Book Reviews

ETHICS

THE MORAL LIFE: An Introductory Reader in Ethics and Literature by Louis P. Pojman, ed. New York: Oxford University Press, 2004. 985 pages. Paperback; $70.95. ISBN: 0195166086.

If you like to contemplate the mysteries, vagaries, puzzles, enigmas, riddles, inequities, controversies, and paradoxes of the moral and ethical life, this book will speed you on your way. It contains a grouping of ninety-two classical and contemporary readings on ethics and morals. The writers cover a wide range of viewpoints, topics, and time periods. They include works by Camus, Dostoevsky, Epictetus, Herodotus, Hugo, Nietzsche, Orwell, Plato, Plutarch, Tolstoy, and many others. Noteworthy are the inclusions of two sermons by Jesus, C. S. Lewis' article entitled "We Have No 'Right to Happiness,'" and Charles Colson's contribution on "The Volunteer at Auschwitz."

Maya Angelou's autobiographical item, "Graduation," is about her graduation from high school in Stamps, Arkansas. Martin Luther King, Jr.'s most famous speech, "I Have A Dream," is included. In the section on "International Justice and the Threat of Terrorism," Joshua 6–8 tells the story of "God's Command to Destroy Jericho and Ai." The story of David and Bathsheba is told under the heading "Lust." Other articles which will appeal to *PSCF* readers include "The Deep Beauty of the Golden Rule," "The Evil of Lying," and "Licensing Parents."

These articles are intended to lead students to a better understanding of philosophical issues related to relativism, utilitarianism, virtue, the meaning of life, freedom, sex, love, marriage, ecology, and other topics. There are pros and cons on moral relativism, utilitarianism, the Golden Rule, religion and morality, ethical egoism, abortion, and the legalization of drugs.

The book includes helpful chapter introductions, biographical sketches, abstracts, and study questions for each reading selection. Alas, there is no index. There are, however, lists of further readings for each of the sixteen chapters. This book is expensive because it is intended for college students. (Why are college books expensive? One reason is because so many free ones are given as examination copies to potential adopters.)

Pojman is a philosophy professor at the United States Military Academy at West Point. He has written or edited many other books including *Global Environmental Ethics* and *Classics of Philosophy*. Pojman's own writings in this collection include "The Case Against Moral Relativism," "Egoism and Altruism: A Critique of Ayn Rand," and "The Cosmopolitan Response to Terrorism."

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

FAITH & SCIENCE

THE CASE FOR A CREATOR: A Journalist Investigates Scientific Evidence That Points Toward God by Lee Strobel. Grand Rapids, MI: Zondervan, 2004. 341 pages, notes, index. Hardcover; $19.99. ISBN: 0310241448.

Educated at Yale Law School, Strobel was an award-winning legal editor of the *Chicago Tribune* for a number of years. He is the author of several best-selling books, including *The Case for Christ* and *The Case for Faith*. He has been a teaching pastor at two of America's largest churches: Willow Creek Community Church in suburban Chicago and Saddleback Valley Community Church in Orange County, California. During his academic years, Strobel became convinced that God was outmoded and that science had made the idea of a Creator irrelevant. After his wife became a Christian, he began to seriously investigate the claims of Christianity for himself. His journey from atheism to Christian faith is retraced in his book *The Case for Christ*. This book, *The Case for a Creator*, documents how recent developments in science are pointing away from materialism and atheism and instead are pointing toward the existence of God.

The format of this book is identical to Strobel's previous two "Case" books. He interviews a number of different scholars, taking on the role of a skeptic as he searches for answers to questions that plagued him when he was an atheist. Strobel states that he "sought out doctorate-level professors who have unquestioned expertise, are able to communicate in accessible language, and who refuse to limit themselves only to the politically correct world of naturalism or materialism" (p. 28). Those chosen for interviews also represent a variety of scientific disciplines with a chapter devoted to the evidence from each discipline. Those familiar with the Intelligent Design movement will recognize most, if not all of the scholars interviewed.

The first person interviewed is Jonathan Wells of the Discovery Institute and author of *Icons of Evolution*, a book that raises doubts about the evidence for Darwinism. Stephen Meyer, also of the Discovery Institute (an Intelligent Design think tank), is interviewed in chapters four and nine. Michael Behe, author of the book *Darwin's Black Box* and proponent of the concept of irreducible complexity, is interviewed in chapter eight. Others interviewed include J. P. Moreland and William Lane Craig from the Talbot School of Theology, Robin Collins of Messiah College, and the authors of *The Privileged Planet*, Jay Wesley Richards (of the Discovery Institute) and Guillermo Gonzalez.

The evidence that is cited in support of a Creator will be very familiar to readers of this journal. The kalam cosmological argument (whatever begins to exist has a cause, the universe began to exist, therefore the universe has a cause) is supported by recent scientific evidence for the Big Bang theory. In the area of physics, the anthropic principle, which recognizes the incredible fine-tuning of the universe that makes life on earth possible, is discussed in detail. Astronomical evidence comes from a variety of scientific sources; the concept of the Galactic Habitable Zone, the unique arrangement of the planets in our solar

system, the unusual properties of our sun and moon, as well as from the phenomena on earth that contribute to its ability to sustain life. In the field of biochemistry, the concept of irreducible complexity as it relates to biological structures and biochemical pathways, is used as evidence for Intelligent Design. The failure of origin-of-life theories to adequately explain how chemical evolution could have produced living organisms from nonliving matter is the subject of the chapter on biological information. The last piece of evidence to be addressed focuses on the problem of developing conscious, thinking, feeling, believing creatures from materials that do not have those properties (by a naturalistic evolutionary process).

To whom is this book primarily addressed? After the cumulative case for a Creator is summarized in the last chapter, a challenge is given to spiritual skeptics and seekers to investigate the evidence systematically and enthusiastically, as if their lives depended on it! Strobel clearly desires to reach those who are not Christians, since he includes an appendix that summarizes the historical evidence for Jesus Christ from his book *The Case for Christ*. If his main purpose is to convince unbelievers that God exists on the basis of scientific evidence, one wonders why he chose to only interview individuals who are closely associated with the Intelligent Design movement. His arguments may have been more forceful if at least some of them had been presented by scientists who are not so closely connected to this movement. Several of those he interviewed are actually Christian philosophers rather than practicing scientists, and only two of those interviewed (Behe and Gonzalez) are research scientists in secular universities. Although many quotes from scientists outside of the Intelligent Design movement are included, extended interviews with some of these scientists might have lent more credence to the evidence for a Creator than is presented in this book.

The primary audience appears to be the Christian community as the book is mainly an apologetic for theism and Christian faith. The book can easily be used in a study group setting within the context of the local church. This book could also be used as a text in an introductory course on science and faith at a Christian college. Study questions are provided in the appendix and brief bibliographies are included at the end of each chapter. This book, like Strobel's first two "Case" books, will likely be read by many within the Christian community. Hopefully, many skeptics and seekers will read it as well.

Reviewed by J. David Holland, 868 Oxford Drive, Chatham, IL 62629.

COMING TO PEACE WITH SCIENCE by Darrel R. Falk. Downers Grove, IL: InterVarsity Press, 2004. 234 pages, index. Paperback; $17.00. ISBN: 0830827420.

ASA member Darrel Falk studied or taught at five secular universities before serving two Christian universities. He is currently professor of biology and associate provost for research at Point Loma Nazarene University.

Falk recalls a picnic with his wife and daughters on a southern California beach over twenty-five years ago. He spotted a Sunday school bus belonging to the denomination in which he grew up. This brought fond memories of church fellowship that he once enjoyed—a fellowship to which he, as a young adult, felt he could not return. "The chasm that separated us was too great," he writes, and one of the widest gulfs was "my belief in gradual creation."

According to Falk, three origins scenarios are consistent with Scripture: (1) separate origin of each species; (2) separate origin of prototypes, followed by microevolution of related species; and (3) each new species arose from a previously-existing species. Many Christians think *creation* can only mean (1) or (2); and that (3) excludes God. To Falk, all three imply Divine involvement. The Bible teaches that life arose at God's command and because of his presence. It does not reveal mechanisms. Falk believes that God gave the creation freedom to act, as he also gave humans moral freedom. Autonomy is implied by phrases such as "*Let* the waters teem …" (Gen. 1:20). Falk wants Christians to understand that gradual creation is a valid position for evangelicals to hold.

Evidence from many disciplines suggests that (3) is the most *scientifically* valid position. Astrophysics tells us the universe is 12–13 billion years old. Numerous methods indicate the earth is 4–5 billion years old. Stratigraphy and plate tectonics yield a coherent geological history. Transitional fossils (which Darwin's critics said did not exist) have been found—many during the 1990s.

Genomes change. The changes accumulate at rates that correlate with the geologic events that isolated populations. Cichlid species in Lake Malawi (which formed four million years ago) are more closely related to each other than to cichlids in Lake Tanganyika (which is six million years older). Marsupials in Australia are more similar to each other than to their placental counterparts in South America.

