





CHRISTIAN ENVIRONMENTAL ETHICS: A Case Method Approach by James B. Martin-Schramm and Robert L. Stivers. Maryknoll, NY: Orbis Books, 2003. 325 pages. Paperback; \$20.00. ISBN: 1570754993.

Martin-Schramm, associate professor of religion at Luther College, has served on the presidential Council on Sustainable Development. Stivers, professor of religion at Pacific Lutheran University, is coauthor of *Christian Ethics: A Case Study Approach*.

The publisher of this book, Orbis Books, seeks to publish works that enlighten the mind, nourish the spirit, and challenge the conscience. Orbis Books is the publishing arm of Maryknoll Fathers and Brothers. *Christian Environmental Ethics* is published under the Ecology and Justice Series banner, seeking to integrate an understanding of the Earth as an interconnected life system.

Christian Environmental Ethics contains twelve chapters divided into two parts: (1) foundations for ethical reflections; and (2) cases and commentaries. Each chapter concludes with notes, a list of further readings, and a list of web sites. Most of the book is dedicated to nine case studies on such critical topics as urban sprawl, habitat fragmentation, endangered species, nuclear waste, and genetic engineering. Specific problem locations are identified such as the 3,000 foot peak in Washington called Market Mountain, Snake River in Idaho and Washington, and Skull Valley in Utah.

Not only are problems discussed but solutions are suggested. Take, for example, the issue of environmental degradation. The authors suggest environmental degradation has five causes, the first two being too many people some of whom consume too much. The world's human population is more than six billion and increases 1.3% yearly. Birth rates in rich countries are roughly equal to death rates. In poor countries, while birth rates are going down, they still exceed death rates. Africa's population grows 3% a year. The United Nations projects human population to reach nine billion by 2050 before it stabilizes.

What is the solution to the problem of environmental degradation? "Social development projects backed by appropriate environmental and population policies, adequate financing, land reform, and local control have been successful in lowering birth rates and reducing the degradation of ecosystems" (p. 11). In discussing these topics, the authors think "Christians can draw on various aspects of their tradition as they grapple with ethical issues related to these topics" (p. 175).

The book has received praise as "a real treasure," "ethics done well," and "teaching at its best." At the end of the book, in addition to an index, is an appendix on resources for teaching. This feature makes *Christian Environmental* *Ethics* an appropriate choice for use in a discussion group. A college or adult Sunday School teacher might profitably use it in a class. Its case studies and personal references keep it from being too erudite and pedantic. Christians can become much better informed about the environmental crisis by reading *Christian Environmental Ethics*. I recommend it.

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



SCIENCE AND CHRISTIANITY: Conflict or Coherence? by Henry F. Schaefer. Watkinsville, GA: The Apollos Trust, 2003. 179 pages, appendix, and index. ISBN: 097429750X.

Schaefer is a professor of chemistry at the University of Georgia, and this is his first book. It is a compilation of some speeches he has given on apologetics over the past twenty years. In the preface, Schaefer notes that this is both good and bad. Most of the egregious errors have been removed over the years, but the references documenting the points are lacking.

The book has ten chapters covering areas like Scientists and their Gods, The Nondebate with Steven Weinberg, The Big Bang, Climbing Mount Improbable, Quantum Mechanics and Postmodernism, C. S. Lewis on Science and Scientism, Ten Questions Intellectuals Ask, his testimony, and what he calls "The Way of Discovery." Each is a self-contained essay, and they are all fairly basic and fairly nonphilosophical.

In the chapter Scientists and their Gods, Schaefer answers the question whether it is possible to be a scientist and a Christian. For most readers here, this will be a strange question akin to asking if it is possible to be a thief and a Christian. Schaefer answers in the positive citing several atheists, like Feynman, that it is OK to be a Christian and a scientist. He then notes that science developed in a Christian environment citing many of the early scientists as Christian (Kepler, Newton, Boyle, Pascal, etc.). But the problem with this approach is that one has to go back a few centuries to find Christianity at the forefront of the scientific world, and in some sense whether William Perkins was a Christian seems not to matter much to the issues we face today reconciling our faith with observation.

