event, only that the event is such that some information can be obtained about it from a scientific investigation. To say that an event is intrinsically "supernatural," is to claim that no relevant scientific description can be given of it.

Another way is to ask: What is the meaning of this event? What is its purpose? How does this event relate to God, to His purposes, to the flow of history, and to ultimate reality? To consider such questions is to focus on a supernatural description for the event. It is a description that does not arise out of the event itself or its scientific description, but from a total context beyond it within which the event must be viewed.

It is essential, therefore, for us to realize two distinguishable ways of treating these two terms, "natural" and "supernatural." In one way, they express whether or not a particular event is appropriate for description through scientific investigation. This is a categorization of the kind of event. The transformation of a caterpillar into a butterfly, a sunset seen from a mountaintop, and the disappearance of electrical resistance of some superconductors when the temperature is lowered sufficiently are all natural events. That they are marvelous, few would debate. They are seen as members of that set of events that can be meaningfully described by scientific investigation. The Resurrrection of Jesus, and the many miracles He and His disciples performed to heal disease and demonstrate power over forces in the world, are examples of supernatural events. As far as we know, it is not meaningful to seek to express scientific mechanisms for their occurrence.

But at the same time we must remember that whenever we speak of any event in this world, we are speaking of a manifestation of the power and activity of God. Thus, a natural event is never one that occurs without the activity of God, but rather is one that represents our perception of God's normal or regular activity. Every natural event must be interpreted within a supernatural context as well as a natural one. The coming of rain can be described in terms of air pressure and temperature, but it can also be described in terms of answer to prayer. A cow may be seen as an example of bovine biology, but how we treat the cow will depend on whether we see it as a creature made by God for specific purposes or not.

In addition, we recognize the possibility and historical occurrence of the special activity of God that does not follow His normal pattern: acts that we recognize by the name "miracle."

All events that take place in the created universe are manifestations of the free activity of God. A natural event is one that is susceptible to scientific description, but also to interpretation within the context of a larger supernatural perspective. An intrinsically supernatural event is one that is not susceptible to scientific description, but brings out of its own context a particular revelation of God and His purpose.

Do you agree that it may be natural to wonder at the supernatural, but it is no less supernatural to wonder at the natural?

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Book Reviews

THE EMERGENCE OF LIFE: Darwinian Evolution from the Inside by Sidney Fox. New York: Basic Books, 1988. 208 pages, index. Hardcover; $17.95.

Biochemist Sidney Fox directs the Institute for Molecular and Cellular Evolution at the University of Miami. He believes that proteins came first (i.e., before nucleic acids) in a stepwise transition from nonliving matter to the first cells capable of true Darwinian natural selection. He has parlayed "thermal copolymerization of amino acids to a product resembling protein" (the title of his 1958 *Science* paper with K. Harada), into an ever-expanding model of how life began. In *The Emergence of Life*, he tells the general reader how the model developed and why it is profoundly significant.

Fox's apologia pictures him as the natural leader of the protein-first school of origin-of-life (OOL) researchers. Why so few followers? Because, he says, the "channeled thinking" of neo-Darwinian biologists forces them to deny that Fox's pre-DNA "protobiology" has anything to do with real biology. Chemists, channeled into analytical, reductionist thinking, are slow to appreciate his "constructionist" approach.

My appreciation for Sid Fox goes back to his 1945 review in *Advances in Protein Chemistry*, which stimulated my interest in peptide chemistry and influenced the course of my research. His 1955 move to Florida State opened up a post for me at Iowa State and space for my students in his old labs. And in the flurry of excitement following Stanley Miller's

1953 OOL experiments, I applauded Fox's preference for experimentation over speculation.

Yet Fox's writings, including this book, have disappointed me ever since he discovered that aqueous treatment of his proteinoids yielded rather uniform microspheres. He immediately dubbed them "protocells" and began referring to their protometabolic and protocommunicative properties.

Fox easily forgets (or wants us to forget) that he's describing a mere model, dropping the prefix or making excessive claims with no hint that they are intended as metaphors. He speaks of molecules making *choices* (p. 4). For Fox, human cooperation has its basis in the *co*-polymerizing of amino acids (p. 59). To his credit, when discussing the social life of protocells, he puts the "dating" and "mating" behavior of "adult" members of the community in quotation marks (p. 84). From the attraction shown by his microspheres, however, "a moralist can deduce that friendship rather than hostility is a natural evolutionary legacy for mankind" (p. 86).

Obviously, nothing is "mere" about Fox's model. He chides others for saying that DNA copies it*self*, but harps on the *self*-ordering of amino acids. Indeed, *selforganization* (written without a hyphen) forms the basis of a whole new evolutionary paradigm (for which he claims a share of the credit) and of the book's subtitle. "Inside" Darwinian evolution, a fundamental nonrandomness operates before random mutation or any other source of variation (or even DNA) appears.

Three "Conversations," in which the author answers questions about his work, and a few other first-person passages are quite readable. Elsewhere, Fox's unique way of referring to himself obliquely comes across as a blurring of the facts rather than as modesty or objectivity. His account of the moon-rock analyses seems almost deliberately confusing (pp. 15–18; FN 8 on p. 186). Readers cannot judge claims for the catalytic activities of proteinoids (p. 101), or even their chemical characterization (FN, p. 168).

The selfcongratulation in this book is less blatant than in Fox's chapter in Ashley Montagu's *Science and Creationism* (1984, p. 229). There, as one "mode of recognition of the state of the proteinoid art," Fox cited an "encyclopedic listing of what is equivalent to 'laboratory synthesis' of a primitive organism." The citation was to *Who's Who in the World*—whose biographees write their own entries.

As his contribution to philosophy and quantum physics, Fox seems to have found the evidence Einstein lacked to show that the world is deterministic (pp. 159–169). Yet cooking up animo acids produces "an array of thermal protein molecules of sharply limited heterogeneity," so the world's determinism must be "soft." Fox rejects Oparin's coascervates as models for protolife because the materials of which they were composed came from already highly evolved organisms. A good bet is that Fox uses animo acids purified by highly evolved organic chemists.

After reading *The Emergence of Life*, I suspect that Sidney Fox would readily accept the Nobel prize. I can't say whether or not he deserves it, or whether receiving it would improve his writing style. I *can* say that a much better way to learn about Fox's work is to read the "Bubble, Ripples, and Mud" chapter in Robert Shapiro's *Origins: A Skeptic's Cuide to the Creation of Life on Earth* (Bantam Books, 1987).

Reviewed by Walter R. Hearn, editor, ASA/CSCA Newsletter, 762 Arlington Ave., Berkeley, CA 94707.

SCIENCE HELD HOSTAGE: What's Wrong with Creation Science *AND* Evolutionism by Howard J. Van Till, Davis A. Young and Clarence Menninga. Downers Grove, IL: InterVarsity Press, 1988. 189 pages. Paperback.

This book results from the participation during 1984–85 of its three authors in the Calvin Center for Christian Scholarship at Calvin College, where Van Till is Professor of Physics, and Young and Menninga are both Professors of Geology. Of the nine chapters in the book, five are written by Van Till, together with an introduction and an epilogue, two are written by Young, and two by Menninga. Van Till served as general editor for the study.

The authors are well known for their consistent contributions to a Christian appreciation of the guidelines for integrating inputs from authentic science and from authentic biblical theology. It is primarily their desire to maintain the integrity of authentic science that motivates them in this book, knowing that the practice and interpretation of authentic science and theology are closely interrelated.

Part 1 of the book consists of two chapters dealing with "Science as Practiced by Scientists," written by Van Till following the outstanding presentation he has previously given in *The Fourth Day: What the Bible and the Heavens Are Telling Us about the Creation*. These chapters present a clear and concise delineation of what it means to do authentic science today. The crucial message is summed up:

> Science held hostage by any ideology or belief system, whether naturalistic or theistic, can no longer function effectively to gain knowledge of the physical universe. When the epistemic goal of gaining knowledge is replaced by the dogmatic goal of providing warrant for one's personal belief system or for some sectarian creed, the superficial activity that remains may no longer be called natural science. (p. 41)

It is the central purpose of the book to illustrate how the pursuit of authentic science has been corrupted both by those who would subject science to metaphysics and theology, as well as by those who would attempt to base their metaphysics and theology upon science.

Part 2, "Science Held Hostage by Creationism," discusses four cases in which so-called "scientific creationism" has departed from authentic science while claiming the support of science: the shrinking sun (Van Till), the depth of dust on the moon (Menninga), age determinations from analysis of seawater (Menninga), and interpretations of the geologic column (Young). These chapters can at times become rather

technical, but the degree of such technicality is necessary for the full demonstration of the message.

Part 3, "Science Held Hostage by Naturalism," considers examples of well-known writers who have claimed to derive philosophical conclusions from science, but have really used science to defend and justify their own philosophical convictions. Young considers Isaac Asimov's *In the Beginning*, and Douglas Futuyama's *Science on Trial*. Van Till analyzes P.W. Atkins's *The Creation* and Carl Sagan's popular television series, *Cosmos*.

Others in the past have referred to activity that claims the support of science but violates the integrity of science as "pseudo-science." Van Till chooses the softer sounding "folk science," an effective analogy with "folk medicine." He says:

> Creationist folk science (more commonly called "creation-science") strives to warrant its belief in a particular concept of divine creation by means of unconventional interpretations of selected empirical data. Naturalistic folk science seeks to warrant its belief in reductive materialism by constructing arguments which have the appearance of being logical extrapolations from the results of professional natural science. In neither case are the boundaries of the domain of natural science honored. In both cases science has become indentured in the service of an ideological or religious commitment. (p. 153)

This is an important message, well worth repeating in the often confused climate of today.

This book is an excellent learning device for those interested in understanding the relationship between science and Christian faith. I heartily recommend it to readers from a wide variety of backgrounds.