Nonfunctional DNA testifies to a species' past. *SINE CHR-1* occurs at identical loci in all even-toed ungulates, dolphins, and whales. This retroposon (which was inserted by a virus) has been replicated faithfully, and organisms cannot delete it. Its presence strongly implies common ancestry. Like facial scars or lunar craters, it is mute evidence of formative history.

Falk wants fellow believers to understand the reasonableness of his scientific views, but he wants Christian oneness even more.

> Unless the church begins to downplay the significance of believing in some variety of sudden creation … there will continue to be thousands of individuals … who will be denied true fellowship in God's kingdom … not because of their refusal to accept Christ … but because they believe the church doors are not wide open to someone who believes in gradual creation.

It is not hard to find examples of the divisiveness that Falk is talking about. A Google search for "Darrel Falk" directed me to *Christianity4Life*, where Michel Archer brands Falk as a "theistic evolutionist" (TE) and charges that TEs "do not believe the Bible." May God have mercy on us; for his people are fighting a civil war. Falk wants to be a peacemaker.

This is the most helpful book I have ever read on biological origins and Christianity. Every ASA member should own it. Please share this book with your pastor and

with your church's young-adult Sunday school teacher. College biology teachers should assign it as supplemental reading.

As I write these words, I am enjoying a picnic with my daughter at a state park in northeast Ohio. Across the road, a signpost proclaims that we are sitting astride a continental divide. Rain that falls south of us will drain into the Mississippi River and empty into the Gulf of Mexico. Drops that fall north of us will drain into Lake Erie and will eventually reach the Atlantic Ocean *via* the Saint Lawrence River. *Coming to Peace with Science* is a watershed event in evangelical publishing. Its rhetoric is unusually gracious, and its purpose is to restore fellowship among the body of Christ. Let it be so, Lord.

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

SCIENCE AND THE RENEWAL OF BELIEF by Russell Stannard. Philadelphia: Templeton Foundation Press, 2004. 228 pages, index. Paperback; $16.95. ISBN: 193203174X.

Stannard is emeritus professor of physics at the Open University in Great Britain. He is highly regarded for his expertise as a physicist and also his ability to popularize issues pertinent to science and faith. He has a number of best-selling books and is a well-known television and radio broadcaster. These unique skills show through in *Science and the Renewal of Belief*, as he makes complex science concepts, such as quantum physics, understandable to the lay reader.

Science and the Renewal of Belief was first published in 1984 in Great Britain. This reprint is an updated version published for the first time in North America. This book contains twenty-two chapters, many of them quite short.

There are several main arguments that undergird Stannard's work. He considers modern science to be continually providing evidence for the legitimacy of basic Christian doctrines, including original sin, the Trinity, and Christ's divine-human nature. This reflects his sincere Christian faith. At the same time, he considers the advances of science to be the first and nearly invincible evidence of truth, and weighs the Bible against the authority of science. For example, he questions the virgin birth and the miracles of Jesus. He said that in some of his miracles Jesus is as much a good psychiatrist as a miracle worker. He explains God's provision of manna as insect secretions on tamarisk leaves. The only supernatural aspect of the Bible that he seems to recognize is the resurrection of Christ. ASA members might be troubled by the casual attitude he takes toward the Bible. His philosophical and scientific prowess provides fascinating fodder for theologians, but most evangelical theologians would find it hard to rest many of his arguments securely in orthodox biblical teaching.

His ideas are creative and fascinating, and his mastery of complex physics concepts is stunning. One of his more interesting concepts is what he calls the "the experiment of prayer." He considers our relationship to God to be of paramount importance, of more importance than our conceptions of God. He wrote that "… all valid statements they [theologians] make about God are statements about our relationship with God, and any attempt to go beyond that, in order to arrive at an objective description of God in isolation from us, is inadmissible" (p. 214). So he challenges the skeptic to pray for one year and test whether in fact through prayer he meets God. While I suspect that without input from the Word of God, the "pray-er" will likely end up an animist or a yogi, he is not so concerned.

Chapter 18 on the role of paradox in science and faith was particularly enriching for me. He has much to offer the Christian struggling to thrive in the relativistic context of postmodern thinking. His ideas will possibly push you deeper into the postmodern waters, but he also provides interesting arguments which will keep you from being washed away.

This book would be good for skeptics who consider science to have eliminated the need for faith. His descriptions of the changing nature of science would challenge their confidence in science and possibly open them up to considering faith. However, unless they had a prior commitment to Christianity, I suspect Stannard's teachings would as likely lead them to new age philosophy as to Christianity. This book could also be used in an upper level course on science and faith. To that end, I found it to be better engaged with the kinds of questions the modern university is throwing our way than most books by more conservative Christians. Many loyal readers of our journal *PSCF* would enjoy this book, and I do recommend it.

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

General Sciences

A SENSE OF THE MYSTERIOUS: Science and the Human Spirit by Alan Lightman. New York: Pantheon Books, 2005. 224 pages. Hardcover; $17.95. ISBN: 0375423206.

Lightman is the author of several novels that include *Einstein's Dreams*, which was an international best seller; *Good Benito*; *The Diagnosis*, which was a finalist for the National Book Award; and *Reunion*. He also published *Great Ideas in Physics* that serves as a text for a course of the same name at UNC-Wilmington for nonscience majors. His essays have appeared in *The New York Review of Books, The New York Times, Nature, The Atlantic Monthly,* and *The New Yorker*, among other publications. Lightman, who received his Ph.D. in theoretical physics from the California Institute of Technology in 1974, is a novelist, essayist, physicist, and educator. Currently, he is adjunct professor of humanities at the Massachusetts Institute of Technology.

This book represents a collection of essays most of which have appeared previously in various publications. The titles of the essays, which are not in chronological order, are as follows.

In "A Sense of the Mysterious," Lightman recounts his early tinkering with rockets and the realization that beauty at times succumbs to reality not only in the crash of a rocket but also in ideas such as parity conservation in particle physics. Early on, he showed an underlying interest

in science and art but concentrated on relativistic thermal plasma research at Caltech. This was his introduction to discovering something new in science.

In "Words," Lightman contrasts scientific words that are operationally defined and objects and concepts that the novelist uses but cannot precisely define. It is clear that this distinction is based on the former dealing exclusively with the physical aspect of nature, whereas the latter deals essentially with the nonphysical aspects of human nature.

In "Metaphor in Science," Lightman discusses the use of metaphors in science to create theories, such as the mechanical picture of Maxwell's electromagnetism, and its use to explain results of theories, e.g., the expanding balloon used by Eddington to illustrate the expansion of the universe.

In "Inventions of the Mind," Lightman confronts the intriguing question of why the constructs in pure mathematics find applications in the description of nature. He indicates that the human description of nature relies on the language of mathematics but that the phenomena themselves may not necessitate it. In addition, the success of the use of pure mathematics is because science is a human construct. Alternatively, it may be that our minds are part of nature and thus reflect nature and its logic. Of course, for a theist, the mystery is solved by acknowledging God as the Creator of both humans and nature with humans in turn the creator of mathematics.

In "The Contradictory Genius," "The One and Only," and "Megaton Man," Lightman recounts the lives of Einstein, Feynman, and Teller, respectively. In "Dark Matter," one learns of Vera Rubin, a woman who loved astronomy and discovered mass in spiral galaxies that do not emit light, now christened "dark matter."

In "A Scientist Dying Young," Lightman bemoans how great scientific achievements are accomplished very early in the life of scientists, thirty-six being the average age of physics Nobel laureates. Of course, most scientists dwell happily in teaching, academic administration, and some research. Some continue their love for research on an individual basis while others administer the research done mainly by others.

Finally, in "Prisoner of the Wired World," Lightman decries the modern world of technology with its accompanying benefits and ills. Our society is obsessed with speed and a consequent impatience embedded in consumption and materialism. The world is exploding in communication and computers giving rise to a virtual world devoid of face-to-face personal contacts. People have accommodated themselves to a noisy environment where privacy has been lost by being constantly "plugged-in." Technology has gone from being our servants to becoming our masters!

Lightman gives a personal account of his scientific life. The book is peppered with quotes of famous physicists and insights derived in the pursuit of scientific knowledge and discovery, which is common to all practicing scientists. His writing is very good and informative. However, despite the reference to spirit in the title of the book, no unifying world view is presented that integrates science and the true nature of humans, viz. the spiritual.

The book is entertaining to read and quite informative for its size. ASA members can require it as reading material for any course that deals with the anecdotal history of science and a secular critique of modern society.

Reviewed by Moorad Alexanian, University of North Carolina Wilmington, Wilmington, NC 28403.

HEALTH AND MEDICINE

HOLY COW: Does God Care What We Eat? by Hope Egan. Littleton, CO: First Fruits of Zion, 2005. 162 pages. Paperback; $14.00. ISBN: 189212419X.