From a personal perspective, The Nondebate with Steven Weinberg was interesting as Schaefer cited my web account of that "debate." Schaefer claims that Weinberg equated Mohammed, Jesus, and Buddha and "called the three religious leaders 'fairies.'" The tape I have of the debate shows that he did not name Mohammed or Buddha but named Zeus, Jehovah, Christ, and Allah. Wienberg used the term as a placeholder for any supernatural being. Schaefer also claimed that Weinberg almost broke down when he said that people would not see their families after death, but others there recall the statement but do not recall the near breakdown.

The chapter on the Big Bang discusses the anthropic principle and the chapter on Dawkins presents the usual

arguments against the origin of life. There is little which is novel in these chapters. Schaefer's idea of what is in the geological record and its order is vastly different. When outlining his conformance between the Scripture and earth history, he has land plants arise before marine life. This is, of course, backwards. He also claims that Day 4 was a clearing of the atmosphere, an event for which there is absolutely no evidence. And flying creatures do not arise before land animals, contra this book.

The Ten Questions chapter actually presents twentyone questions which are all rather basic, "Who made God?" "Who is Jesus?" "What about other religions?" etc. The questions are answered with simple answers. One gets the feel that the responses are superficial.

The lack of philosophical depth to the book is best illustrated by Schaefer's surprise that the question "Can God make a rock so big that he can't lift it?" was not a joke. That is one of the biggest weaknesses of the book. The book gives the impression that there has been no deep wrestling with the issues confronting theology today. That is too bad as Schaeffer obviously has made important contributions to quantum chemistry.

There are very few references throughout the book and indeed the book seems to have been little altered from the lecture notes. While that will be a good documentation of his lectures, it is unlikely to make much of a mark on the intellectual tenor of our times.

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



THE HEALING CONNECTION: The Story of a Physician's Search for the Link between Faith and Health by Harold G. Koenig. Philadelphia, PA: Templeton Foundation Press, 2004. 204 pages. Paperback; \$14.95. ISBN: 1932031650.

Koenig is the director of the Duke University Center for the Study of Religion/Spirituality and Health, and editor of *Science and Theology News*. He has authored dozens of books and journal articles about the relationship between faith and health. Templeton Foundation Press, the publisher of this book, promotes knowledge about invisible and intangible reality including such spiritual aspects as love, creativity, worship, and purpose.

Koenig's interest in faith and health has been influenced by his life's personal experiences, contact with patients, and his study of research outcomes. He learned that in times of physical and emotional turmoil, people turn to religion for help. Many of them find it helps lessen depression, anxiety, and physical symptoms.

Koenig is careful to point out that benefits flowing from religious belief do not prove God's existence. Furthermore, religious faith does not guarantee good health and long life. But Koenig does conclude that both individuals and churches might consider how physical and mental wellbeing can be improved by religious faith and action.

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



HISTORY OF SCIENCE

LIVING ENERGIES by Callum Coats. Gateway (www.gillmacmillan.ie), 2001, 311 pages, Paperback; \$19.95. ISBN: 0946551979.

The back cover introduces author Coats as a "scientist and architect" who has spent twenty-three years translating and editing the works of Austrian forester and inventor Viktor Schauberger (1885–1958). The book begins with a biography of Schauberger's life, involving his son Walter, in his largely frustrated efforts to either commercialize his inventions or convince the scientific community of his theories about energy, motion, the sun, fluid mechanics, water, agriculture, and atomic theory.

I could only read half way through the book; the rest was skimmed. My motivation to continue was depleted by the many high-school-level errors in physics, reasoning, unconventional and abstruse use of scientific terminology, vagueness, and failure to cite and confront conflicting work. Schauberger was opposed to the more established science, technology, and theology he encountered.

The work amalgamates pseudoscience, the occult philosophy of Helena Blavatsky, and ecological concerns into a profoundly incoherent manifestation of why the scientific and Christian communities reject the genre of literature of which this book serves as an excellent example. A particular instance of the book's content: Schauberger's explicitly neo-pagan views about water appear in the chapter, "The Nature of Water." To Schauberger, water is

the "original" substance called into being through the "original" motion of the Earth, itself the manifestation of even more sublime forces. Being the offspring or the "First Born" of these energies, as he put it, he maintained and frequently asserted that "*Water is a living substance*!" (p. 107, original emphasis).

