Paul II, who admitted mistakes by their seventeenth century predecessors, also alleged that Galileo had not proved his case scientifically. They even attempted to obscure the issue by presenting the Copernican and Ptolemaic alternatives as if equivalent in a wider context of modern physics.

Weidhorn writes that "[s]cience and religion, as separate disciplines, are hermetically sealed off from each other," as if the mutually beneficial relation of science and the noncoercive study of theology were not part of religion. He writes that "[i]n trying to silence him [Galileo], the Church was, therefore, correctly assessing the long-term danger presented by his innovations." If the church had assessed the long-term danger correctly, it would never have silenced him; Cardinal Bellarmine's inability to imagine that the Copernican planetary arrangement might be proved true, as Galileo had warned, initiated the silencing.

Weidhorn asserts the existence of "a straight line from Galileo's freeing of reason from ... religion to the turning of reason against religion by rationalists like Voltaire, Marx, Nietzsche, Shaw" and multiplies examples of such "straight lines," thus creating for his readers the impression that Galileo is somehow responsible for later anti-religious developments. The argument rests on a fallacy. There is a straight line, taken by a ray of sunlight, from Sun to Earth. If a bombardment of rays protects you from cold or kills you from heatstroke, it is not the Sun's doing.

This author's attempt to ground modern democratic institutions in Galilean science comes uncomfortably close to blaming Galileo for the false principle of majority rule. He writes: "[D]emocracy takes no metaphysical position but lets a headcount settle things." A headcount may settle things, but not without coercion of the minority by the majority. Athenian democracy spearheaded by Pericles predated Galilean science. Weidhorn misses the connection of Galileo's advocacy of free intellectual exchange to the free market economy when he tries instead to connect Galileo to democracy.

Weidhorn has hit upon a historical failure of organizational dynamics where he writes: "... if history teaches anything, it is that an idea is like a dropped ball ... Anyone may pick it up and run with it in any direction ... once you put an idea into currency, you lose all control over it." Here is a worthy challenge for social scientists.

One of my favorite math books is error-ridden; I learned from it by correcting its errors. Similarly, though *The Person of the Millennium* is a mine field of unhistorical interpretations through which the reader must step gingerly, it is also thought-provoking and worthwhile reading.

Reviewed by Albert DiCanzio, Adjunct Professor, School of Business and Technology, Webster University, Webster Groves, MO 63119.

FRANCIS CRICK: The Discoverer of the Genetic Code by Matt Ridley. New York: Atlas Books, HarperCollins, 2006. 213 pages, no index. Hardcover; \$19.95. ISBN: 006082333X.

Matt Ridley, a science writer (*Genome* is his best known work) deliberately emphasized the code, not the helix. Crick did important theoretical and experimental work on solving the genetic code.

James Watson's *The Double Helix* began with this sentence: "I have never seen Francis Crick in a modest mood." Ridley is not modest about Crick either: "the greatest biologist of the twentieth century" (p. 5). The publisher also admires Crick—the book is in a series about "Eminent Lives," which includes Washington, Jefferson, Beethoven, and Shakespeare.

This book is a good biography, in spite of brevity and lack of scholarly apparatus. It should be in all academic libraries, and it is accessible to intelligent nonscholars. The book tells of Crick's early education and his marriage. It describes how Crick worked with Watson, interacted with Rosalind Franklin (the two were on very good terms at the end of her life), and other aspects of Crick's career.

Crick worked on the study of consciousness during his last years. There were no great breakthroughs. Ridley says that what really motivated Crick, in his work on DNA and on consciousness, was a desire to discredit vitalism,

Book Reviews

the idea that living things cannot be explained and understood completely in terms of physics and chemistry. Depending on what is meant by explanation, I question vitalism, too. Crick did not live to see the achievement of his goal of being able to understand consciousness in terms of neuron activity. We are a long way from that yet, and may never get there.

What is meant by explanation? If, by explanation, we mean that we can, at least in principle, describe how a cell works, in chemical and physical terms, most biologists of today would agree. This has not yet been done, at least not completely, but, within my lifetime, enormous strides have been made. I would not be surprised if a working living cell, capable of metabolism and reproduction, was produced *de novo* from laboratory chemicals in the first half of this century. Any aspect of cell function can, in principle, be explained and understood in terms of the chemistry of the cell. Does this rule out divine action? Certainly not. In principle, it is possible to understand, say, all the parts, and the functioning, of a Ford Explorer. If I did so understand it, that would not mean that it was not a wonderful piece of equipment, designed and planned. In the same way, even if we did understand all of the cellular activity of organisms, including how consciousness works, it would not make their existence any less wonderful, nor would it rule out supernatural design and planning.

If, by explanation, we require ourselves to answer some other questions like “How did life begin?” “Why do atoms and other chemical entities have the properties that make life possible?” “Why are humans interested in this sort of question?” we cannot explain life. (More and more plausible naturalistic answers for the first question may be produced, but they will never give us a certain description of what actually did happen.) Ridley says that Crick once put forward panspermia (Earth was seeded with life by aliens) as an explanation for the origin of life on Earth. Why would an intelligent person consider that living things may have been placed here by extraterrestrials and reject that they were placed here by a supernatural being?

It is unfortunate that Crick, who was noted for discussing serious issues for extended periods with intelligent people, even when they did not agree with him on all points, did not really come to grips with the issues of the meaning of life, the origin of living things, and the origin of the universe. Perhaps he did not really want to come to grips with these questions. Perhaps he could not find an intelligent believer to discuss them with. Perhaps he was turned off by interpretations of the Bible that claim to rule out some of the important findings of science. I do not know. But it is unfortunate.

Reviewed by Martin LaBar, Professor of Science Emeritus, Southern Wesleyan University, Central, SC 29630.



NATURAL SCIENCES

THE COSMIC MYSTIQUE by Henry A. Garon. Maryknoll, NY: Orbis Books, 2006. 235 pages, index. Paperback; \$20.00. ISBN: 9781570756320.

The only formal divisions of this book are the 35 chapters, which can be read either sequentially or, a wonderful fea-

ture of this book, independently. This is not to say this work is without a theme but simply that either way of reading the book will be productive. Each chapter is concluded and summarized with questions for reflection.

Garon takes his readers on a journey of wonder throughout “the beyonds” (p. ix) of physics undertaking a “pursuit of meaning” (p. 3). Each chapter, though distinct in topic, does bear a similar structure to the next. Garon is masterful at communicating his child-like wonder for the world around him. A point of commonality with the reader is established immediately as Garon unfolds his simple observations of the world.

In what is a fairly typical chapter in the book, Garon begins by describing his childhood scientific investigations into the eating patterns of honeybees and sleeping patterns of crawfish. He goes on to develop this thought to bring in the teachings of Karl Rahner on the relationship between humans and the world (“the *objective other*” p. 39).

From the story of Robinson Crusoe to the growth of snowflakes, it is this pattern that makes the book so accessible and readable. Garon tries to “consider ways in which the worlds of science and religion blend” (p. 3) and in using this pattern does so masterfully. A formidable challenge to those who believe that the teachings of Scripture imply that all exchanges (particularly scientific) with the physical universe should be considered secular is raised by Garon.

This book is an attractive read on two levels. First, it can serve as a primer to the works of ones such as Karl Rahner, Pierre Teilhard de Chardin and others of a similar vein. They undoubtedly have influenced this work and the worldview of Garon heavily. He also concludes the book with reference to some of their well-known/trademark works. This book is the work of a scientist who is a theologian. He is able to blend what has in contemporary times been considered antithetical (i.e., God and Science). Garon admirably maintains his integrity both as a scientist and as one with a theistic worldview. This book represents a contemporary manifesto on how both can be held. Naturally one may wish to read material in which these thoughts have been expressed previously; Garon’s bibliography provides this opportunity.