Reviewed by Richard H. Bube, Professor of Materials Science and Electrical Engineering, Stanford University, Stanford, CA 94305.

THE EARLY EARTH: An Introduction to Biblical Creationism (revised edition) by John D. Whitcomb. Grand Rapids, MI: Baker Book House, 1986. 174 pages, index, bibliography. Paperback.

John Whitcomb, professor of theology and Old Testament at Grace Theological Seminary, and perhaps best known for *The Genesis Flood* which he wrote with Henry Morris, has revised and expanded *the Early Earth* which was first published in 1972. The subtitle correctly identifies the subject as biblical creationism, not scientific creation. For anyone confused by the creation-evolution debates, the simple and straightforward approach to origins by Whitcomb might be very appealing. Whitcomb believes that "The fundamental issues, in the matter of ultimate origins, is whether one puts his trust in the written Word of the personal and living God who was there when it all happened, or else puts his trust in the ability of the human intellect" (p. 52). Trust in the written Word means to accept the Genesis account of creation as historically and scientifically accurate. Since creation was supernatural, it can be understood by the human mind only as the Holy Spirit gives insight through special revelation.

In *the Early Earth*, Whitcomb has presented supernatural instantaneous creation in six literal days of the creation week as the only logical and ultimately satisfying way to understand the harmony of God's written record and His revelation in nature. The five chapters of the book roughly follow God's activities during the six days of the creation week. Explanations are provided for some interesting questions, for example: "Why did God create the sun, moon, and the stars on the fourth day rather than the first day?" (p. 71). The main purpose of the book is to demonstrate that the literal six-day interpretation of the creation account of Genesis is the way in which God intended. "If God has told us of his creative methods, the order of events in the creation of various entities, and the amount of time which elapsed between these creative acts, we have no one to blame but ourselves for our ignorance" (p. 160). Whitcomb argues that the various attempts to accommodate belief to prevailing scientific theories, like the Double-Revelation theory, the Day-Age theory, the Ruin-Reconstruction theory and theistic evolution, or various interpretations of Genesis (e.g., the concordist interpretation or the literary framework) are ultimately unsuccessful and can lead to a destruction of the theological and historical credibility, not only of Genesis, but of the rest of the Old Testament (p. 70).

Whitcomb has well represented the case for biblical creationism in *The Early Earth*. That it is biblical creationism and not scientific creationism is illustrated by his four evidences for a literal seven-day creation week which are biblical evidences (pp. 28–40). Some science is discussed, e.g., in the presentation of nine of the basic problems that remain to be solved by evolutionary cosmogonists relating to the origin of the earth (pp. 57–62).

Several recent books including those by Blochers, Hummel, and Van Till are critically but briefly discussed. Whitcomb reviews the usual arguments presented against evolution but does not discuss what I believe to be perhaps the most important arguments from chemistry relating to the origin of life. I truly appreciate the faith and sincerity of men like Whitcomb, but I find that answers to questions in the realm of origins do not come quite as easy or simple for me. I personally believe that the theory of general evolution is not scientifically established and is very much a faith proposition, but I cannot easily set aside major positions of science as I believe Whitcomb does.

Reviewed by Bernard J. Piersma, Professor of Chemistry, Houghton College, Houghton, NY 14744.

THE GENESIS DEBATE by Ronald Youngblood (ed.). New York: Thomas Nelson Publishers, 1986. 250 pages. Paperback; $12.95.

Readers who want contrasting viewpoints of controversial issues will enjoy *The Genesis Debate*. Unlike the Bible-

question books that present many questions, each with a short answer from only one viewpoint, this book addresses only 11 questions and gives two different, more comprehensive, answers to each question. The pro and con viewpoints of each question were written by different persons who were allowed to read the essay on the other viewpoint and then modify their original answer if they wished.

All but one author were college faculty who taught in anthropology (2), geology (3), theology/religion/philosophy (4), or Old Testament/Bible (11). Youngblood, professor of Old Testament at Bethel Seminary West, is editor of the *Journal for the Evangelical Theological Society* and has previously written the books *Genesis 1-11* and *Evangelicals and Inerrancy.*

The subtitle to *The Genesis Debate* is *Persistent Questions About Creation and the Flood.* Youngblood selected what he considered to be "the most significant questions covering matters of interest to the widest possible range of readers." The questions are: (1) Were the days of creation 24 hours long? (2) Are the events in the Genesis creation account set forth in chronological order? (3) Was the earth created a few thousand years ago? (4) Was evolution involved in the creation process? (5) Is the doctrine of the trinity implied in the Genesis creation account? (6) Was Cain's offering rejected by God because it was not a blood sacrifice? (7) Were there people before Adam and Eve? (8) Did people live to be hundreds of years old before the flood? (9) Are the "sons of God" in Genesis 6 angels? (10) Did Noah's flood cover the entire world? and (11) Does Genesis 9 justify capital punishment? Each question is handled in a unique format with the "Yes" answer occupying the upper part of several pages and the "No" answer appearing in bold faced type on the lower part of the same pages.

The Genesis Debate presents an informative debate with enough balance and depth to satisfy most readers. It avoids superficiality and yet does not devote more space and time to these questions than they merit. They have much more interest to us than they have importance to the main gospel message. The strength of some arguments may prompt readers to wish that their (stronger) advocate had been one of the debaters. In general, the questions were handled rather well. I doubt that many will change sides of the argument but at least they have a chance to review the basis for their position and to learn why others believe as they do. Having at least two different viewpoints by different authors adds a broader perspective and also avoids much of the bias inherent when only one author tries to present opposing sides. Ample endnotes refer to more extensive treatment of each position.

I recommend *The Genesis Debate* for anyone interested in contrasting views of these 11 questions.

Reviewed by L. Duane Thurman, Professor of Biology, Oral Roberts University, Tulsa, OK 74171.

Books received and available for Review

(Please contact the book review editor if you would like to review one of these books.)

D. Brooks and E. Wiley, *Evolution As Entropy,* (2nd ed.), University of Chicago

F. Bruce, *The Canon of Scripture,* InterVarsity Press

W. Carey, *Theories of the Earth and Universe: A History of Dogma in the Earth Sciences,* Stanford University Press

L. Crabb, *Real Change is Possible if You're Willing to Start from the Inside Out,* Navpress

R. Culver and P. Iannna, *Astrology: True or False?* Prometheus Press

G. Dalbey, *Healing the Masculine Soul: An Affirming Message for Men and the Women Who Love Them,* Word Books

R. Ferm, *Billy Graham: Do The Conversions Last?* World Wide Publications

E. Earle Fox, *Biblical Sexuality and the Battle for Science: Healing the Sexual Turmoil of Our Time,* Emmaus Ministries

C. Garrison, *Two Different Worlds: Christian Absolutes and the Relativism of Social Science*

I. Hexham and K. Poewe, *Understanding Cults and New Religions,* Eerdmans

J. Jividen, *Miracles from God or Man?* A.C.U. Press

J. Le Goff, *Your Money of Your Life: Economy and Religion in the Middle Ages,* Zone Books

J. Masson, *The Assault on Truth: Freud's Suppression of the Seduction Theory.* Farrar, Straus and Giroux

V. Matthews, *Manners and Customs in the Bible,* Hendriksen Publishers

M. Muggeridge, *Confessions of a Twentieth-Century Pilgrim,* Harper and Row

D. Patten, *Catastrophism and the Old Testament,* Pacific Meridan Publishing Co.

J. Perry, *Tillich's Response to Freud: A Christian Answer to the Freudian Critique of Religion,* University Press of America

M. Phillips, *What Every Christian Should Know about the Supernatural,* Victor Books

R. Proctor, *Racial Hygiene: Medicine Under the Nazis,* Harvard University Press

G. Rekers. *Counseling Families,* Word Books

J. Robbins, *Diet for a New America: How Your Food Choices Affect Your Health, Happiness and the Future of Life on Earth,* Stillpoint

J. Roberts, *Darwinism and the Divine in America,* University of Wisconsin Press

E. Skoglund, *A Divine Blessing: A Well-Kept Secret of Life's Second Half,* World Wide Publications

P. Vintz, *Sigmund Freud's Christian Unconscious,* Guilford

E. Wilson, *Counseling and Homosexuality,* Word Books

THE GOD WHO IS REAL: A Creationist Approach to Evangelism and Missions by Henry Morris. Grand Rapids, MI: Baker Book House, 1988. 85 pages. Paperback.

Henry Morris was for many years the Head of the Department of Civil Engineering at Virginia Polytechnic Institute, and since 1970 has been the Director of the Institute for Creation Research. He is perhaps most widely known for *The Genesis Flood,* written with John Whitcomb and published in 1961, and has been at the forefront of the Creation-Evolution debates for thirty years. Morris believes that modern man cannot be reached by preaching from the Scriptures since the Bible is rejected because of indoctrination into evolutionism and humanism. "Most of the leaders in our modern scientific

and educational establishments, as well as practically all New Age Organizations, still look toward such goals (a world government of socialism and a world religion of humanism)." This is why they oppose the modern creationist movement which wants to restore commitment to the God of creation. The basic thesis which Morris develops is that to reach modern man with the saving gospel of Christ, he must be approached on the basis of creationism, exposing the follower of evolutionary atheistic or pantheistic premises.