This view is combined with the homeopathic claim that substances in water leave a memory, though the molecules of these substances are completely removed from it. Schauberger, in regarding water as alive, rates its quality based on its source and history. He is also fascinated by fluid phenomena, especially vortices. He is concerned that hydroelectric dams damage water, "hurled against steel turbine blades, where it is smashed to smithereens. The physical structure of the water is literally demolished and all the dissolved oxygen, and even some of the oxygen in the water molecule itself, is centrifuged out of the water."

While some of Schauberger's patented inventions might contain new ideas, this book is of value only in illustrating a growing body of literature read by the general public which hides, confuses, and misleads the reader regarding the true nature of physical reality and its relationship to spiritual reality.

Reviewed by Dennis L. Feucht, Cayo, Belize.

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NATURAL SCIENCES

RATIONAL MYSTICISM: Dispatches from the Border between Science and Spirituality by John Horgan. New York: Houghton Mifflin Company, 2003. 292 pages. Hardcover; \$25.00. ISBN: 0618060278.

In *Rational Mysticism*, Horgan examines how science, theology, and philosophy deal with spiritual enlightenment and mysticism. In his quest for understanding, he interviewed, among others, theologian Andrew Newberg, transcendental psychologist and Buddhist Ken Wilber, psychedelic pharmacologist Alexander Shulgin, psychologist Susan Blakemore, and shaman Terence McKenna. Horgan is interested in how mysticism is dealt with by neurology, anthropology, physics, and other scientific enterprises.

Here are some of the questions Horgan considers: (1) What neurological links exist between mysticism and madness? (2) If heaven is the ultimate, why did God create anything else? (3) Were Paul's spiritual experiences caused by epilepsy? (4) Do yoga and prayer affect the brain similarly? and (5) Is all mysticism chemically based?

Horgan identifies himself as a "lapsed Catholic," but he seeks to be objective, fair, and candid in his appraisals. His experience as a science writer left him too skeptical to believe in revelations (p. 14); Horgan is not a biblical believer. Nevertheless, he thinks some people who think they are too rational to believe in Christianity have faith that scientific progress is unending. He disagrees. He thinks the important questions will always go unanswered in this life: "Science will never give us The Answer, a theory powerful enough to dispel all mystery from the universe forever" (p. 4). Christians might agree that many questions are unanswerable now; they would also affirm that someday "we shall know" (1 Cor. 13:12).

In his *New York Times* review of this book, Dick Teresi observes that mystic believers write about spiritual enlightenment with "gooey prose" whereas skeptics write about it with "adolescent bitchiness." Horgan walks a fine line between these two extremes seeking to affirm what is empirically believable while raising a skeptical eyebrow over undocumented claims. This means that the enlightened may find this book a tad critical while the "mystical eunuch" (to quote Teresi) will continue to search for answers.

Horgan critiques each position. To give two examples: (1) Horgan finds Huston Smith's Perennial Philosophy, which sees good in all religions, deficient because religions contradict each other in certain vital ways; and (2) He sees postmodernism, which holds truth to be inexpressible, inadequate because it is "a conversation about the unspeakable" (p. 37), "hostile to any kind of belief" (p. 40).

Horgan authored *The Undiscovered Mind* and *The End of Science* (it sold 200,000 copies and irritated some scientists). He was a senior writer for *Scientific American* and has been published in leading newspapers and other publications. Now he is a free-lance writer living in New York's Hudson Valley.

Reviewed by Richard Ruble, John Brown University, Siloam Springs, AR 72761. **EARTH'S ECHO: Sacred Encounters with Nature** by Robert M. Hamma. Notre Dame, IN: Ave Maria Press & Sorin Books, 2002. 190 pages. Paperback; \$12.95. ISBN: 1893732460.

God has revealed himself in Scripture and in nature. In *Earth's Echo*, Hamma writes of how to find God in nature. He displays his thoughts in six chapter divisions based on geography: nature, shore, forest, desert, river, and mountain. Contributors via quotes include Bill Bryson, of *A Walk in the Woods* fame, Rachel Carson, best known for her *Silent Spring*, and Charles Frazier, author of *Cold Mountain*. Henry David Thoreau and Walt Whitman are also noted.

Hamma finds nature, in all its manifestations, a rich and enduring fountain of spirituality. His appreciation for nature goes back to the summer nights of his boyhood when he gazed at the starry sky and listened to the chirping of the katydids. Now Hamma sees in nature the presence and action of God. To Hamma, God is in the song of the cardinal, the embrace of a loved one, and the exhilarating plunge in the sea.