Holy Cow is about what you put into your mouth and how it relates to the Bible, health, and longevity. It does not advocate legalism or vegetarianism, but it does come down on the side of those who advocate a diet based on Old Testament dietary laws. It considers the ban on unclean foods just as relevant today as the ban on idolatry and adultery (p. 111). Egan concluded that "the Bible's instructions about which meats God designed to be eaten still applied to us" (p. 8). The concluding chapter is entitled "God's Word Does Not Change—and Neither Does the Physiology of Pork or Shellfish" (p. 83). She believes that "God established His statues to last forever" (p. 85).

Egan stresses throughout that dietary choices are not related to the hope of salvation. Whatever one's theology, it would be difficult to disagree with the book's conclusion that "eating more vegetables, whole grains, beans, peas, nuts and seeds is a healthy, economical alternative to meat eating …" (p. 84). Egan offers supporting evidence throughout. One example: "A John Hopkins University study illustrates how pigs and other unclean mammals, birds, fish and insects have significantly higher toxicity levels than clean ones, like cows" (p. 33).

In the chapter "What Would Jesus Eat?" Egan writes: "Dispensational theology holds that there is a 'parentheses' during the Church Age in which believers are not bound by the Hebrew Scriptures' laws, which will become applicable again in the future. This idea of a Torah time-out seems odd" (p. 57). However, to contend that the Old Testament dietary rules should be followed because they are conducive to health may be more reasonable to some Christians than the idea that these Old Testament rules apply to Christians today.

Some readers may question some conclusions. For example, Egan asks: "Did God provide meat in order to shorten our life spans? Would our loving Creator—who carefully created our bodies and a myriad of Gen. 1:29 foods to perfectly fuel them—intentionally provide food that would harm us? I doubt it" (p. 15). But the reader might wonder about tornadoes, hurricanes, floods, and other natural disasters. They certainly cause harm. Where do they come from, if not the Creator?

Egan's co-author, D. Thomas Lancaster, observes that "Whether or not a particular commandment seems to apply in our day is irrelevant" (p. 86). This sweeping generalization seems contradictory to the point of the book. Some of Lancaster's other (controversial and unorthodox?) views include: today unclean animals should not be eaten (p. 96); Peter's sheet vision episode did not relate to which meats are fit to eat (p. 109); Romans 14 and

1 Corinthians 8–10 do not sanction the consumption of unclean meats forbidden by the Torah (p. 117); Acts 15 does not abolish biblical dietary laws (p. 122); and Colossians 2 is not speaking against Old Testament dietary laws (p. 126).

This book is handsomely produced, with easy to read large type, and written in a mostly non-polemic style. The author's irenic attitude may reduce the tendency to argue with some of her conclusions. She writes: "As we explore whether God cares about what we eat, I want to be helpful" (p. 30). She intends the book to be "neither a theological treatise nor a diet manual" (p. 10).

In summary, despite some gentle nitpicking, I liked this book. Christians concerned about obeying God's will in all of life's venues will find this book helpful in dealing with a controversial topic in a thoughtful, helpful, pleasant fashion.

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

HISTORY OF SCIENCE

A SHORT HISTORY OF NEARLY EVERYTHING by Bill Bryson. New York: Broadway Books, 2004. 544 pages. Paperback; $15.95. ISBN: 076790818X.

Bryson writes books in the genre called "travel literature." And he is an expert at it. *A Walk in the Woods*, about his hiking the Appalachian Trail, is informative, entertaining, and sometimes hilarious. His *In a Sunburned Country* is also deeply amusing and thoughtful as Bryson observed life in Australia as "a place with the friendliest inhabitants, the hottest, driest weather, and the most peculiar and lethal wildlife to be found on the planet."

Now Bryson comes forth with a chronicle of his scientific travels and finds in many parts of the world. His acknowledgments include sites and people in the United States, England, Australia, and other places. For three years, he interviewed experts, visited museums, read copiously and amalgamated all he learned into a highly educational and unusually insightful volume. It will interest experts and possibly thrill neophytes. In the Bryson tradition, it manages to amuse quite often: if you dived two and a half miles in the ocean, the water pressure would be "equivalent to being squashed beneath a stack of fourteen loaded cement trucks" (p. 240). Or take the case of J. B. S. Haldane, the absent-minded Oxford professor. Once his wife found him in bed in his pajamas after sending him upstairs to dress for a dinner party. Haldane said he found himself disrobing and assumed it was bedtime (p. 243). The first bathysphere "held two men, but only if they were prepared to become extremely well acquainted" (p. 275).

This relatively long book has the customary table of contents, endnotes, bibliography, and index. Its six major parts are subdivided into thirty easily digestible chapters (wonderful for reading in one sitting without "reader fatigue"). In them you will learn some amazing things and look at things you already know in brand new ways. Bryson has a gift for telling metaphor, illuminative analogy, and potent observation. For example, he starts chapter 16, "The Lonely Planet," with this trenchant observation: "It isn't easy being an organism. In the whole universe, as far as we know, there is only one place, an inconspicious outpost of the Milky Way called Earth, that will sustain you, and even it can be pretty grudging" (p. 239). Bryson quotes Freeman Dyson as saying: "The more I examine the universe … the more evidence I find that the universe in some sense must have known we were coming" (p. 238). Above 5500 meters, women do not provide enough oxygen to a fetus to bring it to full term (p. 259).

Some of Bryson's salient observations may entice you to read this book. If you were to pull atoms from your body with tweezers, "you would produce a mound of fine atomic dust, none of which had ever been alive but all of which had once been you" (p. 2). "Of the billions of species of things which have lived since time began, 99.99% are extinct" (p. 3). "Protons are so small that a little dib of ink like the dot on this *i* can hold something in the region of 500,000,000,000 of them, rather more than the number of seconds contained in half a million years" (p. 9). The edge of the universe is 90 billion trillion miles away, according to Arno Penzias and Robert Wilson (pp. 11–12). It was not until 1978 that anyone noticed Pluto had a moon (p. 19). (Pluto is so small it would cover only half of the United States). Space is so enormous that "it is possible that alien beings travel billions of miles to amuse themselves by planting crop circles in Wiltshire or frightening the daylights out of some poor guy in a pickup truck on a lonely road" but it does not seem likely (p. 27). Isaac Newton inserted a long needle into his eye socket and rubbed it around to see what would happen (p. 46; fortunately, nothing did). Scientists can calculate the weight of the earth sitting in their La-Z-Boys (5.9725 billion trillion metric tons, p. 62).

Bryson introduces his thoughts with a quote from Leo Szilard who was thinking of keeping a diary: "I am merely going to record the facts for the information of God."

His friend Hans Bethe inquired, "Don't you think God knows the facts?" Responded Szilard: "He knows the facts, but He doesn't know *this version of the facts*." This book is Bryson's version of the facts, and while it may not inform God, it will certainly inform the curious. Bryson is a wonderful writer, and you will be richly entertained and rewarded by reading this book.

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LIGHTNING MAN: The Accursed Life of Samuel F. B. Morse by Kenneth Silverman. Cambridge, MA: Da Capo Press, 2003. 503 pages, bibliography, notes, index. Paperback; $20.00. ISBN: 0306813947.

Samuel Finley Breese Morse, the inventor of a technology that revolutionized civilization, transformed transportation, the military, foreign affairs, and the very course of this world's history, was a miserable failure. Morse described his life as "cursed."

A prolific painter, Morse's art was largely unappreciated and often went unsold. His neglect of his wife and children in the pursuit of his career was indecent. He was a

lifelong Anglophobe (until England granted him a medal). He assured George Vail, who worked closely with him on the invention, that Vail was his "partner," but took all the glory of the results for himself. A zealous Christian, he railed against public education and church-state separation, opposed immigration from "sub standard races," and attacked Roman Catholics and Irish.

Morse vilified Abraham Lincoln as (p. 410) illiterate, inhuman, wicked, and irreligious. He organized a committee for the overthrow of the Emancipation Proclamation, and argued that male domination of females and Negro slavery were God ordained. He saw Abolitionists as the hideous progeny of religious liberalism, a Christian apostasy. The concept (after the Civil War) of black suffrage and interracial marriage threw him into frenzies. He once ran for Mayor of New York City on such a platform, garnering just 78 votes out of 37,000 cast! His commercially successful telegraph brought him much wealth, many honors, hundreds of lawsuits, and interminable debates in the public press. Acclaiming himself always as a "meek Christian," his favorite photograph, bedecked with medals, and taken at age 72 (p. 390), is best described as ludicrous.

Kenneth Silverman, a Pulitzer Prize recipient and a masterful storyteller, depicts Morse in all his complexity. The book is a microhistory of the exciting times of the first seventy-five years of the nineteenth century. It shows how a world was changed, not only by the telegraph, but by other technologies. More than that, it is the very sad story of a man who truly tried to follow Christ, yet never recognized he had lost his way. Morse died in 1872, still defending his claims both in the courts and in the public press. He was not only a failure, but a man unfulfilled, who had lived much of his life in acrimonious legal battles.