This thesis is developed in five short chapters: (1) The Impotent God of Chance, (2) The Immoral God of Pantheism, (3) Science and the God of Creation, (4) The God of the Bible, and (5) The God of all Grace. The first three chapters touch in a very brief way, many of the arguments presented by Morris in numerous other publications against evolution and for creation. For anyone not familiar with his work, Morris believes that the Genesis record is completely historical and scientifically accurate, and proper understanding requires Christians to accept a literal seven-day, approximately twenty-four hours per day, creation week. Theistic evolution "is not only completely contrary to the teachings of the Bible, but is also completely incompatible with an omniscient, merciful God" (p. 32). After arguing that evolutionism "will satisfy neither the data of science nor the spiritual needs of mankind" in the first three chapters, chapter four surveys "the history of God's dealings with the various nations of the world." Here Morris asks and then provides answers for several questions that help in understanding God's purpose for His creation. Chapter five provides some common ground for all Christian readers (although I expect Morris might disagree with me on this). We can certainly join in his closing prayer "that many readers will open their hearts and minds to the God who is real, the God who created them, the God who, in Christ, died to save them and rose again from the dead to assure them eternal life" (p. 80).

Reviewed by Bernard J. Piersma, Professor of Chemistry, Houghton College, Houghton, NY 14744.

ONE WORLD: The Interaction of Science and Theology by John Polkinghorne. Princeton: Princeton University Press, 1986. 114 pages, notes, glossary, index. Paperback; $7.95.

Are you an odd, incongruous mixture of incompatible elements? Nor am I, but what do your colleagues think? During a break on an archaeological excavation, a fellow graduate student shifted the conversation slightly by saying: "I don't think it is possible to be an anthropologist and also a member of one religion." This was no random remark; she knew that among those listening was one who thought himself both. Despite the special twist of cultural relativism, this may have a familiar ring to *Perspectives* readers. Why do so many believe science and religion are opposed? John Polkinghorne sees it as the result of misunderstanding both, and his book, *One World*, can be a valuable corrective.

There is only one world, and both science and theology are "concerned with exploring, and submitting to, the way things are" (p. 97). Polkinghorne traces the uneasiness in their relationship to the Enlightenment. While an emphasis on use of reason to understand an objective world did not logically deny the reality of religious experience, it made it seem irrelevant. But we have gone beyond the Enlightenment; the world known to the 20th century is more curious and complex. Chapters 2 and 3 describe science and theology. If one considers actual practice, science is removed from the "pedestal of rational invulnerability" and revealed as a subtle activity involving participant judgement. Yet it is more than socially conditioned speculation; our understandings are dictated by the way things are. The more personal a subject, the more we risk being trapped by our culture. But theology is rational reflection on religious experience, not unmotivated assertion. Thus, theology too concerns the way things are. Chapter 4 presents ten aspects of the physical world in the current scientific view, and 5 and 6 move on to how they relate. The heart of the book, this section draws directly on the base already set. The interaction of science and theology is covered under: (a) areas of perceived conflict, (b) natural theology, (c) mutual influence of habits of thought, and (d) levels of discourse vs. reductionism. Chapter 7 concludes.

It is clear that this professor of theoretical physics (now honorary) and Anglican priest, has thought deeply on those issues. He is also a good writer. Even those ideas I have heard before were here more fully digested and clearly presented. This is a book of sweeping synthesis, but Polkinghorne uses many examples to illustrate his often abstract points. He puts the concept of quantum-level uncertainty to good use as a analogy to help us understand a complex point, while largely avoiding the temptation to base metaphysical conclusions on these findings.

Specialized knowledge is not assumed, and the mingling of theology and physics is smooth and flowing, never strained, as if itself illustrating their compatibility. Yet this rapid synthesis and summation has its disadvantages: where he fails to convince on the first pass, he frustrates. For example, he notes Mackay's idea that chance means unknown causation, and all is in God's control, but asks: "Why has God chosen to hide his hand under the appearance of randomness?" (p. 68). His alternative has much to commend it, but I wonder if this does not miss the point. If I understand Mackay, chance is an artifact of limited knowledge; God does not need to hide his hand for the blind to miss it.

In another instance, he says he does not believe the sun stood still for Joshua to fight the Amorites. He gives no explanation, and I do not find his alternative satisfying. Though I wish for further clarification, Polkinghorne has moved on. Lest I give the wrong impression, he then states that the resurrection is at the heart of Christianity. And in dealing with miracle he characteristically seeks a perspective accounting for all relevant information, noting that one must consider why miracles do not happen more often, not merely why they happen; they must be part of a unity of divine action and purpose (p. 75).

When people ask how one can be a geologist *and* a Christian, they are often not asking at all but declaring it

impossible. My friend did the reverse; she phrased her remark as a statement but was really asking a question. I do not recall my answer (and it may be just as well), but I know it would have been both deeper and clearer had I read this book. There is no substitute for personal testimony, however halting, but *One World* will benefit both those called on to answer, and those asking these questions. It may be most illuminating for one who has not studied this area in depth, but it has none of the blandness of an introductory summary and should prove stimulating for its synthesis of thought and clarity of expression, even where one is familiar with the basic propositions.

Reviewed by Paul K. Wason, Instructor in Anthropology, University of Louisville, Louisville, KY 40214.

SCIENTIFIC GENIUS AND CREATIVITY by Owen Gingerich (ed.). San Francisco: W.H. Freeman, 1987. 110 pages. Paperback.

This book is a convenient collection of twelve brief articles published by *Scientific American* over the past thirty-six years. The editor, a Smithsonian astrophysicist, Harvard science historian, and ASA member, selected the articles. It is not clear why these twelve articles were chosen or why they had all appeared originally in one journal. Unfortunately, no check can be made with the original articles because specific references are not given. One would like to know if the synoptic sentences under each title, the photos, and the biographical paragraphs in the appendices are due to the editor. Not everyone may agree with his choice of Darwin's photo on the cover as representative of this group of scientific geniuses. It would have been helpful if the editor had expanded his one-page introduction to include a comparison of the scientific creativity exhibited.

Only two articles deal with the general nature of scientific creativity, which is not defined. This is not surprising, inasmuch as the title is an afterthought. The first one, "The Creative Process," is by the late mathematician Jacob Bronowski, who believes "a man becomes creative, whether he is an artist or a scientist, when he finds a new unity in the variety of nature." I do not, however agree with his dictum that "the creative activity lies here in the process of induction." The imaginative choice is made by speculation as to the sequential terms beyond our experience. The initial selection, however, of deduction axioms is equally imaginative. The last article, "Prematurity and Uniqueness in Scientific Discovery," by the biologist and bacteriologist Gunther Stent, agrees that there "is no profound difference between the arts and the sciences in regard to the uniqueness of their creations." I agree with his conclusion that "art is no less cumulative than science, in that artists no more work in a traditional vacuum than scientists do." I do not quite agree that paraphrases of great artistic creations generally require a genius equal to that of the original creator in contrast with scientific revisions (cf., Einstein and Newton).

Nine articles are essentially biographical sketches which contain illustrations of their scientific creations. William Harvey was "the first biologist to use quantitative methods to demonstrate an important discovery," viz., the circulation of the blood. Robert Boyle was novel in "his notation that one could prove a scientific theory by experiment." Lavoisier was the founder of modern chemistry. Carl Friedich Gauss did for number theory what Euclid had done for geometry. Evariste Galois was the author of group theory, and was killed in a duel at the age of twenty. Joseph Henry discovered electromagnetic induction before Michael Faraday did. Darwin's *Origin of Species* is one of the great books of all times. Alfred Wegener was an astronomer turned meteorologist and geophysicist. Robert Millikan had a "penchant for controversy in subjects ranging from cosmic rays (which are still a mystery he named) to the support of science." The last article deals with Newton's discovery of gravity. I do not agree with the claim that this marked the beginning of modern science.

Reviewed by Raymond Seeger, 4507 Wetherill Rd., Bethesda, MD 20816.

THE NEW STORY OF SCIENCE by Robert M. Augros and George N. Stanciu. New York: Bantam Books, 1984. 184 pages, notes, index, bibliography. Paperback; $3.95.

The New Story of Science has value for all readers including scientists, persons curious about science, Christians, agnostics, and atheists. In recounting the return of the mind to a place of preeminence, the authors open minds with remarkably clear language refreshingly free of jargon or condescension. With its strong emphasis on science, as manifested through its Old and New Stories, the book's theme is actually historical and contemporary world views.

According to the authors, we are living in an era of transformation, leaving behind the exclusive materialism of the Old Story but not yet accepting the more spiritual New Story. The former, some 300 years old, is scientific materialism. According to this view, only matter has existence. Everything can and must be explained "scientifically"; i.e., exclusively in terms of matter. Free choice is an illusion, there is no purpose behind natural phenomena or entities. Scientists, moreover, are merely detached spectators.

The New Story, originating with the revolutionary thinking of Einstein, holds that the material concept of the natural order is insufficient. Certain phenomena stand outside the material world, transcending it. Primary among these is the human mind. The New Story holds mind and free choice just as real as material objects. Furthermore, there is a purpose in nature present from the moment of creation—the Big Bang.

Central is the Anthropic Principle, a conception of the cosmos as designed *from the beginning* with the exception that the mind of the *participating* observer will enjoy equal status with the material world. The thesis is advanced through a progression of precisely structured chapters, frequently drawing from the recorded thoughts of scientists.

The authors proceed from the basic premise of the Old Story: Newtonian physics. Time and space are conceived as

absolutes which are infinite, universal, and unchangeable. But then the progression opens to examine the mind, neatly paralleling the preceding structure with sharp analogies. Having re-introduced the mind, the authors enter into an insightful analysis of beauty from the scientist's vantage point.

To the analytical mind, beauty is a central principle of scientific endeavor. Beauty is non-existent or simply dismissed through the Old Story, but it is intrinsic to nature with the New. To proponents of the New Story, beauty is simplicity, symmetry, elegance, "*rightness*," universality—a certain harmony coupled with brilliance.