Hamma believes we are assisted in exploring the wonders of nature by reading the observations expressed by others: "Their writings are sacred because their subject, the earth, is sacred" (p. 22). In reading the words of others, Hamma recommends that we (1) pay attention at a higher level, (2) ponder thoughts of our own, (3) respond to God, and (4) surrender our hearts to the One who has called us. As Hamma proceeds through his geographical divisions, his quotes fall under each of these four headings.

Some readers may find this book tending toward pantheism since there is such an emphasis upon the oneness of God and nature. The writers who are quoted come from a variety of religious traditions. Nevertheless, the author, a graduate of the University of Notre Dame, quotes some from the Bible. This book will indeed call forth quite a bit of pondering about creation and the God of creation. Its insights can elicit awe and surrender and be a helpful devotional accessory.

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



THE DESIGN REVOLUTION: Answering the Toughest Questions about Intelligent Design by William A. Dembski. Downers Grove, IL: InterVarsity Press, 2004. 334 pages, index. Paperback; \$22.00. ISBN: 0830823751.

Dembski has previously published *The Design Inference, Intelligent Design,* and *No Free Lunch.* This book should not be ignored or treated with indifference. It should be required reading for all ASA members! If Dembski is wrong, he needs to be answered (especially as he is critical of the position taken by ASA members at several points); if right, then his views will ultimately change the nature of the ASA, and maybe even the scientific establishment.

Dembski has a razor-sharp mind and meets the challenges of Darwinism with clarity, precision, and critical sense; leaving the reader with the conviction that they

have received honest, satisfying, and definitive answers to the toughest questions. The book is divided into forty-four chapters, each devoted to a different issue. There is inevitable overlap, but never a sense of needless repetition. The chapters are grouped into six parts, each with an overriding theme.

Part One (Basic Distinction) introduces intelligent design (ID) as a scientific theory distinguished from theological approaches such as the doctrine of creation and the traditional design argument. A chapter is devoted to distinguishing ID from scientific creationism.

Part Two (Detecting Design) outlines the design inference, specified complexity, and explanatory filter, and calls for a truly scientific approach that follows the empirical biological evidence and does not prejudge the answer by denying the possibility of anything other than undirected natural causes.

Part Three (Information) points out that information is fundamentally different from matter and questions whether undirected natural forces are able to bridge the vast gulf between the inorganic world and the information-rich organic world. Information also opens the possibility of a designer affecting the physical universe without being an interventionist: "Unembodied designers who coopt random processes and induce them to exhibit specified complexity are not required to expend any energy. For them the problem of expending energy to move material objects simply does not arise."

Part Four (Issues Arising from Naturalism) throws down the gauntlet to methodological naturalists, who hold methodological naturalism as a dogma that not only "takes evolution as God's method of creating life but rules out of court the possibility that God might have left any empirical fingerprints." Recent religious naturalism does not allow for supernatural intervention and thus rules out the possibility of predictive prophecy and miracles. Dembski considers the contrast between natural and supernatural causes to be wrong. For him the proper contrast is between undirected natural causes and intelligent causes. "Intelligent causes can work with natural causes and help them to accomplish things that undirected natural causes cannot."

Part Five (Theoretical Challenges to ID) has Dembski the philosopher and mathematician answering the more detailed and technical criticisms of ID. Some chapters are not easy reading, though I particularly enjoyed his insight into David Hume whom I found difficult in my undergraduate days.

Part Six (A New Kind of Science) shows that Dembski is conscious of being part of a new revolution in science, hence the title of the book. Not only does his book make another major new contribution to the design movement, but this part also outlines a course of action for what needs to be taken to ensure that ID does not fizzle out but becomes a widely accepted and truly testable science including aspects of refutability, confirmation, predictability, and explanatory power.

The Design Revolution is highly readable with many illuminating, down-to-earth illustrations. All thinking scientists will enjoy the read, even if it is only to sharpen their own rhetoric skills. Dembski is widely read and interacts

with the leading voices of a wide range of disciplines. His logic is at times devastating and more than once he comments on the irony of a particular attack against ID. His chapter on Selective Skepticism is highly amusing.

Reviewed by Bryan Ezard, 14 Graham Street, Goolwa, 5214, Australia.

PHYSICS OF GENESIS by James Allen Thompson. Las Vegas, NV: Chiron Development, 2004. 145 pages. Hard-cover; \$14.99. ISBN: 0974494518.