Secondly, though I do not know if this was the intent, Garon really lays out a new pedagogical strategy for teaching science. At a minimum, he serves to reinforce the power of wonder in beginning the discussion about God. It bears a restatement that there is an effectiveness that still remains, though often neglected, in starting a conversation about theological truths in an examination of intricacies of the physical universe. Like Garon, I avoid the terms “gap” and “design” lest the impression be given that this work is a “God-of-the-gaps” or ID reiteration. As a sincere and devout scientist, Garon progresses from simple observations to profound biblical truth, leaving us with a well-developed exposition of natural revelation. A point of potential controversy is Garon’s Christ-centered approach.

There can still be wonder even in that which science explains; it still remains a testament to the glory of the Creator. It is incorrect to assume that wonder and knowledge are mutually exclusive. Yet, at the same time Garon is careful to guard against materialism which he defines as “... mindless surrender ... to things with little consideration of higher values” (p. 159). He posits a “correct mate-

rialism" (p. 160) as has been put forth in the thoughts and writings of Rahner. This approach (from wonder) may in fact be influential enough to encourage those of faith to re-engage themselves in the sciences.

This book was a joy to read. It should be read by those so entrenched in their scientific discipline that they no longer look heavenward. This work serves to remind us that the universe is God's creation and that he has revealed himself through it.

Henry A. Garon is a professor of physics recently retired from Loyola University in New Orleans.

Reviewed by Kyle Hilton, South Hamilton, MA 01982.



ORIGINS & COSMOLOGY

THE COSMIC LANDSCAPE: String Theory and the Illusion of Intelligent Design by Leonard Susskind. New York: Little Brown, 2006. 1380 pages, glossary, index. Hardcover; \$24.95. ISBN: 0316155799.

Susskind, a professor of physics at Stanford University, was instrumental in formulating string theory. This is his first popular book. It has thirteen chapters covering such topics as an introduction to particle physics, the Anthropic Principle, the origin of string theory, the myth of uniqueness and elegance, and why he believes that the universe is a Rube Goldberg affair.

One of the unique things about this book is that Susskind actually respects those who believe in intelligent design, saying they have a point, which is an oddity among science books. The Anthropic Principle, he says, is easy to explain away, save one thing, the tiny value of the cosmological constant. This constant is a repulsion force which Einstein called his biggest blunder but which discoveries in the late 1990s may show to be one of his greatest discoveries. Susskind says the cosmological constant should be 120 orders of magnitude larger than it is. Thus, it appears to be fine-tuned to an incredible degree. It is this which Susskind is trying to explain.

He believes that the mathematics of string theory, with its 10^{500} possible solutions is telling us that there really are 10^{500} universes out there, each represented by one of the solutions. In such a cosmic landscape of universes, a few of them would have the properties of our universe, with our tiny cosmological constant. This is, he says, how we came to exist. We are a giant crapshoot on the cosmic landscape; design is an illusion arising from this.

Contrary to most books on physics, this one presents an alternative to the general view that the universe is elegant. Susskind ridicules this elegance saying that modern particle physics theories require thirty constants of nature, for none of which do we know why they have the values they have. This kind of adjustable clockwork is not elegant. No one can explain why the particles have the masses they do, the charge they do. We have not even observed the Higgs boson, which is supposed to give matter mass. Like angels and demons, some particles are believed in, but they are never seen.

At the end of the book is an all too brief discussion of the inability to verify the cosmic landscape. Susskind

acknowledges that some think it appears as a religion. Like God, the cosmic landscape refuses to enter our laboratories and subject itself to observational verification. He looks to mathematical inconsistency to be the test for the string theory. The problem is that mathematical consistency does not ensure ontological status and neither does the existence of an equation. The thrust of the book seems to be: To explain our existence requires the existence of a cosmic landscape, a megaverse. Therefore, the cosmic landscape exists. This is quite similar, in my opinion, to the ontological proof of God, which purports: The definition of a perfect God must include existence. Therefore, God exists. But when applied to the string theory, does it have the same force? Is it even science rather than religion?

One truly fascinating revelation about string theory as an explanation for our existence is not the unverifiable megaverse. That has long been known. It is that string theory, the thing that creates the cosmic landscape upon which Susskind depends for his existential explanation, depends upon supersymmetry, a theory that predicts that each and every subatomic particle has a twin. The problem is that this entire concept has been experimentally falsified because the present day particle accelerators are quite capable of detecting these twins but they have *never* been observed — none of them. This means that string theory as an explanation for our existence is not only *not* an explanation; it is just flat out observationally false. To use a falsified theory as a way to create a multiverse in order to avoid fine-tuning seems a wee bit ironic given the claim above that mathematical consistency will be the standard upon which to judge the theory. If observationally false predictions do not falsify it, what will? This too fits the definition of a religion more than that of a science.

The book was an interesting read, although tedious at times early on. The last half was much better. I recommend it to the readers of this journal.

Reviewed by Glenn R. Morton, 10131 Cairn Meadows Dr., Spring, TX 77379.

INTELLIGENT THOUGHT: Science vs. The Intelligent Design Movement by John Brockman, ed. New York: Vintage Books, 2006. 231 pages, appendix. Paperback; \$14.00. ISBN: 0307277224.

You *can* judge this book by its cover. If its "science vs. intelligent design" (ID) subtitle does not make the authors' central premise clear enough (that ID is *not* science), the photo of a human skull facing an orangutan skull reinforces the point. A barely-legible nameplate underneath the orangutan fossil reads *Darwin*. Whether this was meant to satirize past creationist attacks against the theory of evolution, I cannot say. The skulls were apparently part of the exhibit *Fierce Friends: Artists & Animals in the Industrial Era, 1750–1900* hosted by the Van Gogh Museum in Amsterdam and subsequently by the Carnegie Museum of Art in Pittsburgh.

Brockman is an editor at Edge Foundation, a private nonprofit whose goal is "to promote inquiry into and discussion of intellectual, philosophical, artistic, and literary issues, as well as to work for the intellectual and social achievement of society" according to www.edge.org, for which he is publisher. All sixteen essayists in *Intelligent Thought* are regular contributors to *Edge*. They include

Book Reviews

evolutionary biologists (Jerry Coyne, Richard Dawkins, Neil Shubin); a historian of science (Frank Sulloway); paleontologists (Scott Sampson, Tim White); psychologists (Scott Atran, Marc Hauser); cognitive scientists (Daniel Dennett, Nicholas Humphrey, Steven Pinker); physicists (Seth Lloyd, Lisa Randall, Lee Smolin, Leonard Susskind) and a theoretical biologist (Stuart Kauffman).

Intelligent Thought is a polemic whose unrelenting theme is that ID (like other forms of creationism that preceded it) threatens science education and American society. Although some contributors critique ID as science, others make little effort to conceal their indignation over ID's secret religious agenda. Brockman's own rhetoric clearly illustrates his warfare mentality. In the following quote, he equates IDers with the Visigoths:

Our children are literally the future of our nation, which will increasingly need competent scientists and engineers to guide us through the coming technological revolutions ... There are examples in history of the collapse of great civilizations. There is no particular reason that the United States should be exempt from historical forces. The Visigoths are at the gates. Will we let them in?

On its publication date, copies of *Intelligent Thought* were mailed to all 535 members of United States Congress. A cover letter signed by the authors stated in part:

The recent federal court decision in Dover, Pennsylvania found that ID was not a scientific theory, but a form of religion in disguise. Judge John Jones III, a churchgoing Republican appointed by President Bush, concluded that teaching this doctrine in the public schools represents both bad education and an unconstitutional violation of the First Amendment ... Reason and law triumphed in Dover.