From the place of beauty in science the authors turn to the place of theology. While religion has always been significant to some scientists, those faced with the precepts of the Old Story are hard-pressed to find any place for theology. Not so the New Story with its cosmology of a universe expanding from a *beginning*. All those "coincidences" and "fortuitous" events in nature actually have direction and lead inevitably to the conclusion: "Though man is not at the physical center of the universe, he appears to be at the center of its purpose" (p. 70). That conclusion points inevitably to the mind directing the scientists' cosmology. Is God not equally inevitable?

The authors themselves confess no personal religious conviction. That is the province of the reader's own mind. And only the scientist who is also a believer in an immanent God can fully appreciate their extraordinary message. It is a tribute to the authors' succinct yet poetic prose that anyone fortunate enough to discover this volume should come away with a freshened outlook.

Ironically, the Old Story *depends* largely upon imagination but cannot transcend it. In the New Story, mind transcends the material through *escaping* restrictions of the imagination. The exquisite irony is that, while the Old Story represents hard-headed acceptance of "reality," the New is more intellectual and, therefore, the more demanding world view. Since the Old Story would exclude the spiritual side of humanity, a sense of poetic justice emerges from the more inclusive concept of reality of the New.

The remainder of the text is almost anticlimactic. But it remains for the authors to allow the New Story to lift mankind out of sterile behaviorism into the fullness attending the primacy of the human mind and will: ". . . In the New Story of Science, the ordinary man, the scientist, and the philosopher can know the world, and the artist can render the fullness and richness of that world in his art" (p. 139). All these endeavors are complementary. Furthermore, the New Story does not destroy but builds on the Old in reaching that most profound realization: Man is truly at home in the universe. The ultimate inferences are quite properly left to the individual reader.

Reviewed by Dorothy J. Howell, Adjunct Visiting Professor, Environmental Law Center, Vermont Law School, South Royalton, VT 05068.

TRANSCENDENCE AND PROVIDENCE: Reflections of a Physicist and Priest by William G. Pollard. Edinburgh: Scottish Academic Press, 1987. 264 pages, index. Hardcover; $17.00.

This collection of essays, written between 1956 and 1987, reflect the author's personal journey in the field of theology and science with a warmth and insight that allows the reader to sense the power of the providence of God in the life of one man. The sixth in a series of publications for the Center of Theological Inquiry at Princeton under the general editorship of the distinguished Professor Thomas F. Torrance, the book continues to call both scientists and theologians to seek afresh to apprehend the significance of "a vast shift in the perspective of human knowledge" upon the influence evident between theological science and natural science. The essays generally argue for a new appreciation of the unique singularity which is created reality and that transcendency which is necessary for grasping the truth of the wholeness of the nature of life.

A physicist turned priest, Pollard has argued that we must admit that the scientific culture of Western civilization would not have been possible without our biblical heritage. He claims the ground upon which those concepts necessary for the development of our probing into the nature of the universe are found in the Judeo-Christian tradition. The contingent intelligibility of the character of the world is thus bound up with the creative freedom of a transcendent God.

I enjoyed the way the essays move from the author's personal role in the discovery and making of the atomic bomb, through modern society's skepticism about any kind of scientific utopia and its guilt complex over its moral responsibility to the creation, into a fresh effort for a deeper appreciation of the roots of the Judeo-Christian tradition. The range of these essays allows our author to survey the state of the art across a wide spectrum of scientific disciplines, from quantum to evolution theories, with an effort that seeks to throw light upon the meaning and purpose of the scientific enterprise itself. I believe scientists will benefit from the author's arguments that would keep open the structures of scientific knowledge, and theologians will benefit from his call for realism in theological knowledge.

I do have one deep reservation about this book. In his effort to relate transcendent realities with those of physical nature, Pollard has resorted to articulating his encounter of God and the world by reference to Otto's *numinous* experience of the *mysterium tremendum*. I believe this is a mistake that is rooted in our tendency to divorce word from being, a mistake against which the early fathers of the Church fought. I would suggest that Karl Barth's discussion of the incomprehensibility of God is much more to the point here, since he does not allow throughout his *Church Dogmatics* the Word of God to be understood except as rooted in the very being of God Himself. I believe in this way appropriate guards are established which would help us avoid this tendency and allow us to be free and courageous in our efforts to articulate what we have been given to know of the great I AM.

Reviewed by John McKenna, Adjunct Professor, Fuller Theological Seminary, Pasadena, CA 91101.

HEALING THE EIGHT STAGES OF LIFE by Matthew Linn, Sheila Fabricant, and Dennis Linn. Mahwah, NJ: Paulist Press, 1988. 263 pages. Paperback; $6.95.

The eight stages of life referred to in the title of this book originated with psychologist Erik Erikson. Best known for his theory which charts the course of human development throughout life, Erikson expanded on Freud's theory of four psychosexual stages of development. His theory presents the psychosocial stages which individuals pass through from birth to death. The authors of this book like Erikson's theory because it emphasizes healthy development, the ability of individuals to heal past psychological wounds, psychosocial rather than psychosexual development, development as a lifelong process, and the balance between the assets and liabilities of life's stages.

This book integrates ideas from Erikson with those on the value of healing prayer for each stage of development which may have gone awry. To make the book relevant, the authors give many case studies and many pertinent quotes. The 23 pages of notes expand on the material presented in the book and also provide bibliographic information for further study. An appendix provides a helpful list of courses, books, and tapes. Each chapter ends with some suggestions for applying what has been discussed.

Some of the more interesting notions this book contains are that homosexuality may be the result of failure to establish trust with the same-sex parent, hell may be an abstract possibility which no one will experience, sexual abuse may occur as often with boys as with girls, and adults need 12 hugs a day for growth!

The authors work together as a team seeking to help people attain physical, emotional and spiritual wholeness through their writings and retreats. They have lectured in many countries and universities and authored many other books in this same general area of Christian healing and deliverance. This book, simply written, provides insight and inspiration. It can benefit psychology students, counselors, and Christian laypeople who want to heal past hurts and experience future growth.

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

THE BETTER HALF OF LIFE by Jim Geddes. Nashville, TN: Broadman Press, 1987. 192 pages, bibliography. Paperback.

Jim Geddes is a clinical psychologist and a Southern Baptist pastor with extensive experience in church planting in Canada. Much of the content of the book reflects his knowledge of psychological and sociological studies on the subject of aging. As he deals with attitudes toward the various stages of life, he presents the "scientific" point of view which is then complemented by the Christian perspective.

The book is divided into two parts: "The Aging Process" and "The Life Span." In the first five chapters, the author builds a case for optimism with such chapter titles as "The Second Half Is Better," "A Strategy of Joy," and "Old Brains Are Better." The second part looks at the stages of life. Chapter titles include "Mid-Life Crisis," "The Happy Time—Ages 55 to 65," and "The Crowning Years—A Study of Dying."

The bibliography contains fifteen entries, representing the field of psychology, the social sciences, and gerontology. The book contains many lists and charts. These deal with such topics as "phases of the second half of life," "rules for the first half and the second half," "The Longevity Commandments," "Jung's Four Stages of Life," and "Turning Anxiety into Motivation."

The main point the author makes is that life can be productive and joyful from childhood to the death bed, if people approach the several stages of life with proper attitudes. Much of the book consists of suggestions for adapting to the changing conditions of life. Many of the guidelines are based on scientific studies and apply equally to Christians and non-Christians; but Geddes makes it clear that only the Christian has the joy of looking forward to eternity with Christ.

The book probably would be more readable and useful if it had a narrower focus. Some suggestions are directed at young or middle adults: "We ought not to pursue joy, but joy will come as we pursue the prerequisites" (p. 25); "When youth is over, let it go" (p. 89); "Stop blaming others. Stop depending on them for so much" (p. 183). Others are directed at the relatives of older persons; they are advised to allow the aging relative as much independence as possible. A word of wisdom which seems meant for younger parents is: "Young people who have to struggle hard for their existence are usually spared many problems" (p. 68).

Nevertheless, *The Better Half of Life* has much to offer to older persons. Topics include deciding when to retire, hobbies, nursing homes, living with family, sharing one's experience and knowledge, exercising the body and the mind, dealing with depression, anxiety, loneliness, and boredom, and the fear of death and dying.

This reviewer doubts that this book will appeal to the typical older person because it has somewhat of a textbook style. It devotes much space to classifications of various life stages, and there is a good deal of repetition, probably designed to facilitate retention. On the other hand, anyone who counsels adults of *any* age, especially Christian adults, will find lots of ideas and illustrations that should prove very useful.

Reviewed by Ralph Kennedy, Retired, John Brown University, Siloam Springs, AR 72761.

COUNSELING THOSE WITH EATING DISORDERS by Raymond E. Vath. Waco, TX: Word Books, 1986. 215 pages, index. Hardcover.

A clinical professor of psychiatry at the University of Washington, Vath also has a private practice that has given him many successes with patients with anorexia and bulimia, under- and overeating. Chosen by editor Gary R. Collins to write this volume, fourth in a series on Resources for Christian Counseling, the author gives the bases for dealing with such patients and numerous illustrations from real life. Good advice on eating habits is also considered for each of us.

The nature, causes, and consequences of anorexia nervosa and bulimia are elaborated and the treatments of such disorders selected from both science and Scripture. The bibliography indicates the more useful books, and a national directory for sources of help (e.g., National Anorexia Society, Columbus, OH) is appended.

Vath lists the similarities between alcoholism and eating disorders, and "the illness's complexity makes it necessary that patients be treated in the context of a multidisciplinary team involving therapists, physicians, dieticians, and family and spiritual counselors." Specific medications are mentioned to combat the depression common in patients, who are ten to twenty times more often women than men. Treatment of anorexia involves mental, cardiovascular, digestive, kidney, blood cell, glandular, and musculoskeletal functions, and in bulimia all of these except kidney and blood cell functions.