Thompson, a graduate from Portland State University, has a degree in theology from Luther Theological Seminary. He has also done post-graduate work at the Graduate Theological Union in Berkeley and written a number of articles on a variety of subjects and two other books on theological issues.

Physics of Genesis is divided into two sections. The first part is a look at the biblical book of Genesis to study the text and determine what type of literature it is. The second part of the book is an investigation into the assumptions of Darwinism and the methods of science. Although Thompson quotes many authors and articles, there is no bibliography nor any footnotes. There is one minor illustration.

The premise of this book is that one need not take a side in the creation/evolution debate. The important thing is the debate itself and what we can learn from it. His first point is his conclusion that Genesis is a scientific treatise based on the best research available at the time, that of the Ionian empiricists of the fifth-fourth centuries BCE. The emphasis of Genesis is not God creating but a process of creation that relies heavily on the operation of laws and mathematical principles. The main question of Genesis is not, "Is this universe a work of God?" but "Is the world structured to natural laws as defined in Pythagorean and Ionian terms?" His second point is that Darwinism is a religion, not a science. Darwinists make passionate statements of faith, not of scientific fact.

That Genesis is scientific literature is not a new concept, but Thompson's argument that the writer of Genesis based his writing on the Ionians and Pythagoreans is innovative. That Darwinism is a religion many creationists have concluded for decades. Thompson adds no new material to the argument although he does review many of the current facts.

Thompson quotes Genesis One a great deal, but he has a habit of quoting only part of the indicated statement. He frequently leaves out "and God said," claiming God is not actively present as plants and animals develop. He also uses his own translation to "prove" that the earth sprouted greenery without God's action. One can certainly disagree with Thompson in his assumption the language of Genesis One is passive rather than active, showing God's commands in creation.

Thompson's selective quoting of partial statements as complete ones in Genesis makes one leery of his quotations from various scientists in the second part of the book. The quotes are not footnoted and rarely are page numbers given. Without research, there is no way of knowing if Thompson is quoting statements in part or out of context. The significance of this book is limited. Those who appreciate a well-documented and precise argument will find this book frustrating. The book is self-published and lacks the benefitting work of an editor. Thompson seems to have acquired his scientific insights from reading the books of others, such as Michael Behe, Philip Johnson, Richard Milton, and Richard Dawkins. Thompson adds nothing new to the discussion other than his own philosophical musings.

Reviewed by Joan Nienhuis, owner of His Place Christian Bookstore, Oak Harbor, WA 98277.

UNCOMMON DISSENT: Intellectuals Who Find Darwinism Unconvincing by William A. Dembski, ed. Wilmington, DE: ISI Books, 2004. 306 pages, notes, appendix and index. Paperback; \$18.00. ISBN: 1932236317.

Dembski, associate research professor at Baylor University, is the author/editor of numerous books and articles. In this book, he has compiled a series of articles from authors critical of some aspect of Darwinian theory. He says that the purpose of the book is "to expose and unseat the myths that have gathered around Darwinism." The book has fourteen chapters by authors such as Koons, Johnson, Shûtzenberger, Pearcey, Denton, and Behe. Each author outlines his or her problem with Darwinism.

Koons describes five stages of science, says that Darwinism is at stage 1, but then acknowledges that ID is also at stage 1. Johnson's essay is fourteen years old, outdated, and lacking any mention of the progress made in the late 1990s on the origin of phyla. Budziszewski and Pearcey try scaring parents about the theological implications of evolution. Pearcey said things like: a reason for challenging evolution is so that churches and seminaries will not feel forced to accept evolution. That, of course, seems to ignore the bigger question: Is evolution true? If it is, then churches should accept it.

It is Edward Sisson's article which will most enrage scientists who seek for truth. Sisson is another lawyer who thinks that scientists build a case like a lawyer does amorally lacking any regard for truth. He likens scientists to the lawyer who decides what must be true for the client to win and then seeks out data to support that view. That may be how ID works, but it is not how science works.

Frank Tipler argues that peer-review should be scrapped. None of Einstein's papers were peer reviewed; he cites numerous cases of leading scientists getting their Nobel Prize-winning papers rejected. That being said, the article was clearly chosen to try to make the case that ID proponents are not allowed to publish their papers in scientific journals. The chapter does seem a bit self-serving since one of Dembski's books was published by Cambridge University Press, hardly a scientific backwater.