Morse was not a scientist; he had no education or training in the sciences. Yet, at age 41, he did have one great idea, conceived (as it seems) on board the ship Sully, in October 1832. June 20, 1840 marked the filing of his patent, "a new and useful Improvement in the mode of communicating information by signals, by the application of Electro Magnetism" (p. 212). Four years of experimentation, legal fights, and seeking funding followed. On May 24, 1844, the historic words, "What hath God Wrought," were flashed from Washington to Baltimore.

Three days later accounts of the Democratic Convention in Baltimore were telegraphed to eager listeners in Washington. A day later political negotiations by telegraph between the two cities were underway. The world would never be the same. The impact of the technology drew a nation—and a world—together.

The story is exciting; I found myself unable to put the book down. I heartily recommend it to my ASA colleagues. There are lessons in humility, examples to be avoided, and perspectives on nineteenth century civilization to be gained. Morses's *harmatia* (Aristotle's "fatal flaw") was that he was always sure he was "right," his biblical interpretations "truth," and in the adoption of this rigid and unyielding stance, he brought misery not only on himself but on others.

The most poignant part of the story comes in the final chapter. In 1944 the country celebrated the 100-year anniversary of the first telegraphed message. Western Union sent its last domestic telegram in 1960. Morse's invention lasted just 116 years.

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

CATHOLIC PHYSICS: Jesuit Natural Philosophy in Early Modern Germany by Marcus Hellyer. Notre Dame, IN: University of Notre Dame Press, 2005. 352 pages, appendix, endnotes, bibliography, index. Paperback; $50.00. ISBN: 0268030715.

Hellyer is a senior research officer at Parliament House in Canberra, Australia. He previously taught at Brandeis University, and has edited a book of readings on the Scientific Revolution. He received his Ph.D. in the history of science at the University of California, San Diego.

Part 1 of *Catholic Physics* describes the Society of Jesus' program for shaping university instruction in post-Reformation Europe, a program crafted in the middle sixteenth century to maintain Roman Catholicism in Catholic lands and to reclaim Protestant territories for Roman Catholicism. The Jesuits sought to produce leaders for both church and state capable of maintaining and defending Roman Catholic theology. They believed that a firm grounding in scholastic philosophy, i.e., the peripatetic philosophy of Aristotle as Christianized by Thomas Aquinas, was a prerequisite for learning theology. Natural philosophy, based on Aristotle's *Physics*, constituted the second year of the Jesuits' philosophy triennium. Parts 2 and 3 of the book deal with developments in the seventeenth and eighteenth centuries, ending with the suppression of the Society of Jesus by Pope Clement XIV in 1773.

Scholastic physics was a very different thing from modern physics with respect to what was believed to be true about the natural world, with respect to the nature of questions asked, and with respect to the means by which those questions were answered. *Catholic Physics* tells how Jesuit thinking and teaching evolved during the two hundred years they interacted with the new science begun by Copernicus, describing how they actively confronted, rejected, or absorbed crucial components of the Scientific Revolution.

The most important questions of physics for Roman Catholics in the sixteenth century concerned the Eucharist. How could bread and wine be transubstantiated into the physical body and blood of Christ in the Eucharist while maintaining the *accidents*—the physical taste, appearance, odor, etc.—of bread and wine? And how could Christ's body and blood be present on the altars of thousands of churches at the same time? Scholastic physics had provided satisfactory answers to these questions for centuries, but newly-revived atomism challenged the scholastic view. The Jesuits struggled to maintain the scholastic physics of substance and form and accidents throughout the two centuries during which they monopolized philosophy instruction in the universities of Germany. Nevertheless, by the time the Society was suppressed, most Jesuit instructors had adopted atomism, though still maintaining a Roman Catholic understanding of the Real Presence.

Another source of pressure (pun intended) on peripatetic physics that appeared during the sixteenth century

was the air pump invented by Otto Guericke. Guericke, a Protestant with no commitment to Aristotle, claimed to have demonstrated the existence of a vacuum by evacuating various cylinders and spheres. At first the Jesuits opposed Guericke's interpretation of his experiments, but as certain Jesuits began to practice experimental physics for themselves, they began to abandon Aristotle's views. In hindsight, the significance of the air pump for the Jesuits was not primarily its effect on their views regarding the vacuum; rather, it was in moving them to accept experiment as a source of truth in physics.

Catholic Physics is a well-researched book, citing nearly three hundred primary sources, most in Latin, and over four hundred secondary sources. It gives every indication of being an adaptation of the author's Ph.D. dissertation. Nevertheless, *Catholic Physics* is a book the nonspecialist can read without difficulty. It will not interest everyone in the ASA, but some will find it a worthwhile read. Those interested in the history of science will find it fills gaps in their knowledge (I know of no other work dealing with Jesuit natural philosophy in early modern Germany). Some who teach in Christian colleges will find that the Jesuits faced the same problems they face: integrating their faith with new, sometimes disturbing scientific discoveries, working in an institutional framework that exerts pressure to conform, or even explicitly censoring and forbidding divergent opinions.

Reviewed by Robert Rogland, Science Teacher, Covenant High School, Tacoma, WA 98465.

Natural Sciences

INSIDE THE MIND OF GOD: Images and Words of Inner Space by Michael Reagan, ed. Philadelphia, PA: Templeton Foundation Press, 2005. 160 pages. Paperback; $19.95. ISBN: 1932031901.

Colorful photographs and inspiring words transport the reader *Inside the Mind of God.* Reagan has assembled an impressive group of pictures and words to conjure up a sense of awe and wonder at creation and creation's God. Bacteria, DNA, lung cancer, sperm, adrenaline, protozoa, lymphocytes—they are all pictured here. To highlight the text, luminaries such as Albert Einstein, George Bernard Shaw, Harold S. Kushner, and Elie Wiesel are quoted. And quotes from celebrities appear which might surprise you: Charles Darwin, John Dewey, Christopher Reeve, Albert Camus, and Rene Descartes. Richard Dawkins observes that "the essence of life is statistical improbability on a colossal scale." Elton Trueblood thinks "faith is not belief without proof, but trust without reservation."

Inside the Mind of God was previously published in a hardback edition; this softcover format now makes the book available to more people. The seventeen-page introduction by Sharon Begley, science editor at the *Wall Street Journal*, sets the proper tone with her view that "it is possible to see the sacred in the science of life" (p. 24). This idea is explored in William Paley's *Natural Theology* which holds that God's existence, attributes, and benevolence can be inferred from the intricacies of nature. Michael Reagan, the editor, is president and founder of Lionheart Books. He has previously produced for Templeton Press *The Hand of God* and *Reflections on the Nature of God.*

This is a wonderful book to give as a gift. It could also serve as a resource for personal devotions. No matter the reader's view of theology, it will be difficult to ponder the words and pictures in this book without being emotionally and spiritually touched. The reader will be impressed with the magnificence of creation and the Creator.

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

Origins & Cosmology

BY DESIGN OR BY CHANCE? by Denyse O'Leary. Minneapolis, MN: Augsburg, 2004. 337 + xiii pages. Paperback; $15.99. ISBN: 0806651776.

In this book, Canadian freelance journalist Denyse O'Leary pitches batting practice for the Intelligent Design movement and observes with satisfaction that it hits a lot of balls into the seats. How it does in real games is a different matter.

The book is divided into four parts which focus, respectively, on cosmology, evolution, creationism, and design, followed by an "Afterword" and extensive notes. The author presents a reasonably accurate survey of the history of ideas about creation and scientific views of cosmological and biological origins and development, and sets out some major controversies involved with these issues. I think she tries to treat different views about origins and development fairly, but her own preferences are not hard to discern. What is problematic is her selection of evidence and arguments, her scientific and theological analysis, and at times her tone.

Take the latter point first. In the discussion of evolution, we encounter several cutesy sarcastic comments such as the one heading a box about the coelacanth: "Oh, Dear! Those Inconvenient Details …" (p. 70). We do not find these with the presentations of creationism or intelligent design. This in itself makes it pretty clear what the author does not like.

O'Leary correctly points out that there is a wide variety of views labeled "creationism." She makes some criticisms here but seems inclined to treat even young-earth creationism gently. For example, she argues (pp. 142–3) that the belief of young earth creationists that terrestrial life is less than 10,000 years old is no "weirder" than ideas of modern physics such as extra dimensions or multiple universes. Both, she says, are "subject to much ridicule." But it is one thing to be ridiculed for proposing extravagant theories that have not yet received support by correctly predicting novel facts and another to be derided for ignoring mountains of evidence.

O'Leary's heart clearly seems to lie with the Intelligent Design (ID) movement. She sketches its development, describes the basic claims made by Behe and Dembski, and discusses some scientific and theological objections to claims for ID. Unfortunately she does not deal with the most pointed scientific objections. Is Behe right that some

biological systems are irreducibly complex, so that they could not have developed through natural selection? While O'Leary refers to Kenneth Miller's *Finding Darwin's God*, she mentions only briefly (in another place, p. 45) his arguments about putative irreducible complexity, giving the impression that he can only express a hope that science will some day explain such features. Miller's substantive arguments are not dealt with. Similarly, scientific objections to Dembski's claims about "conservation of information" are not addressed. Instead O'Leary prefers to discuss rhetorical objections such as "ID is merely 'Stealth Creationism'" (p. 190).