The controversy over ID vs. evolution is not a scientific controversy ... The "controversy" is about whether sectarian religious views should be taught in the science classroom. Most theologians readily accept evolution, finding it compatible with their faith ...

Science education that incorporates unscientific issues like ID is a sure path to America's failure against competing countries.

Stuart Kauffman is one of the few contributors who entertain the possibility that ID *might* be science. He discusses *pre-adaptation*, the view that a biological structure may have been selected for one job, but also had the potential to do something else. Kauffman offers ID the opportunity to make a testable prediction. ID, he says, must predict that no multifunctional intermediates will be found. If ID adherents are unwilling to predict this, they cannot claim to practice science. If IDers *do* make this prediction, Kaufmann argues that it has already been refuted by the fish swim bladder, which developed into lungs with a radically different function.

Richard Dawkins, author of *The Blind Watchmaker* (1986), discusses whether our judgment of *intelligent* is a legitimate scientific question. At least in the case of SETI, he admits that it is. What should messages from extraterrestrials sound like? Rhythmic radio pulses detected by Jocelyn Burnell (1967) came from pulsars, not *E.T.* Once we understood their physical origin, they ceased to be compelling evidence for intelligent aliens. A string of

prime numbers (as in Asimov's *Contact*) might constitute a more convincing message, but Dawkins claims that too could have a natural explanation.

Regardless of what you think of its evolutionary views, *Intelligent Thought* demonstrates that Christianity has a public-relations problem. Misrepresenting religious views as scientific views has not won the trust of our secular neighbors.

Reviewed by Joseph H. Lechner, Professor of Chemistry, Mount Vernon Nazarene University, Mount Vernon, OH 43050.

DARWIN STRIKES BACK: Defending the Science of Intelligent Design by Thomas Woodward. Grand Rapids, MI: Baker Books, 2006. 223 pages, index. Paperback; \$14.99. ISBN: 0801065631.

ASA member Thomas Woodward teaches the history of science, communications, and systematic theology at Trinity College of Florida. His specialty is rhetorical argumentation. This book is a sequel to his book *Doubts about Darwin* (2003), a history of the Intelligent Design (ID) movement by an insider. The present book has a foreword by Dembski and the blurbs on the back cover are by Johnson, Behe, Wells, and Colson.

Woodward chronicles the debate over ID in the last decade, which he presents using the language of warfare (appropriately, he has a military background). The book has four introductory chapters followed by chapters on Behe and cellular complexity, Wells and *Icons of Revolution*, the Cambrian explosion, the origin of life (two chapters), Dembski and complex specified information—unexpected allies of the ID movement—and an assessment of the present situation.

Woodward is an impassioned advocate for the ID movement. He uses his rhetorical skills accordingly. ID proponents are presented in a favorable light. The arguments of ID critics are presented in some detail but are then immediately discounted—they are characterized as disappointing or unconvincing. Woodward writes in a lively style suitable for the general public. His comments about the personalities involved in the debate are very interesting.

The major books of the ID critics engaged by Woodward are *The Tower of Babel* by Robert Pennock, *Finding Darwin's God* by Kenneth Miller, *The Triumph of Evolution and the Failure of Creationism* by Niles Eldridge, *Creationism's Trojan Horse* by Barbara Forrest and Paul Gross, *Unintelligent Design* by Mark Perakh, *Why Intelligent Design Fails* edited by Matt Young and Taner Edis, and *God, The Devil, and Darwin* by Niall Shanks. An edited version of Del Ratzsch's review of *God, The Devil, and Darwin* appears in this book as an Appendix.

Woodward, who is neither a professional scientist nor a professional theologian, relies on the assumptions that the two foundation books of the ID movement, namely *Evolution: A Theory in Crisis* by Michael Denton and *Darwin on Trial* by Phillip Johnson, are based on solid ground. He assumes that the proper battlefield is that chosen by Richard Dawkins in his book, *The Blind Watchmaker*. He also assumes that the rhetorical firepower provided by Behe and Dembski is effective. In my assessment, each of these assumptions is invalid.

Denton now regrets the choice of title of his 1987 book, and he has dissociated himself from the Discovery Institute and the views of Johnson. Rather than a mechanistic (a superwatch analogy) view of macromolecular structures, he now sees self-organizing lawful forms (a crystal analogy). British scientist-theologians such as Roger Forster and Paul Marston regard Johnson's insertion of metaphysics into science as misguided and misinformed. Johnson has made the same mistake as Dawkins, and thereby has set up a perceived conflict between science and religion at a point where no conflict need exist in this particular respect. Dembski's design filter based on specified complexity (ID in its pure form) fails in practice because he can never know the probabilities that he needs to apply it to a biological situation, because of the unknown processes involved. Thus, his argument is ultimately one of the "God of the gaps" type.

The ID argument is not science because it fails to provide an alternative explanation of the "how and when" type. It is poor theology because it confines the creative action of God to just a subset of universe.

Woodward sees the Dover trial decision as an aberration, and he foresees a rosy future for Intelligent Design. However, from my perspective that decision was a logical outcome of events in the US, and my expectation, based on the fundamental weakness of ID, is that in the future, ID proponents will be engaged in trench warfare rather than conducting a blitzkrieg.

People interested in the evolution-religion debate should read Woodward's book for its lucid exposition of the ID argument. But in order to see why the argument is ultimately unsatisfactory and in fact unnecessary, they should then read the recent books by Francis Collins, Simon Conway Morris, John Haught, Denis Alexander, Ted Peters and Martinez Hewlett, and Alistair McGrath that present a theistic evolutionist view and directly demolish the scientism of Dawkins.

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

THEISTIC EVOLUTION: Did God Create through Evolution? by Mark W. Swarbrick. West Conshohocken, PA: Infinity Publishing, 2006. 254 pages. Paperback; \$15.95. ISBN: 0741424142.

Swarbrick is a former pastor in Arizona with the Assemblies of God, holding a diploma in Ministerial Studies from Global University's Berean School of the Bible. A former theistic evolutionist, he writes out of pastoral concern for those Christians who continue to believe that "God created the world through the process of evolution" (p. 2). The book aims to demonstrate the incompatibility of Christianity with evolution.

To make his case, Swarbrick begins with an expansive (and, in my opinion, question-begging) definition of "evolution":

Evolution is the universe spontaneously expanding and organizing itself into galaxies and solar systems from the disorganization of the explosion. On earth, chemicals leached from rocks by water form a 'pre-biotic' soup. From this goo, living cells spontaneously form and begin changing into more complex

living creatures. These creatures in turn continue to advance to higher life forms until finally man has evolved. All of this activity is undirected and unsupervised by any divine being (God) (p. 10).

He then provides a sketch of Christianity as principally a plan of sovereign redemption, immediately followed by an attempt to catalog the opinions of theistic evolutionists and how these differ from Christianity. While he ably and fairly demonstrates the diversity of exegetical views among that group (creation timelines, the reality of Adam and Eve, local vs. global flood, whether miracles occur, etc.), Swarbrick does not attempt to interface with their theology. There is no reference to Polkinghorne, Teilhard de Chardin, or Ken Miller—nor, indeed, any other prominent author on the subject—in the entirety of the book.

Rather, Swarbrick focuses on common objections to theistic evolution, while declining to showcase any attempts to rebut them. In Chapter 3, titled "Conflict 1: Deism vs Theism," he maintains that

[T]he theistic evolutionist cannot believe that God somehow "guided" evolution in any real sense, for the very definition of evolution as it is being taught in school today denies this ... The theistic evolutionist finds himself in the cock-eyed position of trying to imagine God creating accidentally on purpose (p. 22).