The best article is by Denton, who tells his story of how he moved from biblical literalist to an almost deistic evolutionist in which teleology lies in the laws of nature. Denton's article undermines the ID case. He notes that there is no evidence today for anything remotely resembling a program which specifies in detail the phenotype. Thus he denies the very basis of complex specified information! With Denton's article the book becomes incoherent. Many of the dissenters say evolution happened. They doubt that we have all the details of evolution correct. These authors make one understand why ID will not work.

James Barham is an emergentist, in which complex systems give rise to phenomena greater than the parts. He questions the ability of natural selection to create behaviors in which 1940s Germans, at the cost of their own lives, came to the defense of their non-kin, Jewish neighbors. He argues that the properties of life emerge from the laws of the universe. Such views hardly help the ID case.

Roland Hirsch criticizes evolution for not anticipating certain discoveries, but then fails to apply that approach to astronomy and physics which also do not always anticipate their discoveries. Cornelius Hunter uses classical misunderstandings of the fossil record to claim that it does not support evolution.

Langdon also seems to argue for a self-contained universe, one at odds with the ID viewpoint and fully in line with the evolutionary paradigm. Indeed, if Langdon is correct, there is no need for God because Langdon proposes that nature brings forth both itself and logic from a self-contained system. One might wonder why Dembski thinks killing off Darwinism with this view is a good idea for theology.

The book is worth owning for the two articles by Tipler and Denton. The book lacks a really coherent message through the articles and does not achieve Dembski's goal. Dembski seems to believe that anyone who has something bad to say about Darwinism, even if they are evolutionists, makes a case for ID. It is hardly uncommon for scientists to have dissenting nitpicks with current theories.

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



THE MAKING AND UNMAKING OF TECHNOLOGI-CAL SOCIETY: How Christianity Can Save Modernity from Itself by Murray Jardine. Grand Rapids, MI: Brazos Press, 2004. 304 pages, bibliography and notes. Paperback; \$24.99. ISBN: 1587430703.

Jardine is an associate professor of political science at Auburn University. He has written another book, *Speech and Political Practice*, that provides a lens which he uses to examine our technological consumer society from a biblical perspective.

This book is divided into three parts, each divided into chapters. Part I traces "The Evolution and Crisis of Modern Technological Societies" through a stunning whirlwind of political philosophy from Plato and Aristotle through Hobbes, Locke, and Mills. The Enlightenment foundation of our modern technological society is explored. Jardine does an excellent job of showing exactly why it was inevitable that Western culture developed the way it has. He also asserts that to continue to follow this trajectory is self-destructive. Jardine's expertise is in political philosophy and it clearly shows. Part I alone makes the purchase of this book worthwhile. His arguments are original and compelling.

Part II explores how Christianity relates to the current social crisis in the West. Jardine traces Christian theology and its incorporation of Greek ideas that subtly altered the basic Christian Gospel until the Enlightenment secularized the Protestant work ethic and turned it into an engine driving society, into capitalism, and ultimately, consumerism.

Part III is Jardine's attempt to sketch out a rough "Christian Response to the Modern Crisis." He makes no claim to have all of the answers, but instead puts forth some ideas about how neighborhoods could be structured, work could be re-imagined, and what our care of the aging could look like. His view is that Christian churches cannot stop modernity from self-destructing, but that they can provide examples of alternatives when the house crashes down. This part was a little disappointing, if one is looking for concrete action plans, but it provides food for thought. It is a starting point.

This book was impossible for me to put down. The pace of Part I and the tying together of seemingly unrelated observations placed our current social situation in an entirely new context. Jardine is unafraid to let the chips fall where they may when pursuing truth. Readers will, at some point, find basic assumptions about modern life challenged. His use of the Bible to analyze the current cultural "narrative" was well done; he does not look for exact proof-texts, but rather looks for biblical truths stated in broad strokes. I recommend this book to anyone who wants to explore *why* our culture is obsessed with technology without the ability to display moral restraint. It is primarily a philosophical book and not a technological one. For this reason, it is a breath of fresh air in a society that has almost forgotten that the question "why?" is every bit as important as the question "how?"

Reviewed by David Condron, Marine Engineer, Friend Ships, Lake Charles, LA 70601.