The effects of starvation, both emotional and physical symptoms, are related as well as how recovery is obtained. There is "a confusing array of opinions presented in volumes of books" and a "false belief that there is one program that will work for everyone." The author emphasizes that love, truth, and compassion are essential in the counselor, who treats what every person with an eating disorder believes—that "I won't be loved unless I am perfect"—but each should be led to faith in God's forgiveness and awareness of the understanding of associates (who should possess the same qualities as the counselor). Causes of depression are treated with appropriate nutrition, exercise, rest, a positive mental attitude, and antidepressant medication.

"A noted characteristic of patients with eating disorders is secrecy and deception," frequently accompanied by shoplifting. Vath states how one is led from deception to truth, and how the family should react in cooperation with the counselor and patient. An example would be a family where the father is a critical persecutor and the mother a protective rescuer. Helpful hints are given to produce the signs of recovery: acceptance, love of self and others, appropriate womanliness or manliness, joy, open honesty, independence, and collaboration. Also well treated is the question: "What do you do if you know of someone with an eating disorder, especially if the person is reluctant to acknowledge the problem?"

An admirable book of interest to us normal folks, as well as those dealing with people with eating disorders.

Reviewed by Russell L. Mixter, Professor Emeritus of Zoology, Wheaton College, Wheaton, IL 60187.

HILDEGARD OF BINGEN'S MEDICINE by Wighard Strehlow and Gottfried Hertzka, M.D. Santa Fe, NM: Bear & Company, 1988. 189 pages, indices. Paperback; $9.95.

At age 16, Hildegard, a twelfth-century mystic, became a nun at a Benedictine convent in Germany. She wrote a number of books on theology, nature, and medicine. This volume contains many direct quotations, first written in twelfth-century Middle Latin and translated into German by the authors who evaluated her quotations, all translated into modern English by Karin Anderson, wife of Dr. Strehlow. Dr. Hertzka is a medical doctor, and Strehlow was a research chemist in the pharmaceutical industry in West Germany until he became successor to Hertzka's Hildegard Practice at Konstanz, West Germany in 1984.

In the foreword, David Frawley, O.M.D., says: "Now that the limitations of allopathy are clear to many of us, the validity of these traditional systems is again becoming apparent. . . . Hildegard shows us the direction to which we need to return." Hildegard employs psychological counselling and herbs from the East as well as the West; proper diet is essential.

The authors state that Hildegard advocates "a proper attitude towards life based on the strength and fullness of the Christian faith" as part of the protection against heart attack, rheumatism, and cancer. "If we had not had years of experience with Hildegard's healing art, we would not venture to make this book available to the public." They call her medicine "The Healing Art of the Future," a title for an introductory section which precedes 15 chapters on details of diagnosis and treatment of various parts of the body, plus discussions of colds and flu, digestion, diet, dreams, rheumatism, cancer, and fasting, followed by indexes of plants and herbs, symptoms and illnesses, and remedies. Beautiful black and while drawings adorn the beginnings of each chapter.

Let me sample for you details in a couple of chapters. After listing the causes of cardiovascular disease as malnutrition, high blood pressure, high cholesterol blood level, clotting of blood, smoking, coffee, alcohol, drug addiction, and obesity, Hildegard suggests a help for pain in parsley-honeywine and galangal (*Alpinia galanga*); in critical conditions, yellow gentian soup or gemstone jasper is to be pressed firmly over the heart. Avoid saturated fats, cholesterol, and salt. Limit alcohol a day to two ounces of dry wine or five ounces of beer. Eskimos of Greenland and the Japanese have found that their seafood diet protects them from heart disease. A spring tonic of vermouth, drunk before breakfast from May to October, prevents arteriosclerosis and cleanses the body of waste products. Chestnuts help prevent brain arteriosclerosis, including Alzheimer's disease.

The second summary is on Fasting. "During a fast, everyone will receive two strong healing forces," unlimited energy for holistic health and the power of defense to fortify resistance to overcome such diseases as cancer, AIDS, and multiple sclerosis. Fasting is "total abstention from eating—just drinking plenty of herb teas, spelt coffee, fruit and vegetable juices, and lots of spring or well water, minimum of three quarts a day." How to breakfast on the first recovery

day is detailed. At the end of this chapter, Hildegard is quoted: "In humans, God has completed all divine work . . . not only the four elements, fire, water, earth and air, are included in humans, but also the virtues of a happy person."

Reviewed by Russell L. Mixter, Professor Emeritus of Zoology, Wheaton College Wheaton, IL 60187.

THE THEOLOGY OF MEDICINE by Thomas Szasz. Syracuse, NY: Syracuse University Press, 1988. 200 pages, index. Paperback; $10.95.

Thomas Szasz, a practicing psychiatrist and professor of psychiatry at the State University of New York in Syracuse, is well known for his critiques of modern medical practice, especially psychiatric and psychological treatments. In his latest book, a collection of essays written over the last 20 years, Szasz argues that medicine has increased in power until it has become a state-supported moralizing agent, an institution or religion able to decide for others what is right and wrong, proper and improper. Although our society would never allow a particular "religious treatment" prescribed by a cleric to be imposed upon a person against his or her will, even if we suspected that treatment would "cure" that person's spiritual problem, it is very willing to have a medical treatment imposed upon a person, even if that person does not seek help. We allow this denial of liberty, according to Szasz, because the medical expert, the physician, says the treatment is needed. The canon of this new theology comes in the form of mental health and public health laws which allow for involuntary hospitalization and treatment if authorized by the physician. In these essays, Szasz argues consistently, if not persuasively, against any form of imposed medical treatment.

Examples of Szasz's arguments can be found in his essays dealing with the ethics of suicide and addiction. Suicide is a moral not a medical problem to Szasz, and people have a right to die. "Treatment," or prevention, should not be prescribed without their consent. Szasz also believes that drug addiction is medically irrelevant, and that the medical community should treat addiction as it does masturbation, as a matter of personal lifestyle. He favors the free trade of drugs because the government has no business regulating what a person puts into his or her body. In true libertarian fashion, Szasz places freedom of the individual above all other concerns. The other essays continue the basic theme that the physician has been given too much control over the individual, and the field of medicine has become a powerful force in our society to the detriment of personal liberties.

A major flaw in the book is the author's fanaticism. Szasz identifies a potential problem with current medical practice—the patient not taking an active role in the decision making process—but carries his solution to an extreme (i.e., the individual assuming complete control over what kind of care he or she receives regardless of the concerns of society as a whole). Other weaknesses include Szasz's use of old references to support his position. In the essay on the ethics of addiction, Szasz cites a 1929 article suggesting that morphine addiction is not characterized by any "physical deterioration or impairment of physical fitness" (p. 34). A more recent article describing the cellular and biochemical changes that occur as a result of extended morphine use might have been more appropriate if conveying the truth of drug addiction was the aim of the essay. Also, Szasz includes statements that are just not true, an example being his saying that some drugs, such as insulin, are not dangerous (p. 37).

Szasz attempts to present the medical establishment as a tyrant, forgetting its duty to the patient, and serving only its own narrow self-interest. Although Szasz raises important questions that should be considered, he does not provide enough evidence to support his radical answers.

Reviewed by Kevin Seybold, Department of Psychology, Grove City College, Grove City, PA 16127.

THE RICH AND THE POOR: A Christian Perspective on Global Economics by Carl Kreider. Scottdale, PA: Herald Press, 1987. 156 pages, index. Paperback; $8.95.

Kreider was recently named Dean Emeritus of Goshen College and has served as Professor of Economics there since 1940. He has also served as dean of the College of Liberal Arts of International Christian University in Tokyo, and as a Fulbright Lecturer in Economics in Ethiopia. He has written extensively on the international commercial policies of the United States, and confesses that he writes "from a capitalist bias."

It is obvious from this book that Kreider knows not only the theory of Third World Development but also the practice, and his analysis and Christian insights are extremely valuable. It is his purpose to avoid two extremes: (1) "the poor countries are victims of forces over which they have no control," and (2) "the poverty of the poor countries is entirely their own fault."

The main body of the book is divided into eight chapters. Kreider first sets out to make clear just how poor the "poor countries" really are, and to give an idea of what life in the poor countries is like. Then, he treats major topic areas dealing with the growth of population, agricultural and rural development, education and health, industrial development, and international cooperation. In each case the author strikes a balanced and informed position.

The rapid growth of population in the poor countries is a serious problem. The solution does not lie, however, in self-righteous preaching of population control by the affluent nations alone but rather in limitations on our wasteful consumption of the earth's resources, especially those involved in military expenditures.

Christians can help in the agricultural needs of poor countries by receiving

> specialized training in tropical agriculture. . . . they would have to have additional study to adapt this background to the special soil and climatic conditions in the area where they serve. Above all, they would need to have a knowledge of the language of the people they were serving and a willingness to live and work at their side. (p. 83)

Any effort to be of real assistance depends upon an understanding of the real needs, the real resources, the real abilities, and the real interests of the people involved (introduction of "appropriate technology"), rather than simply attempting to import technology from the affluent nations.

There is a desperate need to come up with new and creative ways to deal with the debt problem of Third World countries. All of the poor countries are troubled by this problem, but it is the very worst for the very poorest countries. The problem is complex and can be dealt with only by an international economic conference dedicated to coming up with possible solutions.

The poorer countries would benefit tremendously if they could form an alliance together like that of the European Economic Community:

> It is one of the ironies of our time that already wealthy nations become still more affluent through regional integration. On the other hand, poor nations . . . have so often demonstrated their inability to develop effective cooperation. . . . where small size is accompanied by political hostility toward neighbors, the prognosis is poor. (p. 125)

Finally comes the major question, especially for the Christian: "What can I do?" There are many things that we can do—some of them not much more than symbolic. We can give food aid, eat less, boycott products of multinational corporations that exploit the Third World, work for political changes in the United States important for the poorer countries, or take a trip to one of the poorer countries (or to an American Indian community) to see first hand what the conditions are. When it comes down to the "bottom line," however, Christians can do one or both of two important things: (1) volunteer for dedicated service in the Third World, and/or (2) help support those who do volunteer.