The treatment of theological issues connected with ID is no better. While O'Leary recognizes the role of the ID movement in the cultural strategy of Philip Johnson's "Wedge," she does not see that if it is to play that role, it cannot be dissociated from religious claims. If ID is to serve the purpose of helping to destroy naturalism, then the Designer must indeed be God (pp. 212–5 notwithstanding). Conversely, a Designer who is some being within the universe (as with directed panspermia) would, of course, be natural. (And the problem of explaining design would only be pushed back a step.) In order for God to "leave his fingerprints all over the evidence" in Johnson's well-known phrase, God must act directly rather than by means of natural processes which science can investigate, so that ID would be a "science stopper" (pp. 193–4 notwithstanding). Conversely, if God brings about design through natural processes, then there are no such "fingerprints."

A failure to engage seriously with the relationship between divine action and natural processes undermines O'Leary's discussion, a failure common to many ID proponents. On the concluding page of the Afterword, she warns "Christian evolutionists" that "you must be content with a God who is *not* there, except as an emotional experience." This shows that she misunderstands not only the ideas of Christian evolutionists but the classical Christian view of providence. That and other misconceptions outweigh any positive value the book may have. For an overview of the issues, Ted Peters and Martinez Hewlett, *Evolution from Creation to New Creation* (Abingdon, 2003) is greatly to be preferred.

Reviewed by George L. Murphy, St. Paul's Episcopal Church, 1361 W. Market Street, Akron, OH 44313.

EVOLUTION FROM CREATION TO NEW CREATION: Conflict, Conversation, and Convergence by Ted Peters and Martinez Hewlett. Nashville, TN: Abingdon Press, 2003. 215 pages. Paperback; $20.00. ISBN: 0687023742.

It would be easy to skip over yet another book about evolution and creation but do not miss this one. There has been a lot of debate about these issues, but one problem for the church has been that too many clergy and other theologians have been willing to accept superficial reconciliations of evolution with Christianity, and have not provided theological resources to help people understand the issues involved. Another difficulty is that treatments by scientists sometime present naive theology and those by theologians often have less than adequate scientific treatments.

This book goes a long way toward remedying those problems. It should be a very helpful resource for those who want to lead discussions about creation and evolution with groups of people who have no special scientific or theological expertise.

The authors are well qualified to provide such a resource. Ted Peters, a professor of systematic theology at Pacific Lutheran Seminary, has long been engaged in theology-science discussions and has written and edited several books in the area. Martinez Hewlett, a Roman Catholic, is an emeritus professor of molecular and cell biology at the University of Arizona and an adjunct professor at the Dominican School of Philosophy and Theology in Berkeley. They make no secret of their own position, which falls within the broad category of "theistic evolution." But they also provide fair, though critical, discussion of other views.

One of the points they make is that there are not only the differences between traditional proponents and opponents of evolution, but that today there are some new participants in the debates. Evolutionary theory continues to develop, so that sociobiology and evolutionary psychology provide new challenges for religious believers. Those who reject evolution experienced a revival in the 1960s and now argue against evolution, not just on biblical grounds, but as "scientific creationists." The more recent Intelligent Design (ID) movement cannot in itself be classified simply as an opponent of evolution—though some people associated with it may be. ID holds that complex features of living things cannot be explained by evolution alone, but require belief in a Designer. And a number of theistic evolutionists have gone beyond mere acceptance of evolution and argue for it theologically, making use of concepts related to the theology of the cross and the participation by the creator in the sufferings of the world.

Peters and Hewlett begin by examining the popular notion that these differences are part of a "war" between science and religion and find it wanting. The different understandings of origins may instead represent different views of what good science and true religion should be. The authors also point out that the various views line up differently on different issues. For example, scientific creationism and ontological materialism are at opposite ends of their "Divine Action" spectrum, but they are close together at one end of the "Causal Explanation" spectrum (p. 31). Theistic evolution is close to the middle of both spectra.

Chapters Two and Three describe the development of evolutionary thought from Darwin onward, including not only its treatment of biology in the narrow sense but also attempts to apply it to society (social Darwinism, sociobiology) and psychology. Analyses of scientific creationism and ID follow. While the authors do not accept these positions, they are not simply dismissive of them and try to set out the concerns that motivate their proponents of these views as well as scientific and theological criticisms of them.

Chapter 6 provides a survey of theistic evolution positions. While this is very helpful, I have one criticism. A kenotic view of God's work, in which God voluntarily limits divine action, need not require that God is absent from some processes. It means rather that God acts within

the limits of creaturely capacities to bring about whatever happens in the world.

The final chapter sets out the authors' own proposal for theistic evolution. Those familiar with Peters' work will not be surprised that there is emphasis on God's creative action from the future. (See, e.g., his systematic theology *God: The World's Future*, 2d ed. [Minneapolis, MN: Fortress, 2000].) This chapter provides a unified way of dealing with many of the issues in discussions of creation and evolution. The following glossary of scientific and theological terms will be useful for those who want to understand and participate in these discussions.

This review is a revised version of one published in *Trinity Seminary Review* 26, no. 1 (Winter/Spring 2005).

Reviewed by George L. Murphy, St. Paul's Episcopal Church, 1361 W. Market Street, Akron, OH 44313.

GOD AND EVOLUTION: A Faith-based Understanding by David L. Wilcox. Valley Forge, PA: Judson Press, 2004. 165 pages, notes. Paperback; $14.00. ISBN: 0817014748.

Wilcox, professor of biology at Eastern University in Pennsylvania and Fellow of the ASA, holds a Ph.D. in population genetics from Penn State University. His research interests include theoretical models of fitness, the nature of genomic blueprint hierarchies, selective models for punctuated change, and human origins. His publications include papers on the integration of science and faith.

God and Evolution consists of fourteen chapters covering a range of topics about evolution and religion. Wilcox begins with discussions of biblical teachings about nature, understanding what science is and how it works, and conflicts between science and religion. From there, he addresses topics such as the earth's age, definitions of evolution and creation, and what is meant by "cause and effect." Wilcox then discusses evolutionary ideas about life's origins, Darwin's concepts of evolution, origins of species, missing links, and the Cambrian explosion. The author covers concepts about human origins in chapter 13, and concludes with a chapter on evolution *as* creation. The book is mostly well written, with few structural errors and misspellings.

In this small book, Wilcox attempts to show that evolutionary theory and faith in God are not mutually exclusive. He begins with a quote, purportedly from a young girl, that she cannot believe in dinosaurs since they are not in the Bible. Of course, since most of earth's biodiversity is not mentioned in the Bible, does this mean that we cannot "believe" in it (think of bacteria, amoebae, nematodes, and tomatoes)? Wilcox initiates his discourse on the unnatural conflict humans have created between evolution and faith with a discussion of what the Bible says about nature. God created the natural world and governs it, even though the specific mechanics of creation are not spelled out in Scripture. Could the minds of Hebrews in Moses' day, or those of early Christians when the gospels were written, have comprehended the scientific knowledge we have today about how creation functions and how life carries on from generation to generation?

Throughout this book, the author does a relatively good job presenting in lay terms what science and the scientific method are, but still promotes (subtly) the idea that science "proves" hypotheses, rather than finding evidence in support of or disproving them. Wilcox addresses the human-made conflict between science and theology, how this conflict may arise from a human misunderstanding of the Bible and scientific data, as well as how everyone brings presuppositions to any discussion of the topic.

While discussing the earth's age, Wilcox does a creditable job of showing that, logically, a young earth is not possible given evidence from geology and fossil coral reefs. He shows that we should believe the evidence, unless we wish to think that God is in the business of writing fiction upon the earth. Wilcox states that we should not avoid these controversial subjects in our teaching, so that misunderstandings will not be taught without challenge. When considering questions of life's origin, Wilcox says that the Bible tells us that God works through nature, and it is thus wrong to pit God *against* nature; it is his handiwork. The author brings in many ideas about how evolution occurred, as seen by his inclusion of topics such as mutation, missing links, punctuated equilibrium, and adaptive radiation. Each of these is discussed briefly, as is necessary in such limited space, but basic information necessary for understanding the concepts is presented.

In the chapter on human origins, Wilcox does not shy away from providing genetic evidence for the relatedness of human beings to other primates. While doing so, Wilcox is careful to state that *interpretations* of both Scripture and scientific evidence should be held lightly, since interpretations may change as we learn more.

It is refreshing to me, as a Christian biologist, to see an open-minded discussion of evolution from a man of faith. While much evidence for evolutionary change is omitted (such as endosymbiosis, and many excellent plant examples), this is a good starting point for anyone wanting to learn more about evolution and avoid the creationist rhetoric often used in such discussions. The bottom line in this debate is this: Christians cannot proclaim that God's glory can be seen in nature while they ignore nature's complexity and the evidence it provides of evolutionary change. This is intellectual dishonesty and does nothing to convince a nonbeliever that our message can be trusted.