Ergo, as the chapter title implies, theistic evolution is deism, not theism. Chapter 4, "Conflict 2: The Fall and the Curse," explores the question of suffering and its traditional Christian explanation rooted in the Fall and Restoration through Jesus. This is an area with compelling, though not necessarily insuperable, difficulties for theistic evolution. Of special note is how "survival of the fittest" can be considered a "good" process as Christians understand goodness. Swarbrick surveys these problems well and with thorough reference to the Scriptures, though disappointingly without any discussion of other readings of redemptive history that might not have these problems.

Chapters 5 through 8 focus on difficulties with theistic evolution in issues of incarnation, judgment, salvation, and redemption. All of these objections, in Swarbrick's view, flow from denying the literal history of, respectively: Adam, a global flood, miracles (including the Resurrection), and the Second Coming. While he admits that not all theistic evolutionists hold to a low view of Scripture, he nevertheless believes that a fully consistent application of evolution requires such a view. In chapter 7, he devotes almost half the book (105 pages) to an impressive historical study of inerrancy and its pre-eminent position in Christian thought, from Paul to Augustine to Martin Luther to the present day. This part of the book is quite scholarly; indeed, I could see purchasing the book for this material by itself. Yet its application to the stated goal of the book is tenuous and not relevant to the many theistic evolutionists who hold fast to God's Word.

The final chapters present evolution as a negative social force and as an unscientific social construct. Swarbrick writes authoritatively on evolutionary influences in the eugenics, racism, and Nazism of the late nineteenth and early twentieth century (his survey of Hitler's *Mein Kampf* is particularly strong). His treatment of the science is, sadly, not nearly as impressive and rather scanty for a book on this topic. Just over forty pages of conflated young-earth creationist and intelligent design arguments, which are considered by his stated audience to be thor-

Book Reviews

oughly discredited and false, are not likely to have much traction. The volume closes with a sharing of the gospel message for non-Christian readers.

All told, this is a puzzling book. Swarbrick's transformation from theistic evolutionist to young-earth creationist has left him with a binary view of the subject. Despite claims to the contrary, he does seem to believe that science and religion are in irreconcilable conflict. He is, however, to be commended for writing in Christian love and avoiding polemic.

Reviewed by Christopher J. Barden, Dalhousie University, Halifax, NS, Canada, B3H 4J3.

A BIBLICAL CASE FOR AN OLD EARTH by David Snoke. Grand Rapids, MI: Baker Books, 2006. 195 pages plus appendix, references, and index. Paperback; \$14.99. ISBN: 0801066190.

In this book, ASA Fellow David Snoke, a professor of physics at the University of Pittsburgh, presents a case for a "day-age" view of Genesis 1. Snoke's twin goals are to establish that the "day-age" view is a valid alternative for Christians who hold to biblical inerrancy and to argue for a concordist understanding of the Genesis texts and modern science. He succeeds admirably at the first goal, but is less persuasive concerning the second.

The book is organized into nine chapters and includes an appendix with a "literal" translation of Genesis 1-12. The first two chapters identify Snoke's underlying assumptions and recite the scientific evidence for an old earth. Snoke does an excellent job of explaining why and when extra-biblical evidence can be used to interpret the Bible, and provides a calm, concise summary of the physical evidence against the young earth view. These chapters are particularly useful and admirable because they avoid the argumentative tone that so often creeps into this sort of discussion.

After laying this groundwork, Snoke responds to two key objections against the old earth view: the problem of death before the Fall and the relationship between the creation week and the Sabbath. His insights concerning animal death before the Fall are particularly helpful. He suggests that the wild, untamed aspects of creation, including things such as carnivorous animals, may have served before the Fall as a reminder to Adam and Eve of God's power, and as a sort of warning about life outside the protected confines of Eden. Just as Aslan in C. S. Lewis' *Narnia* books is not a "tame Lion," he notes, these aspects of creation that do not seem "nice" to us remind us that God is also a "dangerous" God.

After presenting his biblical case for an old earth, Snoke turns to the case for a concordist view of science and Scripture. He defines "science" as "nothing but a way to organize and analyze the things of the world around us," and concludes that since the Bible also makes observations about the physical world, there should be areas of overlap where "things in the Bible are open to scientific investigation."

Many readers will take issue with this definition of "science." Some also may question Snoke's hermeneutical presupposition that biblical texts concerning creation are presented in a form that can be correlated with modern

scientific propositions. Many readers also will question why Snoke discounts Darwinian evolution based on an *a priori* reading of the creation story concerning Adam and Eve, while remaining willing to consider alternative interpretations of related texts that superficially seem to suggest a recent creation. Nevertheless, on the question of the age of the earth, this is a fair and well-balanced book that deserves a wide reading, particularly in the evangelical community.

Reviewed by David W. Opderbeck, Assistant Professor, Law Department, Baruch College, City University of New York, New York, NY 10010.



RELIGION & BIBLICAL STUDIES

A LITTLE PRIMER ON HUMBLE APOLOGETICS by James W. Sire. Downers Grove, IL: InterVarsity Press, 2006. 112 pages. Paperback; \$12.00. ISBN: 083083382X.

ASA associate member James Sire, formerly InterVarsity Press editorial director, with a Ph.D. from the University of Missouri, is the author of *The Universe Next Door*, *Scripture Twisting*, *Why Good Arguments Often Fail*, and many other books. This book is a "primer, a very first book exploring the nature of Christian apologetics, which, simply defined, is a defense of the Christian faith," according to the author. This short book, dedicated to the famous apologist, Francis Schaeffer, contains endnotes, a short bibliography in chapter five, scripture index, and subject index.

Its six chapters can be stated in the form of questions with Sire giving the answers.

Q: What is apologetics?

A: It is the simple presentation of a case for biblical truth, most notably the central truth of Jesus Christ as the Son of God and Savior.

Q: What is the value of apologetics?

A: Apologetics is good for the soul and character of the apologists and the character of the Christian community.

Q: What are the limits of apologetics?

A: Apologetics can offer reasonable evidence for the truths of the Christian faith, but it cannot offer knock-down proof.

Q: What are the contexts of apologetics?

A: Apologetics can be offered in formal or informal situations, to hostile or friendly audiences, and under time constraints or open-ended.

Q: What are the arguments of apologetics?

A: Apologetics offers the case for Jesus, the case for the historical reliability of the Gospels, the case for the coherence of the Christian worldview, the arguments for individual aspects of the Christian faith, and the case for a personal experience of God.

Q: What is the call to apologetics?

A: The call to be an apologist is from God, to God, and for God; it involves a focus on Bible study, prayer, and reading on issues relating to real life.

Sire writes in an engaging and insightful manner, with personal experiences included which make the reading relevant and interesting. He does not hold himself up as a highly successful apologist, but recounts occasions when he has witnessed to large groups and to individuals. Sire writes: "I must confess, though, that though I have accumulated thousands of frequent flyer miles, I have not been very successful in generating significant spiritual conversations" (p. 69).

Sire concludes his book with traits helpful to a Christian apologist. These include passions for truth, holiness, people, communication, positive judgment of Christian friends, success in academic work, and enjoying apologetic endeavors.

This is a welcome addition to books on apologetics. The word "humble" in its title calls attention to the words of Paul to Timothy: "The Lord's servant must not quarrel; instead, he must be kind to everyone, able to teach, not resentful" (2 Tim. 2:24). Any Christian seeking to carry out the Great Commission would profit from reading Sire's thoughts.