THE FIRST IDEA by Stanley I. Greenspan and Stuart G. Shanker. Cambridge, MA: DaCapo Press, 2004. 456 pages plus notes, and bibliography. Hardcover; \$25.00. ISBN: 0738206806.

This is the third book for Greenspan, a professor at George Washington University, and the second for Shanker, a professor of philosophy and psychology at York University in Toronto. The book is divided into four parts with fifteen chapters. It attempts to explain how symbol use, language, and thus social groups form both in individual development and in human evolutionary history. Their thesis comes from work with autistic children and with the symbol-using apes in Sue Savage-Rumbaugh's lab.

Greenspan and Shanker base their view upon the observation that to form symbols, a human infant must invest the word with emotion. Apples are not "just red and round." They are something you proudly give to a teacher or eat to keep the doctor away. The authors contend that without an ability to separate perception from action, symbol use does not appear. Autistic children have problems forming symbols and thus they act out their perceptions rather than symbolically think about the situation. The authors contend that many of the ills of society are due to inhibited formation of symbol use in childhood. They apply this concept to issues like the failure to install democracy in some nations (e.g., Iraq does not have the proper child nurturing process). In the middle ages, children were swaddled and given little attention, but Renaissance care-giving was more interactive between parent and child, leading to a symbolically thinking nation. Infancy and childhood gradually lengthened over the past five million years allowing more parent-child interaction which they correlate to the rise of language and art.

The authors overreach by making childcare practices the basic unit of the psychological universe, a bit reminiscent of Milesian philosophers who, instead of choosing water as the basic element, choose emotion. The authors are radical Lockelean empiricists. Our use of symbols, and thus language, is not hard-wired into the brain or genes as Chomsky and Pinker have argued. Each generation must, through child-nurturing practices, pass on symbol and language use to the next generation. What of the human universals, things like facial expressions, language, laughter and the brain's language centers? Are they not genetically determined? They argue we are born a *tabula rasa*, using Locke's terms. They acknowledge this might be considered heretical by their fellow scientists.

The authors claim biology only brings to the table a neural system capable of being programmed. They claim, a bit like Lamarck, that the culturally programmed items, like language, are not affected by our genes at all. This ignores Bickerton's observation that children raised where pidgin languages were spoken (languages without fixed grammar which occur in polyglot settings), instantly create new languages with fully-formed grammar. Who teaches the children the grammar? It is not the caregivers who do not have it. They do not explain why, barring pathology, the same part of the brain forms the language center in almost all humans. Caregiving cannot be responsible for that, can it?

This claim that symbol use only needs a pliable brain raises the immediate question of why my cat, orphaned at one week, raised by nurturing humans, still likes to chase small furry things rather than type on my computer keyboard like me. The same question can be asked of chimps raised by humans in human homes. The case for absolutely no role for nature as opposed to nurture, seems the weakest part of the book.

An amusing aspect of the book is that the authors take political correctness to its extreme. Not a single male infant is discussed in the book—all are referred to as "she," even when they are playing with trucks. A sarcastic individual might wonder why they never study male infants. One anthropological error is that they say the earliest recognized representation of a face, the Makapansgat pebble, was found in 1998, when it was found in 1925.

The book is a must read for anyone interested in the issues of human evolution, especially the evolution of cognition. While the authors may not solve the problem of the origin of speech, they do have significant things to add to the discussion.

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THRIFT AND GENEROSITY: The Joy of Giving by John M. Templeton, Jr. Philadelphia, PA: Templeton Foundation Press, 2004. 107 pages. Hardcover; \$12.95. ISBN: 1932031715.

This book puts forward the idea that thrift and generosity produce large returns, one of which is joy. Thrift is part of a spiritual and cultural understanding of how time, talents, and resources are used. Thrifty people make careful, thoughtful, wise decisions about how to expend their resources. Generosity is sharing what you have with other people, especially the needy. Thrift can provide the means to practice generosity. The author illustrates these two virtues with quotes from the Bible, literature, philosophy, and daily life.

Templeton includes many trenchant quotes, especially from Benjamin Franklin. Franklin on thrift: "Buy what you have no need of, and before long you will sell your necessities." Generosity enables us "to welcome the weeping widow; to provide for her a place to rest; to dry up her tears; to feed and educate her little orphans, and to put them in a way to gain an honest livelihood."