Reviewed by Michael A. Vincent, Department of Botany, Miami University, Oxford, OH 45056.

PHILOSOPHY & THEOLOGY

THE SCIENCE OF GOD: An Introduction to Scientific Theology by Alister E. McGrath. Grand Rapids, MI: Eerdmans Publishing Company, 2004. 271 pages. Paperback; $25.00. ISBN: 0802828159.

The Science of God is a concise overview of McGrath's seminal formulation of scientific theology. The work is a true distillation of key ideas from the more expansive three-volume work, *A Scientific Theology*, which explores how science informs theology. McGrath has written extensively in the area of science and theology and is eminently quali-

fied, with Ph.D.'s in biochemistry and theology, in developing this new theological endeavor.

Scientific theology seeks to "explore the interface between Christian theology and the natural sciences, on the assumption that this engagement is necessary, proper, legitimate, and productive" (p. ix).

The book clearly and thoroughly argues key concepts without over-simplification and is prefaced by an excellent introduction. It explains McGrath's development as a scientist and theologian which lead to his vision for a scientific theology. As expected, the book is partitioned into three distinct sections that parallel those of the three volume work: nature, reality, and the theory of scientific theology. The style is relatively relaxed, providing a background to some of the general assumptions of the scientific theology while avoiding detailed discussions.

Scientific theology is developed through a linear progression of ideas beginning with the conception of nature. After summarizing the different historical understandings of nature, McGrath specifically focuses on the Christian doctrine of creation, engaging theology by appealing to "the intrinsic resonance between the structures of the world and human reasoning" (p. 60). The "unreasonable effectiveness of mathematics" and the regularity and intelligibility within nature, form a prelude to a detailed discussion of natural theology. McGrath specifically aims to take natural theology in a new direction. His goal is not to prove the existence of God, but to ask: "What should we expect the natural world to be like if it has indeed been created by such a God? The search for order in nature is therefore intended not to demonstrate that God exists, but to reinforce the plausibility of an already existing belief" (p. 81).

Part 2, "Reality," compares and contrasts knowledge in theology with that of the natural sciences. The approach is reminiscent of Polyani in that "knowledge arises through a sustained and passionate attempt to engage with a reality that is encountered or made known" (p. 94). McGrath builds on the ideas of Alisdair MacIntyre to ask how effectively can scientific theology provide insight into the existence and ideas of rival philosophies? Airplanes fly and medicines work, underpinning most scientists' position as realists, and yet the pursuit of science is replete with competing theories which leads McGrath to adopt a stratified view of reality. The key issue is that "natural sciences investigate the stratified structures of contingent existence *at every level open to human enquiry*, while a theological science addresses itself to God their creator *who is revealed through them*" (p. 151).

The last section of the book, "Theory," requires considerable fortitude from the reader as competing theories are introduced, analyzed, and contrasted with the approach taken in scientific theology. The section begins by arguing for the legitimacy of theory within scientific theology and moves to examine how reality and revelation are represented.

Scientific theology has unleashed a new perspective that is reenergizing the interface between science and theology. McGrath's concise *Science of God* introduces the main issues to a larger audience than his comprehensive trilogy, although the book is still an intellectually demanding read. Given the impact that McGrath's project has unleashed, this book provides an accessible place to begin following what is likely to become one of the most influential areas in the science-religion dialogue.

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

THE CLOSING OF THE WESTERN MIND: The Rise of Faith and the Fall of Reason by Charles Freeman. New York: Vintage Books, 2002. Paperback; $16.95. 432 pages. ISBN: 1400033802.

Freeman is a scholar with a specific knowledge of the ancient world he is writing about. The theme of this book is that when Christianity became the accepted religion of the Roman Empire, the Greek intellectual traditions, which were the potential basis of scientific thinking, were swept away and replaced by faith in the dogmas of Church.

In twenty chapters, Freeman sets out the sequential evidence on which his postulates are based. The diction is clear and precise with carefully organized supporting documentation. The author introduces his thesis with an excellent study of the influence of Aquinas on the culture of his time, followed by comments on the contribution of leading individuals in the Church. Although initially oratory skills had governed debates in the Greco-Roman culture, many of these talents were demoted and subsequently lost.

Freeman contrasts the teachings of Jesus, who the Apostle John presents as the *logos,* the force of reason, with those of the Apostle Paul. Jesus expressed himself from within his Jewish culture whereas Paul, the author believes, often encouraged his converts to withdraw from their cultural connections because these were based on the worship of idols, explicit sexuality, and Greek philosophy.

As time passed there were other more subtle changes occurring such as in the attitude to women, who had played important roles as disciples in the early churches. The author describes how Gnosticism, embodying concepts of Platonism, became a threat.

Freeman says some Christian beliefs were partly derived from pagan philosophy. The soul, a pagan concept, was implanted, according to the Church, at conception by a sinful act, sexual intercourse. The author assesses the teaching of the leaders of the churches in the post-apostolic era leading up to the time of Emperor Constantine. After this time, Christianity was officially tolerated, and the church hierarchy shared the wealth and social prestige the Roman Empire made available to it. This was seen in a better lifestyle for church leaders and shown in expenditure on church architecture and in the orthodox tradition in the East, iconography and other art works. Asceticism rejected this newly acquired wealth and opulence of the churches. Desert habitats and personal battles with evil and sexuality were the lot of some of these mystics.

The controversy that accompanied decisions at Nicea in 325 CE was partly fueled by the demand from the emperor that there should be doctrinal unity and order throughout the Empire. The bishops could then be used to support the Empire. These leaders now represented an institutional

hierarchical structure. They interpreted doctrine and finalized the canon of the scriptures. The author explains the influence, in their day, of Arius, Nestorius, Pelagius, Augustine of Hippo, and the Donatists.

Early in the fifth century, secular study was condemned. Intellectuals were silenced. The author outlines how Greek philosophy was preserved through translations of its works into Arabic. Freeman says Arabic was the channel and catalyst leading into the Renaissance which followed many centuries later. The works of Aristotle and other philosophers were available to Aquinas in the thirteenth century.

The replacement of the Greek tradition impeded observation of nature and the cultivation of an inquiring mind. The rejection of a scientific approach to medicine meant that Galen's works remained unquestioned for one thousand years. Magic and relics drew pilgrims to the churches. Obedience to the Church replaced reasoned thought.

Freeman has achieved his aim and has shown that the rational attitude of the Greek intellectual tradition was effectively suppressed by the fourth and fifth centuries of the Christian era. Faith in Church practices now achieved prominence over reason. This was to have dire effects on the development of the scientific method in Europe. The author defines this period as the closing of the Western mind.

This is an excellent book with a wealth of information about the origins of Christianity. Freeman's book is highly recommended. The author's helpful comments integrate the complex changes within the Roman Empire with those occurring in the Church. Freeman therefore presents an important challenge expanding every reader's horizon of early church history.

Vintage Books is to be commended for producing a book with an attractive cover, a sound binding, clear readable type-face, a contents page, introduction, an extensive collection of endnotes, an alphabetical list of the authors cited, an index, and a photo of the author.

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NAMING THE ELEPHANT: Worldview as a Concept by James W. Sire. Downers Grove, IL: InterVarsity Press, 2004. 161 pages, index. Paperback; $ 14.00. ISBN: 083082779X.

Book publishers deserve a vote of thanks for requiring every book to have a subtitle. Sire's book is a case in point. *Naming the Elephant* could leave the impression that zoologists are considering a new name for the popular zoo animal now referred to as "elephant." Theologians also might shake their heads in disbelief if they read the last sentence in the text which states: "God, indeed, is the name of the elephant." This statement, left alone and not read in context, would suggest that Sire is somewhat irreverent, which is not true.

Those of us familiar with Sire's earlier works are not surprised by his unique gift of expressing complicated concepts in simpler language. Many philosophers and theologians whose works I have read would do well to follow Sire's example. Carl Sagan, popular exponent of biological evolution, is one that comes to mind. In the books by Sagan that I have read, he neglects to say that his worldview is: *nature is the ultimate reality*. The one exception is his book entitled *Cosmos*. The first line reads: "The cosmos is all there is, or ever was, or ever will be." Some exponents of theism are guilty here also.

A statement on the back cover of Sire's book summarizes very well what the book is all about: "Here is an excellent resource for those who want to explore more deeply how and why worldview thinking can aid us in navigating our pluralistic universe."

Sire enunciates his revised definition of *worldview* in these words:

> A worldview is a commitment, a fundamental orientation of the heart, that can be expressed as a story or in a set of presuppositions (assumptions which may be true, partially true or entirely false) which we hold (consciously or subconsciously, consistently or inconsistently) about the basic constitution of reality, and that provides foundation on which we live and move and have our being.

ASA member James Sire has achieved what he set out to accomplish: that God is the ultimate reality. I heartily recommend this book to all ASA members and those seeking to examine their worldview.