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

THE REASON DRIVEN LIFE by Robert M. Price. Amherst, NY: Prometheus Books, 2006. 364 pages. Hardcover; \$24.00. ISBN: 1591024765.

Rick Warren wrote *The Purpose-Driven Life*, which one pundit claims is, after the Bible, the best-selling nonfiction book ever written. Robert Price, the author of *The Reason Driven Life*, considers Warren's book "merely recycled standard, one might even say *stale*, fundamentalist teaching" (p. 21). He thinks Warren is "a dogmatic preacher or writer who offers a magic alternative" to an individual taking control of his own life (p. 24) and offers "miserable human speculation" (p. 29).

Price has several problems with Warren's approach which assumes that one size fits all, in terms of a single, uniform purpose for life, and that the Bible is inspired ("An inspired and infallible passage whose meaning you cannot be sure of is not much more useful than an *uninspired, fallible* passage," p. 28; "... fundamentalists cannot seem to maintain their faith without a thousand self-deceptions ... endless implausible excuses and dodges," p. 32). Price aims to respond to the points made in the forty chapters of Warren's book which he describes as the "fundamentalism-driven life."

Price's evangelical/fundamentalist background enables him to write as an outsider who was once an insider. He received Christ in 1965, had a daily devotional time, became a soul winner, attended church weekly, enthusiastically studied the Bible, received Campus Crusade for Christ training, became chapter president of InterVarsity Christian Fellowship, and attended Gordon-Conwell Theological Seminary. He eventually abandoned evangelical Christianity, explored liberal Protestant theology, and during his pastorate of a liberal Baptist church, rejected theism altogether.

Price prefers not to describe himself as an atheist, because it describes what he does not believe rather than what he does. He considers himself a humanist, a would-be philosopher, and a church attendee "for the rich pageantry and

the moral challenge" (p. 18). Price thinks Christianity prolongs moral, intellectual, and personal immaturity. Freud was right, claims Price, when he said maturity only comes to those who realize there is no Creator, no divine lawgiver, no author of destiny and meaning, and no giver of eternal life (p. 17). To Price, the morally neutral universe is not rooting for events to come out a certain way.

Evangelicals may find points with which they agree. For example, Price believes that the much proclaimed statement "Christ changed my life" is sometimes more a statement of faith than an accurate description of experience. Price is not antagonistic to Christians, but states he likes them. Price seeks to be logical rather than combative and argumentative. He states, "I'm not trying to get you to agree with me. That wouldn't be rational. I merely aim to provide food for thought that you might not otherwise have considered" (p. 21).

For those who want to explore alternative views to Price's, *A Little Primer on Humble Apologetics* by James Sire offers brief guidance and directs the reader to many other apologetic and theodicy resources. For an intriguing book by an evangelical on the will of God, read Garry Friesen's classic *Decision Making and the Will of God: A Biblical Alternative to the Traditional View*.

Price is professor of theology and scriptural studies at the Johnnie Coleman Theological Seminary, professor of biblical criticism at the Center for Inquiry Institute, and a fellow of the Committee for the Scientific Examination of Religion and the Jesus Seminar. His books include *Beyond Born Again*, *The DaVinci Fraud*, and *The Incredible Shrinking Son of Man*.

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

IN THE BEGINNING: Bibles Before the Year 1000 by Michelle Brown, ed. New York: HarperCollins Publishers, 2006. 360 pages. Hardcover; \$45.00. ISBN: 9781588342409.

The Bible is the best-known book of all times. It is a compilation of writings stretching over a period of 1500 years. Beginning with the Pentateuch and extending to the Johannine manuscripts, none of the biblical autographs remain. However, many ancient manuscripts of the Hebrew and Christian Bibles are extant. For the first time, the Smithsonian Institution has collected many of these writings and made them available for public viewing. They were on view at the Smithsonian Institution Arthur M. Sackler Gallery from October 21, 2006 to January 21, 2007, the first time some of the biblical manuscripts have ever been put on public display.

In the Beginning is produced as an accompaniment to the Smithsonian Institution exhibition of biblical codices and scrolls. Some of the treasures included in the exhibition and this book are manuscripts from the Monastery of St. Catherine's at Mount Sinai in Egypt, early English and Irish manuscripts from the Bodleian Library at Oxford University, a Dead Sea Scroll from the first century CE, and the Niketas Bible of the tenth century CE, a great example of Byzantine illumination. Although many copies of the Bible are fragments in poor condition, this collection presents some of them in captivating color. Many are in black and white. All of them are numbered for easy identification and accompanied by informative text.

Book Reviews

Included for those readers interested in details about the book and its inclusions, are an index, list of photo credits, list of contributors, a bibliography, notes, a glossary, a who's who, a chronology, a list of manuscripts and lenders, and a reference catalogue.

This is a wonderful volume for Bible lovers, historians, theologians, teachers, photographers, librarians, and anyone else interested in the development of biblical manuscripts from antiquity. And best of all, it is a reasonably priced, big book (10 by 11 inches) with high quality paper and plenty of white space. It is a volume which should find a home in every public and academic library, and the Smithsonian Institution and HarperCollins have rendered a service to the world of erudite and lay knowledge.

Michelle P. Brown, the volume's editor, is well qualified. She is professor of medieval manuscript studies at the University of London, former curator of illuminated manuscripts at the British Library, and the author of *Anglo-Saxon Manuscripts*, *Understanding Manuscripts*, and *The Lindisfarne Gospels*.

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

INTRODUCTION TO NEW AND ALTERNATIVE RELIGIONS IN AMERICA (five volumes) by Eugene V. Gallagher and W. Michael Ashcraft, eds. Westport, CT: Greenwood Press, 2006. 1504 pages, notes, selected bibliography, indices. Hardcover; \$399.95. ISBN: 0275987124.

New religious movements (NRMs) have come under increasing scholarly scrutiny in recent years. One academic journal devoted entirely to the subject, *Nova Religio: The Journal of Alternative and Emergent Religions*, is in its tenth year as of this writing, and there is a regular slew of books from both academic and popular presses on the subject. Now, the field can be said to have something of an authoritative encyclopedia in Greenwood Press's five-volume *Introduction to New and Alternative Religions in America*. The set is an impressive achievement that will aid both scholar and layman in navigating the often nebulous territory of nonmainstream religion in the US.

The first volume of the work, *History and Controversies*, begins with a lengthy article by Timothy Miller, covering religious innovation from colonial times to the present, and includes a whole host of entries that look at issues of leadership, law, gender, age, sexuality, violence, and globalization as they relate to NRMs, as well as to the history of Christian and secular countercult movements. The next four volumes cover specific organizations or practices, grouped together by basis of what might be considered their philosophical root: *Jewish and Christian Traditions* (covering Shakers, Jehovah's Witnesses, Christian Science, etc.), *Metaphysical, New Age, and Neopagan Movements* (Spiritualism, Eckankar, Wicca, etc.), *Asian Traditions* (Vedanta Society, Soka Gakkai, Unification Church, etc.), and *African Diaspora Traditions and Other American Innovations* (Nation of Islam, Santeria, etc.).

Each entry is amply endnoted and features a list of works for further reading. The result is probably the largest survey of new and alternative religions yet published (even if it is strangely missing specific entries on Scientology and various UFO religions). Previous surveys have

tended to be limited to specific groupings of movements, such as Sarah M. Pike's *New Age and Neopagan Religions in America* (Columbia University Press, 2004), which has made it difficult to see the religious forest for all the trees out there. This reference set essentially creates a map that helps locate these movements in the world at large.