> For those persons who cannot themselves give their entire lives to serving those who live in poor countries, I hope that this book will inspire them to give sacrificially to support those who are called to serve in long-term development efforts. This giving must be substantial and it must be long-term. The "emergency" will be with us throughout the lifetime of all of the readers of this book. (p. 153)

This is an important challenge for Christians. It provides "missionary" opportunities for many with a wide range of God-given gifts.

Reviewed by Richard H. Bube, Professor of Materials Science and Electrical Engineering, Stanford University, Stanford, CA 94305.

EDUCATION, CHRISTIANITY, AND THE STATE

by J. Gresham Machen. Jefferson, MD: The Trinity Foundation, 1987. 172 pages, index. Paperback; $7.95.

It is unfortunate the J. Gresham Machen's philosophy of education is presented in a hodge-podge collection of essays, riddled with outdated issues and archaisms. These essays were prepared for different purposes during a quarter century (1912–1934) by a busy seminary professor. Simply collecting them into a single volume results in excessive repetition and the book, of course, lacks unity. It would be more useful for a competent scholar to take the essays, together with additional biographical material, and write a lengthy journal article or, perhaps, a chapter in a composite work that would analyze Machen's educational philosophy. Quotations could be generous and part of Machen's Congressional testimony in 1926 could be appended.

As Professor at Princeton and Westminster Theological Seminaries, Machen insisted on a biblical base for scholarship. His speeches and essays raise fundamental questions as to the relationship and responsibility of the state in the education of a free people. It is impossible to have value-free education, of course, so which values are being taught? What ethical implications are present in the curriculum? What is the basis for those ethics? In Machen's day, government pamphlets based their appeal for right conduct in patriotism, that "which is considered right among boys and girls who are loyal to Uncle Sam. . . . " Machen observes that children should not be told, "Do not tell a lie because you are an American," but "Do not tell a lie because it is wrong to tell a lie."

In other words, ethics are absolute and should be treated as such. If the starting point of ethical discussions is relativism and individual or group autonomy, then the teacher has already made a most fundamental ethical decision, one that conflicts with the ethical teachings of Scripture.

Machen wondered if dilemmas like this meant that public education in a pluralist society was possible for Christians. Indeed, he strongly supported Christian schools and articulated a rationale in defense of them. Machen believed that public schools should be *less* involved in social issues and controversies, leave *explicit* teaching of ethics to families and churches, and concentrate on the factual content within each discipline.

Machen was opposed to Bible-reading in state-controlled schools, fearing a distortion of the content through the selection process. How, he asked, could non-Christian children pray, "Our Father, which art in heaven . . . " if they had not been redeemed by Christ and were, therefore, not children of God?

Machen believed that state-controlled schools should not seek to destroy the values and traditions of individual families, but could aid in a limited way in educating Christian children. The best direction for Christian parents, he believed, was in Christian schools because of fundamental differences as to meaning and purpose in life:

> While truth is truth however learned, the bearing of truth, the meaning of truth, the purpose of truth, even in the sphere of mathematics, seem entirely different to the Christian from that which they seem to the non-Christian; and that is why a truly Christian education is possible only when Christian conviction underlies not a part, but all, of the curriculum of the school. True learning and true piety go hand in hand, and Christianity embraces the whole of life.

Reviewed by William H. Burnside, Professor of History, John Brown University, Siloam Springs, AR 72761.

THE BIBLE AND RECENT ARCHEOLOGY by Kathleen M. Kenyon. (Great Britain: British Museum Publications, Ltd., 1978.) Revised by P.R.S. Moorey. Atlanta: John Knox Press, 1987. 192 pages. Hardcover.

Dame Kenyon, more than any other figure, was responsible for introducing northern European stratigraphic techniques into Near Eastern archeology. Her contributions to Palestinian archeology are comparable to those of Nelson Glueck and William F. Albright. The archeological identification of the Amorites was only one of her significant contributions to the field. The first edition of the work under review was her last published book before her death.

This book has been capably updated by Dr. Moorey of the Ashmolean Museum, Oxford. This work, or another similar to it, is "must" reading for every informed Bible student. It can be valuable for two reasons.

First, it updates the present state of biblical archeology. Despite the present political unrest in the Near East, archeological research continues. The new data must be assessed and published. Both summaries of new data and reassessments of old data are essential. This book accomplishes both. Ironically, this involves reassessing even some of Dame Kenyon's most characteristic views.

Some elements of new summary and update are the following. Based upon recent re-evaluation of archeological data concerning the Philistines, Moorey suggests that Alt's and Albright's theory about the Philistines needs to be updated. The older view, which has gained general acceptance, is that the Philistines settled Palestine after being driven away from Egypt (p. 60). Moorey suggests that the archeological evidence is just as compatible with the view that the Philistines settled Palestine first, and then turned against Egypt. Obviously, this is not a suggestion which would distress evangelicals.

Another significant reassessment involves the impact of the Babylonian invasions upon Palestine and Trans-Jordan. The generally accepted position—the one taught by the present reviewer to his students—is that Judah and all of Trans-Jordan were severely devastated and depopulated by the Babylonian campaigns in the early sixth century B.C. According to Moorey, more recent researches see areas of continued dense population and prosperity in Palestine and Trans-Jordan. Northern Judah, the coastal areas of Palestine, Trans-Jordan, and "perhaps also Galilee" maintained significant prosperity and population density (p. 143). The conclusion is reached that "only the hill country of Judah" was significantly depopulated by the Babylonian invasions. Probably the last word on this issue is still to come.

The book's analysis of the archeological evidence of the Hebrew settlement (pp. 77–84) gives an alternative to the Albright analysis of this data. For present purposes it is significant that Moorey, with all his skepticism concerning harmonizing the text and external evidences, still finds data which can be related to the emergence of Israel.

The second area of significant contribution is that this book illustrates several important methodological presuppositions in archeology. As might be expected, matters concerning methodology are more debatable.

Moorey displays a great skepticism concerning the reliability of the text (pp. 17–18). It is then understandable that he would minimize the possible significance of correlations or parallels between an unreliable text and archeological evidences. In the judgment of the present reviewer, it is quite correct to reject any method which attempts to "prove the Bible at any cost." But Moorey, in seeming to discount completely the value of the text as evidence, carries his incredulity much too far. This incredulity concerning the text becomes more striking when set beside Moorey's acceptance of the results of literary criticism as applied to the text (p. 26). An unreliable source is not made more reliable by being processed through an innately subjective, literary-critical methodology.

Moorey questions the general tendency in the Albright-Wright school of biblical archeology to date biblical passages on the basis of cultural parallels with places such as Mari, Ugarit, and Ebla (p. 37). Moorey argues, correctly, that differences must be noted as well as similarities. He says, "If similarities alone are cited, the culture of Mari will inevitably seem more like that described in Genesis than it really was." Moorey should be credited with a fair criticism of a one-sided usage of extra-biblical parallels. However, despite the truth of this criticism, there is still a valid presumption that the background for any complex sociological phenomenon is more likely to be found in a setting which demonstrates parallels to that phenomenon than in a setting which has no parallels.

In summary, Moorey has produced a competent, somewhat broad updating of Palestinian archeological studies. Any biblical student will be better informed and will have a better understanding of the field for having interacted with this book.

Reviewed by Andrew Bowling, John Brown University, Siloam Springs, AR 72761.

THE ARCHAEOLOGY OF THE JERUSALEM AREA by W. Harold Mare. Grand Rapids, MI: Baker Book House, 1987. 323 pages, index. Hardcover; $19.95.

Mare teaches New Testament and archaeology at Covenant Theological Seminary and is the author of many journal articles, contributions to reference works, *Mastering New Testament Greek*, and a commentary of I Corinthians in the *Expositor's Bible Commentary*. He is president of the Near East Archaeology Society and directs the excavation of Abila of the Decapolis in Jordan.

Mare takes up a twofold challenge to produce a book that will "not only add to the reader's knowledge of Jerusalem but also . . . will be of spiritual and inspirational help." Without a doubt, *Archaeology* does very competently add to the archaeological knowledge of the intended audience. The book begins with earliest prehistoric times and comprehensively covers the archaeology of Jerusalem, period by period, through the Turkish period. Historical details are culled from the Bible and other literary sources, such as Josephus, but the emphasis is primarily archaeological. For this reason, therefore, those who do not draw inspiration from descriptions of walls, tomb contents, and ruins of ancient churches will have to look elsewhere for spiritual edification and inspiration. However, Mare does a good job of presenting the contrasting viewpoints on controversial issues and the reader of this book will have a full outline and summary of the archaeology of Jerusalem.

The illustrations and editorial apparatus of an archaeological book are crucial to understanding the contents, and this book is generally well equipped. The detailed table of contents gives a rough guide to the bold face sub-headings in the chapters. The chart of archaeological periods in Palestine has a number of expansions for complex periods within relatively short time slots. This a is very helpful feature, but, unfortunately, the usefulness of this chart is hampered by its small print and crowded, hard-to-read appearance. Also, a ready grasp of the sweep of time and a comparison of time periods would have been greatly improved by a one-sheet fold-out format. The glossary of technical terms will be a real blessing to the non-archaeologist, although not all terms are included in it (e.g., "favissa" from p. 95 and "bullae" from p. 112).

The select bibliography provides about 6 pages of references to books and periodicals, mostly in English, through 1985. The 10-page index is very good, but, unfortunately, there is no index to the maps and illustrations.