Reviewed by O. C. Karkalits, Dean of Engineering and Technology, McNeese State University, Lake Charles, LA 70609.

RELIGION AND CHRISTIAN FAITH

CAN A SMART PERSON BELIEVE IN GOD? by Michael Guillen. Nashville, TN: Thomas Nelson Books, 2004. 170 pages. Hardcover; $17.99. ISBN: 0785260242.

This book is best described as an apologetic, theodicy, or defense of theism. It will appeal to laypersons in its concise, clear, and convincing approach. Guillen analyzes the position of the six percent of Americans who do not believe in the existence of God. He finds their position untenable. He thinks some people with a high IQ (intelligence quotient) have a very low SQ (spiritual quotient), and conversely. He includes a twenty multiple-choice test at the conclusion of the book to measure SQ. Guillen believes it is possible to believe in God's existence with both your soul and your mind.

Guillen says he is not trying to win anyone over to theism or atheism. He intends to provide evidence for faith in God so that believers need never feel embarrassed for their stance. If you are an atheist, Guillen thinks after examining the facts, you have no justification for denigrating theists.

The book is short with just ten chapters and a brief bibliography. One of the chapters bears the title of the book. Guillen gives quite a bit of autobiographical information about his adventures in science and faith. His conclusion is that faith needs science and science needs faith. He quotes approvingly Albert Einstein: "I think that science without religion is lame and, conversely, religion without science is blind" (p. 80).

This would be a good book to bolster your faith, to give as a gift to someone struggling with faith/science issues, or to provide the fodder for a lively debate in a discussion group.

Michael Guillen is a theoretical physicist, former science correspondent for *ABC News*, former Harvard University teacher, and is currently president of Spectacular Science Productions and consultant on science for Crystal Cathedral Ministries.

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

Social Science

HUMAN NATURE AND THE FREEDOM OF PUBLIC RELIGIOUS EXPRESSION by S. G. Post. Notre Dame, IN: Notre Dame Press, 2003. 208 pages, index. Hardcover, $36.00. ISBN: 0268038279.

The title of this book by Post, professor and associate director for Educational Programs, Department of Bioethics at the Case Western Reserve University, is attractive, and sets the stage for Post's perspective. His central thesis is that a religious inclination is demonstrably part of what it means to be human and that suppression of religious expression is detrimental to both personal and corporate well-being.

Post states in his introduction that he intends to show the place of scientific evidence for this innate trait, and thereby to strengthen the argument for unfettered freedom of religious expression, although he admits that an ethical argument alone is sufficient to support that freedom. He approaches this from several perspectives, beginning with citations of empirical studies that find strong evidence for religiosity in crisis situations. He next discusses studies in neuroscience that show certain human features to be consistent with the evolution of religious tendencies. He then applies this evidence to the natural law argument for a human right to religious freedom. In his concluding chapters, he makes strong ethical arguments for celebrating human religious expression.

The primary strength of this book lies in its scientific evidence and the way in which it is placed within the context of the ethical discussion. In the opening chapters, Post presents unambiguous empirical evidence for something that observers of humanity have long known: religious inclination is found among all peoples. He discusses the positive development of a rising awareness in medicine of the importance of spirituality health and recovery of patients—and argues that neglect of religious training in the medical profession is detrimental to health and recovery. The empirical studies Post includes make a strong and invincible case for protecting religious freedom, since the inclination to religion has been shown to be a core component of human nature.

Some of the strongest arguments Post makes are found in the closing chapters, when he places the empirical fact of human religiosity into the context of ethical arguments for religious freedom. He writes: "A genuinely liberal public world is not one that pushes religious expression into the underground of privatization, as though such free expression were an obstacle to liberal democracy rather than its essential underpinning" (p. 93). Post argues that demands by secular humanists for utter privatization of religion, i.e., for absolute silence on religious matters in the public square, strike at the very heart of democracy, and of basic human rights.

In my view, Post weakens his approach by resting so much of his case on the assertion that religious inclination is a product of evolution. Given his assertion, I do not see how he can defend himself against secularists who argue with Nietzsche that since we have evolved religious behavior, we will soon evolve "beyond religion." Post has soundly demonstrated that religious inclination is innate, and this is critical, and sufficient for his purposes; but he should have left it at that. Evolutionary principles seem to be an unsteady foundation on which to rest something that is presented biblically as a permanent human feature: namely, the abiding need for a relationship with God.

I am concerned that in invoking evolution as that which produces this inclination, Post has left the door open to solid, effective criticism from the secular existentialist position, while claiming to have defeated it. Post argues, correctly in my view," that views of human nature are invariably informed by some prior view of the nature of the universe" (p. 109). The secular humanist does not share Post's prior view of the universe, as created and governed by God, and thus will not interpret the data as Post does.

Despite the weaknesses, this work represents a valuable contribution to the discussion of religious freedom, and will be appreciated by a wide audience. Using convincing evidence from medical and neurological studies, Post has demonstrated that religious inclination lies at the heart of what it means to be human. He has argued effectively that suppression by governmental or judiciary pressures of the extension to the public square of this foundational part of our humanity is harmful to both individual and community life. May Post's warnings be heard.

Reviewed by Todd K. Pedlar, Assistant Professor of Physics, Luther College, Decorah, IA 52101.

A BRIEF HISTORY OF DEATH by Douglas J. Davies. Malden, MA: Blackwell Publishing, 2005. 184 pages. Paperback; $17.95. ISBN: 1405101830.

Davies, a professor at Durham University (in this book, his British spelling and punctuation prevail), has written a number of other books including *Death, Ritual and Belief* (2002) and *Reusing Old Graves* (1995). Recognized as an expert in this area of knowledge, Davies writes about dying, grieving, burial, artistic representations of death, death and memory, fear of death, and tragedies associated with death.

The most influential accounts of mortality, writes Davies, are those of Gilgamesh, Adam and Eve, and Jesus Christ (Davies devotes a lot of space in discussing the variety of Christian views on death). These he considers along with "other myths of death's origin" (p. 1). Individuals face death in four ways: (1) personal grief; (2) the death of

others; (3) personal death awareness; and (4) our actual death (p. 15).

Some of Davies' views may be inaccurate; some are surely controversial. According to Davies, among the Jews, the resurrection of the dead as an act of vindication for the righteous developed about 200 BCE (N. T. Wright, on page 109 in his *The Resurrection of the Son of God*, writes of Dan. 12:2–3: "There is little doubt that this refers to concrete, bodily resurrection." Daniel wrote this about 580 BCE.). Davies thinks the Genesis creation account (p. 4) and Christian eschatology are myths (p. 7).

In addition to its eight chapters, the book contains photos of a crematorium, memorial plaques, coffins, gravestones, and cemeteries. Included also are an index and thorough bibliography (I was surprised to see no mention of Ernest Becker's Pulitzer prize winner, *The Denial of Death*. However, Davies does acknowledge Becker's key point: People fear being buried alive, suffering in hell, departing the security of one's social circle, and extinction. They control these fears by unconsciously keeping busy, thus denying death [p. 131].) A good deal of the contents of *A Brief History of Death* is based on speculation, not unexpected in a history book.

We learn some interesting things in this book. For example, the Chinchorro people of Chile mummified their dead 2,000 years before the Egyptians (p. 24). In Great Britain, there is a growing interest in natural burial, green burial or woodland burial in keeping with ecological-environmental attitudes (p. 79). Over seventy per cent of Britons are cremated with the remains placed on sites personally significant (p. 103). Zygmunt Bauman thinks society hides death lest individuals lose their will to live and impede cultural progress (p. 116). The first architectural constructions of the early church were "funeral buildings" (p. 118). Albert Schweitzer thought it would be dreadful to be caught up in earthly life without end (p. 135).

Davies concludes: "The history of death is a history of a kaleidoscope of sentiment: hope, fear, longing for and gratitude for love, despair at loss of endeavor, concern for our mate and offspring, whispers of a transcendent sense" (p. 173). The Apostle Paul's concludes: "Where, O death, is your victory? Where, O death, is your sting? … God gives us the victory through our Lord Jesus Christ" (1 Cor. 15:55–57).

Blackwell Publishing has developed a series of books on important topics relating to culture, theology and reli-

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gion. Moreover, they all start with the words "A Brief History of …" The authors are scholars in each field, and the books are brief, informative, and appealing to lay readers. Five have already been published with eight more in preparation. One already available, written by Alister E. McGrath, is *A Brief History of Heaven*. Another one forthcoming is Carter Lindberg's *A Brief History of Love*. People short on time and money, but well-supplied with curiosity and a hunger for knowledge, will find these volumes just fit the need. Davies' *A Brief History of Death* fits the bill and delivers a good deal of information in a small package at a reasonable price.

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AUGUSTINE TO FREUD: What Theologians Tell Us about Human Nature (And Why It Matters) by Kenneth Boa. Nashville, TN: Broadman & Holman Publishers, 2004. 288 pages, appendix, bibliography, footnotes. Paperback; $14.99. ISBN: 0805431462.