Of course, there still remain a number of problems underlying the study and categorization of NRMs, the predominant one being that such descriptors as "new" and "alternative" are entirely contextual, as the editors admit. Indeed, there are entries in Volume 4 on Buddhism in general and Tibetan Buddhism specifically, neither of which are new in the slightest, save in the American experience. (And why are not Hinduism or Islam included?) Too, classifying NRMs according to their source material is a risky proposition at best, as religious innovation at the fringe may cover a wide array of inspirations; for example, some neopagans borrow freely from both ancient Norse sagas and Native American traditions. Co-editor W. Michael Ashcraft's previous book, *New Religious Movements: A Documentary Reader* (New York University Press, 2005), categorized NRMs on the basis of what the various movements offered the adherent: new understandings, new selves, new families, new societies, and/or new worlds. It was a very insightful typology, and I think it a shame that it was not applied in some respect here, perhaps in an article on the many ways in which NRMs have been studied.

Despite these few problems, editors Ashcraft and Eugene V. Gallagher have managed to compile what will be the standard reference on the subject for years to come. Readers of this journal may be particularly interested in the set, given the many ways in which some new and alternative religions appropriate science, be it the racially charged pseudoscience of the Christian Identity movement or the scientific rationalism that underlies portions of Swedenborgian doctrine. Popular understandings (or misunderstandings) of science have had just as much influence upon the religious milieu of the US as have the introduction of other religious traditions—groups such as Christian Science or the Church of Jesus Christ of Latter-Day Saints cannot be fully understood without contextualizing their history in the dominant scientific theories of the times in which they were formed. *Introduction to New and Alternative Religions in America* is a great set, though its exorbitant price, roughly eighty dollars per volume (each approximately 300 pages), means that libraries or other institutions will likely be the only ones able to afford it.

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

FABRICATING JESUS: How Modern Scholars Distort the Gospels by Craig Evans. Downers Grove, IL: InterVarsity Press, 2006. 290 pages. Paperback; \$19.00. ISBN: 0830833188.

Craig Evans, a New Testament scholar and teacher at Acadia Divinity College in Nova Scotia, has written a helpful text addressing popular concerns about the origins of Christianity from a conservative evangelical perspective. Evans is well qualified, having learned textual criticism, ancient languages, and early Christian history at Claremont Graduate University under the tutelage of such

scholars as James Robinson, chair of the Nag Hammadi seminar; William Brownlee, one of the first scholars to study the Dead Sea Scrolls in 1948; and James Sanders, the leading proponent of the "New Perspective on Paul." Evans is one of the few conservative scholars sought after by the secular media for expertise in Christian origins. Evans recently served as an advisor for the National Geographic Society's 2006 report on *The Gospel of Judas*.

Fabricating Jesus is written for a popular audience familiar with the writings of John Dominic Crossan and other Jesus Seminar-type authors. While not a point by point critique of various revisionist portrayals of early Christianity, Evans addresses the major methodological flaws behind both scholarly and popular attempts to rewrite the history of Jesus and the early church.

Evans argues that some scholars are motivated by misplaced faith and misguided suspicion. In the case of Bart Ehrman, the popular author of *Misquoting Jesus*, Evans notes that Ehrman had unfortunately built his faith on a rather strict notion of inerrancy instead of simply trusting in the accomplished work of Jesus Christ.

Evans expands his argument by noting where some scholars miss the mark: (1) having cramped starting points and overly strict critical methods; (2) reliance on questionable texts, such as dating *The Gospel of Thomas* as a first century document over and against the general consensus that it was actually mid to late second century; (3) putting Jesus into alien contexts, such as making Jesus into a Cynic; (4) taking the sayings of Jesus out of their New Testament narrative contexts; (5) diminishing the miraculous deeds of Jesus; (6) preferring Josephus over the New Testament writers; and (7) making claims for multiple "Christianities" during the first century.

To cap off the main thesis, Evans reveals the hokum history and bogus findings of such popular works as Michael Baigent's and Richard Leigh's *Holy Blood, Holy Grail*, the conspiracy theory in the guise of historical scholarship that inspired Dan Brown's *DaVinci Code*. *Fabricating Jesus* includes several appendices, including a fascinating discussion of the free-floating sayings of Jesus and some comments about *The Gospel of Judas*.

Two of the best features of *Fabricating Jesus* is its excellent annotated notes section and list of recommended readings consistent with Evans' perspective (James Dunn, Robert Stein, Ben Witherington, N. T. Wright). It is hoped that an extended set of annotated notes for the book will be available at the InterVarsity Press website at: www.ivpress.com/cgi-ivpress/book.pl/code=3318.

Fabricating Jesus succeeds as a popular text, but it leaves you wanting more. For instance, Evans does not really address the most troubling concerns behind Bart Herman's *Orthodox Corruption of Scripture*, which is Herman's scholarly rendition of *Misquoting Jesus*. Herman's "lost Christianities" is not so much the problem as his claim that orthodox Christian copyists altered the biblical text for apologetic purposes. It would be helpful if a conservative evangelical scholar of Craig Evans caliber would issue an in-depth critique of Herman and other more serious non-evangelical scholars.

In the genre of conservative evangelical responses to *The DaVinci Code* and the Jesus Seminar, *Fabricating Jesus* stands out as a generously civil yet firm critique of the way some scholars distort Jesus. Evans has very little rea-

son to fear the loss of faith in light of historical criticism. Evans is frankly embarrassed at how some members of his guild mishandle the evidence in order to advance certain arguments. Nevertheless, Evans is optimistic in that most scholars do follow sound scientific principles in doing historical research. Unfortunately, it is generally the more controversial fringe writers that grab the media headlines. Readers who are interested in how difficult it is to keep misguided suspicion and misplaced faith from impacting the discipline of historical criticism would benefit from reading *Fabricating Jesus*.

Reviewed by Clarke Morledge, Network Engineer, College of William and Mary, Williamsburg, VA 23185.



SCIENCE EDUCATION

FOSSILS AND FAITH: Finding Our Way through the Creation Controversy (4 lessons) by Thea Nyhoff Leunk. Boca Raton, FL: CRC Press, 2005. Leader's Guide, 67 pages. ISBN: 1592551998. Paperback; \$12.95. Student newspaper for each session; \$4.95. Useful for high school students grades 11 and 12 or young adults/adults in either a day school or church school setting.

DISCOVER CREATION AND SCIENCE (Walk With Me Grades 6-8, Year 3, Unit 5, 4 lessons). Grand Rapids MI: Faith Alive Christian Resources, 2006. Leader's Guide, 44 pages. ISBN: 1529551637. Paperback; \$5.95. Student materials for each session; \$3.15. A study for grades 6-8 or youth groups on creation and science.

When and how should we begin to address the issues that arise when science touches Christian faith? Surely as early as science is taught in school. Offering kids the chance to relate the Genesis stories they learned in Sunday School to the science they are taught at school can be daunting yet it can provide a foundation upon which they can build as their knowledge of Scripture and science matures with the years. Setting the stage for how one should approach these topics can avoid much pain in the future.

Session 1 of *Discover Creation and Science* provides a bridge between school and church by beginning with a science trivia game to get the kids focused. Then a transition occurs to an "I wonder" time where students write down science questions that they might ask God to answer that God *alone* knows. These generally focus on the Creation account. They then share the questions, and the teacher helps them to clarify their thoughts with follow-up questions. Using Heb. 11:3, the teacher brings in the dimension of faith and wonder. Emphasis is placed on the diversity and complexity of God's creation. A short time spent outside the classroom can provide examples.

Session 2 "Looking for Answers" contrasts the ways that the Bible and science describe nature. Emphasis is placed on a careful examination of both science and the Bible in tackling questions.