Mare has provided us with a liberal supply of maps, plans of excavations, photographs, and drawings of artifacts, all black and white. While the photos are often sharp and clear, black and white does not bring out archaeological detail. For instance, the monumental stairway on page 154 is virtually impossible to see. I realize the need to keep costs down, but it is unfortunate that there could not have been some color, especially for an overall view of the excavated city and for some of the shots of excavations. While the maps of the city do serve as orienting devices, they do not provide an indication of topography and are virtually useless for comparison of the growth and spatial movement of the succeeding cities.

There are other books on Jerusalem; some by the excavators, such as *Digging Up Jerusalem* (Kenyon), *Jerusalem Revealed* (Mazor), and *Excavations of the City of David* (Shiloh); and others such as *Jerusalem, City of Jesus* (Makowski & Nalbandian) that are often more interestingly written and sumptuously illustrated. However, they are also older, mostly out of print, and provide only partial coverage. *Archaeology of the Jerusalem Area* is a good purchase for those who want a complete and competently done summary of the archaeology of Jerusalem, and a balanced and judicious exposition of the major controversies surrounding it.

Reviewed by Eugene O. Bowser, Technical Services Librarian, University of Northern Colorado, Greeley, CO 80639.

HISTORY AND FAITH: A Personal Explanation by Colin Brown. Grand Rapids, MI: Academie Books, 1987. 129 pages. Paperback.

Of what value is a religious head-trip that is not based on the reality of the external world? None, says Colin Brown in *History and Faith*. A biblical faith must affect lives, attitudes and actions, but it must also be rooted in the historical reality of what really happened, else it becomes merely an ethical system and a relational tool. Critics have understood this in seeking to undermine the historical foundations of the Christian faith.

Modern man is so conditioned to living in a closed system that he can only with great difficulty imagine that his model of the universe is fundamentally flawed and that everything cannot be explained in purely naturalistic terms. Even some Christians are such good children of the Enlightenment that they cannot really see the role of the supernatural as a causative factor in life and history.

There is much to be learned, however, from secular historians, though not without critical analysis. Take, for example, "the crucial question of analogy." It is insightful to observe how all of us use analogy constantly in our understanding of life and of history. As we observe phenomena, we automatically evaluate in terms of similar experiences we have observed in the past, although in a fundamental sense *every* event in history is absolutely unique because that particular event obviously has never happened before. Nevertheless, the patterns and similarities are evident. Complexity cannot be comprehended by finite man without categories for storage and retrieval.

Exotic cultures are sometimes difficult for Western man to comprehend, but with empathy he can do so vicariously; he does not automatically rule out the existence of those cultures simply because he has never experienced anything quite like them. Similarly, one should not automatically rule out the historicity of biblical miracles or the resurrection of Christ simply because he was not one of the first century eyewitnesses.

This thoughtful little book is an excellent tool for those interested in how historians approach the study of history. It deals with basic questions of God in history; of factuality and causation; of objectivity and moral judgments; and of history as art, craft, and, in its analytical skills, as science.

History and Faith is filled with discussion-provoking observations such as the inescapability of moral judgments in writing history. Brown contends that to suspend moral judgment is just as much a moral act as to make that judgment. Editing—e.g., changing all references to "murder" in history to the more neutral term "killing"—does not change the fact that a moral judgment has in fact been made by the historian.

With a text of only eighty-five concise pages, the forty-one pages of notes and bibliography is impressive and useful to the serious student.

Reviewed by William H. Burnside, Professor of History, John Brown University, Siloam Springs, AR 72761.

DEFENDER OF THE FAITH: WILLIAM JENNINGS BRYAN: The Last Decade, 1915-1925 by Lawrence W. Levine. Cambridge: Harvard University Press, 1987 (reprint of 1965 edition). ix + 386 pages, index. Paperback; $10.95.

Although William Jennings Bryan insisted that a man be judged by his life as a whole rather than by one part of it, historians studying "The Great Commoner" have focused greatest attention upon his last years. Most tell a story of the transformation of a crusading progressive reformer into a "champsion of anachronistic rural evangelism, cheap moralistic panaceas, and Florida real estate." Seeking to find out the cause of this transformation, Lawrence Levine undertook a detailed study of Bryan's life in the years between his resignation from Woodrow Wilson's Cabinet in June 1915 and his death in Dayton, Tennessee, in July 1925. His conclusion: "The very transformation I had set out to understand never really took place."

Levine successfully argues that a few basic themes acted throughout Bryan's career as unifying principles. Thus, he insists that those who claim to have identified a transformation in the latter years of Bryan's life "have seriously misread his entire career prior to 1920, and have mistaken a change in emphasis for a change in principle."

Throughout his career Bryan was a moral crusader, "a petitioner for, not a seeker after, truth." His strength of conviction rested upon a sincere faith in the truth of a few basic assumptions. The most important of these was "a belief in the existence of a Divine Law, which might be found in the teachings and precepts of the Bible, which men were obliged to consult and obey." This was coupled with a belief that a "harmony of interests" operated among nations and individuals; a belief that the United States was of all nations most heavily endowed with morality and Christian ethics and that it was destined to spread this moral code throughout the world; a belief in the "essential goodness of Man who would respond immediately and wholeheartedly to truth once he was made to see and understand it;" and finally, a belief in the democratic notion of majority rule as a guide to implementing God's will.

Applications of these principles are identified in both the ways Bryan chose and defended the causes for which he stood. As he championed the causes of peace, prohibition, women's suffrage, fundamentalism, and anti-evolutionism Bryan maintained a steady faith that he stood with God, the Scriptures, and the rural masses. Accordingly, there was no shift in his career from progressive reformer to fundamentalist reactionary. Levine is careful to point out that during the years of Bryan's public denunciations of evolution he also stood before political gatherings to plead for a host of liberal and progressive legislative measures. On the other hand, the heightened emphasis upon religious matters which characterized his public life in the twenties was a manifestation of the fundamentalism to which he had adhered since his youth. Levine concludes that Bryan was an unchanging Progressive rather than as an emerging reactionary.

For those mostly concerned with Bryan's role in the anti-evolution crusades of the 1920s, two chapters, "Brother or Brute?" and "The Last Battle," provide engaging narrative detailing the events leading up to Dayton and describing the trial itself. These chapters, like the rest of the book, are meticulously researched and well written. It is pleasing to see this important interpretation of Bryan's career brought into print once again. Levine has succeeded where too few historians do. He sympathizes with Bryan while at the same time leading the reader to ponder his beliefs and actions.

Among questions raised are those which challenge the validity of Bryan's assumptions. How is the Christian to evaluate Bryan's belief in the essential goodness of man? Is there basis for the assumption that fallen man will respond immediately and wholeheartedly to truth once he is made to see and understand it? Regarding Bryan's implicit faith in majority rule, what ground is there for believing that the voice of the people will consistently communicate the will of God? Although these questions are not given thorough treatment, Levine's narrative encourages the reader to consider them.

Reviewed by Mark A. Kalthoff, Graduate Student, Dept. of History and Philosophy of Science, Indiana University, Bloomington, IN 47405.

TELEVANGELISM: The Marketing of Popular Religion by Razelle Frankl. Carbondale, IL: Southern Illinois University Press, 1987. 155 pages, appendices. Hardcover; $19.95.

The first disappointment about this book is that it's outdated in relation to current events. That is, the material was gathered and written before the escapades of Jim Bakker,

Jimmy Swaggart, and the less notorious antics of Oral Roberts pushed televangelism onto the front pages of our newspapers almost daily.

The second disappointment is that the copy reads like a thinly disguised doctoral dissertation. Sources are quoted by surnames (LeHaye, Mills, Falwell, McBrien) without previous reference or identification. The writer received her Ph.D. in sociology from Bryn Mawr College in 1984, and is now an assistant professor and coordinator of human resources management at Glassboro State College in New Jersey.

Frankl finds the roots of televangelism in the urban revivalism developed by Dwight L. Moody and Billy Sunday. As she traces the strands of revivalism into the electronic church of the 1980s, she continues to measure it against the tenets of those early leaders. Sometimes that does not seem like the most interesting use of the rich data she accumulates. There are problems with terminology such as electric church and electronic church. And, when she states that Jimmy Swaggart and Jim Bakker do not use "persuasive appeals" in their ministries, the reader must back way off to think through her definition of that term.

In her review of early revivalism, the growth of radio and television, the marriage of preaching and broadcasting, the complex role of the Federal Communications Commission as marriage broker and counselor, the birth and development of televangelism, and the extensive literature of communications research, Frankl provides a useful service for all students and scholars interested in the televangelism phenomenon. Although the reader may suspect that Frankl's personal views are far toward the liberal end of the religious spectrum, her own biases do not often intrude into this book in an unfriendly fashion. She arrays her source material in logical order, and her conclusions seem well founded. Her insights can be helpful. Although she doesn't deal with the fall of Bakker and Swaggart, she highlights the enormity of the problem they now face: "In charismatic leadership, it is the preacher's credibility and worthiness, his extraordinary qualities, which serve to motivate the viewer to support his mission."

Frankl surveys the breadth of present-day religious programming, and does make distinctions among the several major televangelism strains. Many of them have strong political orientations, and some of them take vigorous positions on social issues. She builds a strong case that the electronic church is no longer primarily in the business of saving souls, but is engaged in the battle for the mind.

Reviewed by Fred Lollar, John Brown University, Siloam Springs, AR 72761.

FOUNDATIONS OF CHRISTIAN ETHICS by John Dwyer. Mawhwah, NJ: Paulist Press. 227 pages. Paperback.

The author is a professor at St. Mary's College in California. His use of the term "Christian ethics" rather than "moral theology' indicates his desire to reach Protestants as well as Catholics. This book "is really about the challenge to be human." Its purpose is to develop a method of finding good answers to the right questions about Christian conduct. Ethics is the science of human conduct. He is deeply opposed to situation ethics.