This book is an adaptation of Boa's Ph.D. dissertation at Oxford University, completed in 1994. The purpose of the book is to compare and contrast what selected theologians and psychologists have written about the nature of human needs in order to discover the extent to which the two accounts can be synthesized. This involves three convergence/divergence studies of six theologians and eight psychologists (representing two basic models of personality theory) and the theological and psychological accounts of human needs that emerge from the first two studies. The Appendix is a valuable twenty-page survey of human needs in the New Testament.

Part 1 is concerned with theological accounts of human needs. Boa summarizes what Augustine, Aquinas, Edwards, Kierkegaard, Tillich, and Rahner have written about human needs; then he critiques, compares, and contrasts their views.

Part 2 surveys psychological accounts of human needs by examining the work of Freud, Erikson, Jung, Rank, Maslow, Rogers, Adler, and Fromm. The first four theorists present conflict models of human personality; the last four theorists present fulfillment models. Boa critiques, compares, and contrasts these models in the same way he does the views of the theologians.

Part 3 considers the metaphysical and moral assumptions held by the eight psychologists, psychological accounts of theism and theological accounts of nontheism, interest and self-love, and a contrast between immanent and transcendent solutions to human needs. The comparison and contrast of the theological and psychological models regarding human needs also touches on cognate areas like the question of goodness in human nature, the source of morality, the purpose of life, and the quest for meaning in view of the reality of death.

Augustine to Freud could serve as a source book for those who want a quick summary of the views of the fourteen thinkers whose work is summarized in it, but one's head begins to swim in trying to keep in mind the comparisons and contrasts Boa makes. On the other hand, in the last chapter he wraps up his study by drawing broad conclusions that are easily understood.

Boa concludes, first, that psychological models are based on metaphysical and moral assumptions as well as on scientific grounds, even though many psychologists are reticent to acknowledge the fact. Secondly, Boa believes that "[d]espite the differences in presuppositions, vocabulary and proposed solutions to the satisfaction of [human] needs, there is a correspondence between the theological models and the psychological models" (p. 160). Thirdly, Boa concludes that "[t]he psychologies in this study have become secular alternatives to the Judeo-Christian worldview and often serve as religious surrogates for the psychotherapists who embrace them as well as their patients" (p. 165). Finally, Boa concludes that these secular alternatives inherently fall short of either understanding or being able to deal as effectively as possible with human needs:

> This is not to deny the important and sometimes acute perceptions these personality theorists had concerning human traits and behavior. The problem is that when these true insights are embedded in a reductionistic worldview, the solutions the psychologists offer become superficial (p. 180).

Writing as a convinced Christian, Boa is not concerned that these secular alternatives or religious surrogates will ultimately displace the Judeo-Christian world view. Since they deny or ignore spiritual needs and the vertical, Godward dimension of personality, they cannot finally satisfy:

> God uses the pulley of unfulfilled longing to draw people away from idolatrous attachment to the created order to the beatific vision that will satisfy every human need (p. 180).

Spiritual autobiographies from Augustine's *Confessions* to C. S. Lewis's *Pilgrim's Regress* have made Boa's final point: humans have a longing for God that the world cannot satisfy. Boa's work is no substitute for classical spiritual biography, but for those who have wondered how to integrate (or whether to hold at arm's length) modern psychology and the Christian faith, it is a rewarding (and quite orthodox) book.

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KINDNESS IN A CRUEL WORLD by Nigel Barber. Amherst, NY: Prometheus Books, 2004. 415 pages; index; endnotes. Hardcover; $28.00. ISBN: 1591022282.

In a world of aggression and barbarity, whence comes altruism and kindness? Barber skillfully dissects this question in delineating the how, when, who, where, and why of altruistic acts. Along the way, he investigates highway behavior, mutual grooming, religious celibacy, politeness, heroism, reciprocal altruism, and fundamentalism. Barber, former assistant psychology professor at Birmingham-Southern College, is a freelance writer and researcher. He has written *The Science of Romance* and *Why Parents Matter*.

The four major sections are titled "Altruism in Man and Beast," "Growing Up to Be Good," "The Social Impact of Kindness," and "Kindness and Politics." There are twelve chapters nestled within the four sections including "Sterile

Castes of Priests and Nuns," "Altruism Among Thieves," and "Kindness Among Strangers." The book's large type will be appreciated by the visually challenged.

Some of the many intriguing questions addressed by Barber are: why do people donate blood; why did Christians help Jews during the holocaust; why do people adopt; why are worker bees, termites, queen bees, bats, organ donors, priests, and others altruistic. Answers given to these questions by researchers and theorists are among the most interesting parts of the book. For instance, Darwin, baffled by nonreproductive worker bees, imagined altruism resulted from the bee colony making up a superorganism. A better explanation rendered by William Hamilton was based on gene selection (p. 34).

Interesting items abound in this book. Sated bats regurgitate food to sustain their famished friends (p. 10). Almost half of people in England consider their dogs family members (p. 101). (Dogs fit into human societies by treating their owners as top dog.) Pet owners are four times less likely to die in the year after cardiac surgery than patients without pets (p. 190). Children younger than 18 months are not self-aware (p. 103). Chimpanzees show self-awareness, monkeys and gorillas do not (p. 105). Rats are not capable of high moral behavior (p. 111). Children in non-industrialized societies are more altruistic than children in industrialized ones (p. 129).

There is little difference in altruism between men and women (p. 182). For all fifteen of the leading causes of death, men have higher death rates (p. 185). Some Americans have paid no tax for ten years despite being taken to court by the IRS (p. 231). Adoptees have a higher incidence of alcohol and drug use, delinquency, crime, and depression which sometimes leads to attempted suicide (p. 227). Youngsters in poorer countries, compared with those in wealthier ones, are usually more altruistic (p. 14). In-group altruism can translate into out-group aggression (p. 12). The most spectacular failure of altruism relates to violent criminals (p. 13), but mothers who kill their offspring also are examples (p. 14).

Some readers may find Barber's definition of altruism confusing. On page 9, he defines altruism as actions helping another person at some cost to the altruist. ("Some cost" is vague and needs to be operationally defined. Is "some cost" determined by the altruist, the receiver, or society?) On page 10, he adds the qualifier that altruistic acts have no ulterior motive, "except whatever pleasure is derived from the act itself, and no delayed benefit of any kind." (Would not the altruistic acts of Mother Teresa be influenced by her anticipated delayed reward in heaven? Furthermore, how does "reciprocal altruism" qualify as altruism since "a benefit is returned at a future time," p. 43). Then on page 19 an altruist is defined as someone who puts the survival or reproduction of another individual before his own. (Certainly most altruistic acts are performed without the altruist intending to elevate the recipients' survival above his own.)

Religious people may find some of the reported research disconcerting and questionable. For instance, some research shows little scientific support for religion improving health (p. 327). Some scholars think fundamentalist religion undermines moral reasoning (p. 329). A reliable difference between religious people and others is religious people are more intolerant of ethnic minorities (p. 330). A study found atheists less likely to cheat than religious students (p. 328). There is little evidence that religious people are more ethical or live better lives than non-religious people (p. 329).

Quibbling aside, this is a fun book to read. It will hold your interest throughout. It is full of interesting facts, anecdotes, explanations, observations, and questions. The topic of altruism is certainly an important one in a world so full of meanness, brutality, aggression, and hostility.

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Letters

Why Tie ID to Endosymbiosis?

Michael Buratovich, "The Serial Endosymbiosis Theory: Cellular Origins and Intelligent Design Theory" (*PSCF* 57, no. 2 [June 2005] 98-113) is impressed by the possibility that ID may explain the transfer of genes from mitochondria to nuclei better than neo-Darwinian evolution. I cannot share his expectations. For a simple analysis, consider *a, b, c* to be aboriginal mitochondrial genes; *A, B, C,* the corresponding nuclear genes. Those who must emphasize the diploid nucleus may think of these as *AA*, etc. The latter are more stable (p. 106). If *a* is vital to cellular development, then a mutation, *am*, will almost certainly be deleterious or lethal. If the likelihood of *am* and its damage is >n%, the corresponding nuclear mutation, *Am*, with repair options, will be <n%—grist for the selectivity mill. ID is irrelevant.

As to the order of transfer (pp. 106*f*), if *a* is essential to the function of *c*, *C* transferred before *A* will likely be eliminated quickly, whereas *C* following *A* will be positively selected. The explanation is strictly neo-Darwinian.

Imagine that *b* only functions within mitochondria. Then a non-functional *B* will either be negatively selected or, possibly, be mutated to a different function, as other duplicated genes have been. The original *b* will have to be maintained if it continues to be relevant.

Someone may argue that this does not explain the deletion of mitochondrial genes. All I can say is that there are numerous examples of apparently simplified genomes in parasitic and symbiotic creatures (an example is given, pp. 104-6). This indicates the presence of a natural mechanism. Again, ID does not seem to have anything to offer. Consequently, I must conclude that the invocation of ID is otiose, perhaps even silly. I regret that so excellent a presentation is vitiated by irrelevant advocacy.

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