Session 3, "Respecting Different Opinions," looks at some of the classical questions of age, geology, biology, and design and argues the necessity of a careful examination that respects the ideas of others.

Session 4, "The Bottom Line," seeks to focus on the things that Christians hold in common (from six-day liter-

Book Reviews

alists to theistic evolutionists) and suggests that Christians need to present a common front against those who would use science to eliminate God.

This is a rich study. It has good material, creative teaching methodology, openness to new ideas and an approach toward science and faith issues that reflects that of the broad ASA community. It deserves a wide audience.

Fossils and Faith is aimed at the late high school and young adult level in covering the gamut of issues around the theme of origins. A student newspaper frames the questions to be considered in each of the four sessions. Dressed in colorful graphics and written in imaginative fashion, the newspaper has something for all, in setting up the discussion for the day. "In the Beginning, God" offers the Babylonian and biblical creation accounts as describing the Creator as both *immanent shaper* and *distant king*. The class then exegetes the meaning of the biblical account using a helpful hermeneutical approach. Poetry and humor add different interest-gathering dimensions as the class considers the Bible's view of creation.

Session 2, "The Heavens Declare," focuses on the scientific picture: the how of origin of the universe, life on earth, the animals, people. Heady stuff! A bit of science provides a change of pace. "God Has Made Everything Beautiful in Its Time" considers the hard questions—separating fact and belief—in framing a view of creation that takes Scripture and science into account. The final session, "When I Consider," pulls the earlier sessions together in asking what our role in the world should be. Earth keeping, celebration, and worship of the Creator are in order.

In moving from reviewer to enthusiast I encourage the reader to acquire a copy of the teacher's guide and student newspaper, read them carefully, and consider how these courses might be taught in your church or Christian school. Then bring your case to the CE director/pastor/headmaster and prepare for an enriching experience.

Reviewed by J. W. Haas, Jr., Emeritus Professor of Chemistry, Gordon College, Wenham, MA 01982.



SOCIAL SCIENCE

FAILED STATES: The Abuse of Power and the Assault on Democracy by Noam Chomsky. New York: Metropolitan Books, 2006. 263 pages, notes, index. Hardcover; \$24.00. ISBN: 0805079122.

Failed States is a frightening book. Chomsky, an MIT professor, a speaker on National Public Radio, and a prolific writer of political books, makes the claim that our beloved United States is close to being a "failed state." By asserting our right to intervene militarily against other countries, we have claimed for ourselves a world hegemony which we will not allow for any other country, not even an ally such as Great Britain. We create "client states," countries which, regardless of political system, are favored in trade relations and even supported against democratic change. In doing this, we pose an increasing danger to the world and to ourselves, likely nuclear war, at the cost of subduing our citizenry.

This is *not* a partisan book; both political parties come in for criticism. Examples date back fifty years and more, exacerbated since the events of 9/11. By regarding the

country as beyond the reach of international law and exempt from world norms, including the Geneva Conventions and the UN Charter, the United States has become a "rogue state." Even worse, Chomsky asserts, because these postures are creations of both major political parties, the system works to stifle political alternatives and genuine democracy is effectively reduced to popularity contests between Tweedledee and Tweedledum.

Early on, the author discusses breaches of the international norm of war as codified in the Geneva Conventions—first enacted in 1864 to protect both wounded soldiers and civilian populations. In 2002, then White House counsel Alberto Gonzales advised the president on what might constitute torture, advising him to ignore the "quaint and obsolete" provisions of that agreement, once solemnly attested to by our country. Chomsky quotes law professor Jordan Paust:

Not since the Nazi era have so many lawyers been so clearly involved in international crimes concerning the ... interrogation of persons detained during war.

His assessment of Bush's 2002 memo authorizing what most people would deem "torture" is quoted as follows:

... evidence of an unprincipled plan to evade the reach of law ... while seeking to avoid criminal sanctions ... [it] authorized and ordered violations ... which are war crimes.

Other actions, by previous administrations, are also dissected:

- Reagan's invasion of the sovereign state of Granada, with no congressional approval or even public discussion;
- Carter's training and support of the Somoza troops in Nicaragua as they murdered an estimated 40,000 people;
- Eisenhower's policy on Cuba, sanctions (which mostly hurt poor people) that remain in place to this day;
- George H. W. Bush's pardon of Elliot Abrams, convicted of lying to Congress about the United States' terrorist war in South America;
- Reagan's destruction of the elected democratic Guatemala, leading to the death of an estimated 200,000 persons;
- Wilson's invasion of Haiti—because the government there refused to allow U.S. corporations to buy up the land, thousands died;
- Clinton's authorization of the U.S. company, Texaco, to supply the Haitian military junta, one which had overthrown the fragile Haitian democracy, founded in 1990;
- Clinton's military interventions in Bosnia, now generally recognized to have been done, not on humanitarian motives, but to demonstrate NATO's power and establish American domination in Europe.

More could be added; read the book. The Bush invasion of Iraq, taken nearly unilaterally, comes in for particular attention.

This is a tough book to read. Chomsky writes for the highly educated and well-informed reader; I thought I was possibly one or the other but found some parts of his manuscript too complex to fully understand. If you can stand a book which is 50% comprehensible, it is worth picking up. It may disturb you (it did me) to learn more about our country's history and current political actions.

Reviewed by John W. Burgeson, 36633 Road P.8, Mancos, CO 81328.

THE REPUBLICAN WAR ON SCIENCE by Chris Mooney. New York: Basic Books, 2006. 342 pages, index. Paperback; \$14.95. ISBN: 0465046762.

The author is a young journalist who has written for publications like *Mother Jones* and *Slate* and now is the Washington correspondent for *Seed* magazine. This book is in four parts: the first being his view of how the Republican Party has been taken over by "industry" and the "Religious Right" interests in the last 30–40 years. In the second part, he focuses on four issues that he alleges that "industry" has fought in a way that is tantamount to a war on "science." These are global warming, the Data Quality Act (DQA), dietary issues relating to consumption of sugar and fats and the obesity problem, and the endangered species act (ESA) and related irrigation issues. The third part deals with issues relating to the Religious Right; viz: "creation science," stem-cell research, and programs of sex education for children. The book closes with a blistering attack on President Bush, entitled: "The Anti-Science President: Bush League Science." Then follows seventy pages of detailed notes.

The theme is crystal clear. In today's Republican party, the two dominant cultural forces of "industry" and the "Religious Right" are either evil, misinformed, ignorant or maybe all three. Their actions on the selected issues, Mooney claims, are antithetical to "science"—the latter being the "consensus view." He admits Democrats have misused science also but the sins of Republicans are far worse in his judgment. His recommendations for the future are to restore the Office of Technology Assessment (OTA), preserve the ESA, remove the DQA and above all educate the public on the misuse of science, which will help hasten the political demise of these Republican forces.

The tone of this book, even according to friendly reviewers (do a Google search), is "snide and polemical" and "shamelessly partisan." He not very subtly contrasts his "reality-based community" with "faith-based communities." He denigrates scientists on the opposite side of his views, e.g., by dubbing those skeptical of global warming as "contrarians" and even bothers to note that some of these scientists are "smokers." For me, he crosses the line by attacking two scientists with whom I have had personal interactions and whom I admire: Dr. John Graham, who recently resigned from the Office of Management and Budget (OMB), and Dr. Vernon Ehlers, congressman and ASA member.