The quotes in this book provide splendid fodder for a sermon or talk. They alone are worth the price of the book. Templeton uses them to great effect to show that in practicing thrift and generosity "a bit of fragrance always clings to the hand that gives the rose." A life of altruism may be the only way to joy: "When sailing on the Titanic, even first class cannot get you where you want to go." It is worth noting that Jesus said you will be more blessed if you are on the giving rather than the receiving end.

This is a wonderful little book, full of pithy observations, illuminated with many illustrations, touching the heart as well as the purse strings. It points its readers in the direction of finding peace, happiness, and freedom by giving them to other people. The author practices what he advocates. In 1995 he retired from his medical practice to direct the activities of the John Templeton Foundation, an organization whose goal is to encourage the advancement of religious and scientific enterprises.

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Are Patriarchal Ages Factual or Fictional?

Richard Johnson highlights several remarkable patterns in his letter, "Patriarchal Ages in Genesis" (*PSCF* 56, no. 2 [2004]: 152–3), endorsing the conclusions in Carol Hill's article, "Making Sense of the Numbers in Genesis" (*PSCF* 55, no. 4 [2003]: 239–51). Both writers agree that the numbers should be interpreted symbolically, not literally, evidently assuming that while God or inspired bards might contrive lovely patterns, factual ages would be more typical of documented life spans and less aligned with cultural preferences or numerological symbolism. Finding similar patterns hidden in ancient Mesopotamian texts would support the idea that Genesis has fictional and symbolic numbers, but can any evidence be found that they are factual and literal after all? Consider remarkable patterns of numbers related to US presidents. Only eleven were elected in a year evenly divisible by twenty. Of these, all but the first two and the last two died while in office (Harrison, Lincoln, Garfield, McKinley, Harding, Roosevelt, and Kennedy), and these seven all died in a year whose final digit was 1, 3, or 5. Only one other president (Taylor) died in office (in 1850). The sum of the numbers for the month of death of the seven presidents is 49 (= 7×7). This is admittedly less impressive than the patterns Johnson noticed, but suppose someone living in the distant future sees patterns in a history of these presidents and concludes that the numbers must be fictional and symbolic. The idea might pass muster if no confirmation of the factuality of the death dates can be found at the time.

Gerald Aardsma may have found just the sort of confirmation of historicity that should be lacking if the Genesis numbers are fictional. Using these numbers, he constructed a chronology stretching all the way back to the creation of Adam ("Toward Unification of Pre-Flood Chronology," The Biblical Chronologist 4, no. 4 [1998]: 2). Johnson's pattern observations range from Adam to Moses. Although no events earlier than Noah's flood are likely to have left identifiable and accurately datable vestiges, this event can be dated to a time consistent with the Aardsma chronology, as explained in my earlier letters, "On the Hills of Concordism and Creation Science" (PSCF 55, no. 4 [2003]: 278) and "Do Ice Cores Disprove Aardsma's Flood Theory?" (PSCF 56, no. 1 [2004]: 76–7). This finding, if it holds up under closer scrutiny, suggests that the numbers are factual, at least from Noah on.

Has anyone noticed that 777, the age of Lamech, is 3333 when written as a base-6 number? How many other base-10 numbers have a similar property? Johnson said his letter did not cover all the patterns he had noticed, so there must be even more, but if the numbers are factual and Aardsma's chronology is correct, then they will be consistent with all verifiable facts, regardless of how improbable or culturally symbolic the number patterns may be. Has any clear inconsistency ever been demonstrated?

Abraham's age (175) heads one of Johnson's patterned lists, but Aardsma claims secular synchronization with his period as well, citing Gen. 13:10 and a modern study of salt caves near the Dead Sea ("Mount Sodom Confirms Missing Millennium," *The Biblical Chronologist* 1, no. 1 [1995]: 1–4). Although further confirmation would certainly help, Aardsma corroborates traditional acceptance of the Genesis numbers as literal, factual ages, favoring the sovereignty and creativity of God (Ps. 139:16; Isa. 40:22–24, 42:5, 46:10–11; Acts 17:24–28) as still the best explanation for patterns.

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Only One

Williams and Dickerson have *not* described two different systems (*PSCF* 56, no. 2 [June 2004]: 102–10). While their pentagram clock has only five settings, any account of prior history (e.g., # revolutions) would provide "infinite" settings as easily as the hypothetical history that supplements the "other" system. Their *example* of modulo 5