This book has a focus more narrow than the title implies—i.e., dealing with a few issues of political importance and including technology issues like the ABM, when useful. Despite the detailed research, the level of understanding is that of a young journalist and not that of an experienced scientist. To cite an example on which I am knowledgeable, Mooney claims the DQA is a political ruse to hinder science in regulatory agencies. In fact, the DQA, which specifies peer review for documents on the scientific basis of regulations, was enacted in response to several events where an agency document had deficiencies. Instead, Mooney argues that where there is "scientific uncertainty," agency personnel should be allowed to exercise their "professional judgment," keeping in mind the Precautionary Principle (PP). But we in industry correctly have assessed such proposals as the "abandonment of science." Heretofore, scientific proof of a hazard must precede costly regulation. Some, including Mooney, propose that regulations should be as tight as economically

possible even without scientific proof of hazard, if there is the "possibility," as professionally judged by agency personnel, that a hazard "might" be found in the future.

This book is a source of "talking points" for a Democrat engaged in the rough and tumble world of politics as a book entitled *The Democrat War on Religion* would be for Republicans. As for the question of substance, without sensing its immediate applicability, Mooney, in his preface, makes the statement: "It's much easier to sow confusion and misinformation than it is to generate new and reliable knowledge."

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THIS SIDE OF HEAVEN: Race, Ethnicity, and Christian Faith by Robert J. Priest and Alvaro L. Nieves, eds. Oxford, England: Oxford University Press, 2006. 356 pages, index. Paperback; \$35.00. ISBN: 0195310578.

The issue of race underlies the great American experiment like nothing else, and because the US is still self-reportedly a majority Christian nation, race is manifest in our expressions of faith. During the civil rights era, American Christianity essentially split on the issue, with the prophetic voice of Martin Luther King Jr. lining up on one side and the various White Citizens' Councils (with their own verses from Scripture at the ready) lining up on the other, as those ever-present lukewarm Laodiceans lingered in the middle, just wishing it would all go away. Even in the twenty-first century, when most of us would like to pretend that racial inequality is a thing of the past, American Christians are still trying to work out their thinking on what is no longer just a black-white cultural divide.

This Side of Heaven, the product of a long-term study on race and religion funded by the Wabash Center for Teaching and Learning in Theology and Religion, is an attempt to address this big American question from within a Christian context and from a multidisciplinary perspective. The book was designed to fill a particular need—many Christian colleges and seminaries have added courses related to race and ethnicity, but most of the reading material on these two subjects is either at the more popular level or is written from a secular viewpoint often exhibiting an antireligious bias. The editors and authors have worked to create a book that is prescriptive in nature; it explores the latest scholarly thought on race and ethnicity and then details how the problems underlying the ecclesia, particularly in America, might be addressed from a Christian faith perspective.

This Side of Heaven is divided into four parts. The first contains essays examining how race affects our thinking as well as detailing the anthropological reasoning behind seeing race as a cultural construct rather than a biological one; in keeping with the prescriptive nature of the book is a chapter on developing a multicultural competency, in which the authors call for "a theology of identification, one that allows individuals to see the interconnectedness of their identity, clan, and nation with the identity, clan, and tribe of the other" (p. 88). Part II looks at how we encounter the "other" in our racialized worlds. It covers interracial relations in evangelical American Christianity as well as a few smaller case studies, such as the historical debate over integration at Columbia Bible College. The

third part looks at how the Bible has been particularly abused with regard to a racist theology. This includes chapters on the Christian Identity movement as well as some corrective pieces addressing Scripture directly, including one that examines the Samaritans as not a separate race but rather a separate religious group. The last section contains an array of case studies of interracial contact in a variety of church settings.

The editors fulfill their goal, for the end result is a book that is perfect for those being educated in a Christian environment—it is true to both modern scholarship and a religious vision that sees the church as potentially limitless in scope. Not only are our problems with race explicated in detail, but the correctives offered for our catastrophically racialized society call to mind the equalizing worldview that was the foundation of most of these evangelical churches—the radical vision of equality that sought to offer a godly alternative to a society riven by race, class, and gender. Readers of this journal should find the book particularly valuable as an alternative to the discourse on race that is the norm in many Christian and scientific circles. Every now and then, something like Richard J. Herrnstein and Charles Murray's *The Bell Curve* (1994) lures many with its assertions that the group they belong to constitutes an elite, as ordained by, biology (and, by extension, God). The temptation to seek validation for the superiority of a particular racial or ethnic group is not just scientifically misguided but is also incompatible with the Christian vision, given that the church, fundamentally, "is defined by faith in Christ rather than by genealogy, ethnicity, or race" (p. 328).

Reviewed by Guy Lancaster, Encyclopedia of Arkansas History & Culture, Butler Center for Arkansas Studies, Little Rock, AR 72201.

DAILY LIFE OF CHRISTIANS IN ANCIENT ROME by James W. Ermatinger. Westport, CT: Greenwood Press, 2007. Hardcover; \$49.95. ISBN: 0313335648.

Why this book? To explore the differences and similarities in daily life between Christians and pagans, to examine how Christianity developed and identified itself in an unfriendly world, and to place Christianity within the structure of Roman society. In the author's words: "The central aspect of this book examines Christians' daily life during the Roman world, especially in the city of Rome and before the legalization of Christianity" (p. ix). The author's information comes from literary and archaeological sources.

This ten chapter book includes a glossary, bibliography, chronology, photographs, drawings, images, and an index. The book's three main sections describe, in the Roman world, the uniqueness of Christianity, the uniqueness of Christians, and what it meant to be a Christian. Ermatinger presents a brief biography of two saviors of the world: Augustus was seen as political savior of the Roman world; Jesus would be seen as the religious savior of the whole world (p. 6). "These two individuals, Augustus and Jesus, living nearly contemporaneously with each other in the same political system, influenced the future of Christianity and the Roman world" (p. 7).

Christianity took root and developed because of the *Pax Romana*, established by Augustus (p. 19). Constantine established Christianity as the official state religion which led to its rapid spread because "Individuals quickly learned that by converting to this new religion there were more opportunities for advancement and wealth" (p. 21). Even so Christians were sometimes persecuted because they were part of a group, and "The Romans had a sort of national paranoia; they distrusted any gathering of people," even a volunteer fire department (p. 39).

There were many contemporary Roman religions, but they offered little hope for life after death. This was one reason why Christianity and the mystery religions were so popular, with Christianity winning out eventually (pp. 43–4). This topic is explored in the chapter entitled "Afterlife."

The last chapter, "Impact of Christianity," explains how Christianity shaped and influenced its buildings, organizations, papacy, pilgrimages, and tourist economy. The author concludes that some practices and attitudes of Christianity evolved (divorce, dietary laws, vernacular services), but others continue to be a vital contemporary part of Christian experience (fasting, prayer, and communion).

James W. Ermatinger, professor and chair of the Department of History at Southeast Missouri State University in Cape Girardeau, MO, is the author of *Economic Reforms of Diocletian* and *The Decline and Fall of the Roman Empire*.

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



Letters

Dialogues Appreciated

I love the dialogue approach, as exemplified by the Seely-Ross and Haarsma-Behe dialogues in the March 2007 issue of *PSCF*. For my money, this issue was the best yet of *PSCF*. Being able to read the article, the responses, and the responses to the responses all at once made it so much easier for me to understand the issues and make up my own mind. I hope *PSCF* is able to feature similar dialogs in the future, e.g., Dick Fischer & Glenn Morton, Carol Hill and ???, Howard Van Till and ???, and anyone else whose previous articles have stirred up letter responses in the past.

Perhaps some of the "debates" on the ASA List Serve could be turned into future dialogues by giving the principal debaters an opportunity to present their positions and comments on others' positions.

Incidentally, I also appreciated the insightful book reviews in the "Origins & Cosmology" section (my personal area of interest).