The introduction indicates that the author is in favor of objective norms of behavior. To follow one's conscience only makes sense if it is based on an outside standard. Our task is not to follow our consciences but to form them. In this section, Dwyer discusses natural law, moral imperatives, principle of the double effect, and original sin.

In subsequent chapters, Dwyer discusses the motive behind the act, objective and subjective elements in decision-making, foundational values which are givens, personality differences in decision-making, the role of individual responsibility, the moral responsibility resulting from a conscience, and the authority of the church in ethics.

As a Protestant layman, I found these essays interesting. I was surprised to find the author questioning the historicity of the creation account and of Adam and Eve. In view of the number of maverick Catholic priests and theologians, I would have preferred this book to have represented some authoritative Catholic group.

Reviewed by Raymond Seeger, 4507 Wetherill Road, Bethesda, MD 20816.

A TIME TO SPEAK: The Evangelical-Jewish Encounter by A. James Rudin and Marvin R. Wilson (eds.). Grand Rapids, MI: Eerdmans, 1987. 202 pages. Paperback; $11.95.

The proceedings from the Third National Conference of Evangelicals and Jews, *A Time to Speak* includes nineteen papers by scholars of the participating traditions. James Rudin (National Interreligious Affairs Director, American Jewish Committee) and Marvin Wilson (Professor of Biblical and Theological Studies, Gordon College) supply questions for group discussion at the end of each chapter. Their five-page bibliography is more significant to the individual reader, since the multi-faceted discussions within this volume will stir further explorations of similar gems.

Problems in defining membership of each tradition are examined by the first four authors, challenging stereotypes and enhancing understanding. It is refreshing to recognize the diversity or pluralism within these portions of the cultural/religious spectrum; humbling to note ambiguity about the record. This honest portrayal reflects the biblical basis, in contrast to any self-serving propaganda. A minor error occurs in the second paper's allusion to the Canadian mosaic, with reference to Commonwealth membership "until 1967" rather than its actual continuation. Otherwise, the context is American, and accuracy can be assured by the participants.

Jewish and Evangelical contributions to American society occupy two chapters. Evangelicals were associated with the rising tide of New Right politics at the conference time, in 1984, so that diversity needed emphasis. Some had also expressed widely quoted bigotry, including anti-Semitism, while others were militantly Zionist. Humanistic Judaism had been identified with exaggerations of secularist influence, adding fuel to tragic confrontations. Again, acknowledgement of the actual diversity cut through misunderstanding.

Two fascinating articles treat the closely related issue of what the religions teach about each other. Jewish curricula made slight reference to Christian interpretations, gentle allusions to the lifestyle and teachings of Jesus as exemplary Judaism. Sunday school curricula proved to be innocuous at junior levels, but apt to include insensitive insinuations about Judaism at the senior levels. For example, Pharisees continue to be identified with hypocrisy, externalizing the New Testament's criticisms which deserve to be applied within the church. One curriculum alluded to the profiteering moneychangers requiring Jewish money for Temple use; insensitivity was criticized, but the citation's inaccuracy deserved a challenge in that the Tyrian shekel standard was never Jewish.

Delicious irony counters the stereotypes in pairs of papers on "The Place of Faith and Grace in Judaism" and "The Place of Law and Good Works in Evangelical Christianity."

Expectations regarding future prospects for both religions, particularly in an American context, are intriguingly studied in two articles. Four authors examine the various attitudes to modern Israel, expressed among the complex divisions of each tradition. A fine essay by Hillel Levine reinforced the solidarity by reference to "Shared Nightmares and Common Cause."

Despite the range of topics and opinions, there is a remarkable unity to this book. A profound yet very readable, well-balanced exchange, it helps both mutual esteem and appreciation for our own tradition. Much more could be reserved for similar conferences, so that the reader may consider these discussions as an appetizer. Eagerly waiting the next course, this reviewer rejoiced to see that a fourth conference occurred in 1988, as reported in the October 7, 1988 *Christianity Today*.

Reviewed by John R. Armstrong, Deacon at St. Philip the Evangelist Anglican Church, 631-49 Avenue S.W., Calgary, Alberta, Canada T2S 1G6.

THE RIDDLES OF JESUS & ANSWERS OF SCIENCE: Modern Verification of His Wisdom & How It Can Help You by Osborn Segerberg, Jr. Kinderhook, NY: Regis Books, 1987. 265 pages, index. Hardcover; $21.95/Paperback; $14.95.

The title is a warning: Jesus didn't pose any "riddles" and, if He did, science wouldn't provide any "answers." This observation is symptomatic of the whole book. The author concludes that "Jesus was not a man of his time. His genius was so far ahead of his time that he is a man for our time" (p. 214). What he means by this is that Jesus' mystic insights into the nature of the world and life have finally been made intelligible to modern man through the findings of modern science.

On the positive side, one can agree with the author that many of the findings of the life and social sciences have indeed corroborated the basic teachings of Jesus; if the teachings were true, one would expect this. But on the negative side, it is hard to agree with the author when he finds all sorts of scientific precursors in the plain language teaching of Jesus, and suggests that we will continue to obtain new insights into the teachings of Jesus as our scientific understanding increases. He invokes the ultimate reductionism: he writes as if the straightforward personal and spiritual insights of Jesus drawn from everyday life are somehow not truly understood until we understand the scientifically describable mechanisms related to them.

The author, Osborn Segerberg, Jr., is described as "an author, science writer, investigative researcher and journalist." He has written for the news service in the three major television networks, United Press, and television and radio stations in New York City. It is said that this book "stems from ten years of research, thought, study and rethinking a lifelong experience with Christianity."

The format adopted is the proposal that what Jesus meant by "the kingdom of God" is cloaked in mystery: "during nearly two millennia Christianity has grown to be the world's largest religion without Christians knowing what is meant by the central tenet of Jesus' teaching" (p. 32). We are only beginning to understand that the kingdom of God is really a state of mind. "His insights were so profound that his kingdom could not be discovered until we gained the requisite knowledge about life" (p. 213). Hence, "all eschatological references to some kind of future supernatural transformation must be judged as overzealous interpolations to satisfy the commonly-held beliefs and credulity of the times" (p. 210). All biblical passages to the contrary can be explained away because "Kingdom of God, kingdom of heaven, the life or life are the only code phrases for his concept of the good life" (p. 211). Thus, "thy kingdom come" in the Lord's Prayer, and Jesus saying that His kingdom was not of this world, are "clearly" not describing what he meant by the Kingdom of God in general.

Part one of the book, "The Search for the Kingdom of God," involves a fair amount of historical detail describing other early religious beliefs: the Gnostics, the Essenes, etc. Part two offers "Keys from the Life Sciences," with one

section on proposed inputs from biology, a second on inputs from psychology and neurobiology, and a third on inputs from the social and ecological sciences. The author is apparently infatuated with the apocryphal Gospel of Thomas and invokes it on frequent occasions to clear up "confusions" or to supplement "inadequacies" of the canonical Gospels.

Readers who take the book seriously will have to believe that: the Parable of the Sower shows that Jesus had deciphered the principles of evolution and the survival of the fittest; His refusal under temptation by the Devil to throw Himself off the top of the temple was an acknowledgment that "God's law of gravity . . . prevails everywhere, forever, and cannot be abrogated" (p. 96); the parables involving vines and fig trees show that Jesus understood genetic invariance; the Parable of the Mustard Seed "emphasizes the power and accomplishment of growth itself" (p. 103); the Parable of the Talents was based on "a fundamental law of life . . . Grow or die" (p. 106); the miracles of the Loaves and fishes "expresses the principle of biological multiplication perfectly" (p. 108); "many are called, but few are chosen" is an expression of "the irresistible force of life's growth and . . . the inevitable consequences: enormous losses" (p. 114); Jesus' teaching, "For he that hath, to him shall be given: and he that hath not, from him shall be taken even that which he has," contains the secret of the selecting process in biological growth; and Jesus' words, "In my Father's house are many mansions" is "life's credo for successfully colonizing the planet" (p. 118). Finally, "Sometime after the parable of The Sowers was spoken the gospel of the kingdom was de-emphasized. Its place was taken by the Messiah. the audience was given what it wanted" (p. 127).

Actually, many of the insights cited in the last two sections of the book are much more in line with an appropriate harmonization of Jesus' teaching with some of the insights of modern scientific thinking in these areas. It is too little, too late. Soon the author returns to his principle theme outlined in the quotes given above.

There may be those who could find illustrations and sermon examples in this book, but the general reader will come away with only a very distorted view of Jesus, His teachings, and the kingdom of God.

Reviewed by Richard H. Bube, Professor of Materials Science and Electrical Engineering, Stanford University, Stanford, CA 94305.

NEITHER SLAVE NOR FREE: Helping Women Answer the Call to Church Leadership by Patricia Gundry. San Francisco, CA: Harper & Row, 1987. 151 pages. Hardcover; $13.95.

The title of Patricia Gundry's fourth book alludes to Galatians 3:28, a key verse to Christian feminists. These words could be removed from context in order to express frustration with traditional restrictions upon women's participation in church leadership, as covered by the author, as well as to reflect the transitions in status. Her previous works (*Woman Be Free!*, *Heirs Together: Mutual Submission in Marriage*, and *The Complete Woman!*) provided more detailed examination of biblical texts bearing upon the sexual equality issue. Here, she presents a biblical perspective rejecting vengeful female chauvinism and seeking mutual understanding no less than admission of equality for both halves of the human race. Coming from a fundamentalist tradition, Gundry is averse to the hierarchies of clergy, yet most of her opinions are shared by clergy of other denominations, such as the American and Canadian bishops in the Anglican communion. She stresses the example of Dwight L. Moody in church leadership, rather than those formally ordained.

The author has struggled to overcome limitations due to her tradition, learning to recognize that flexibility may offer strength rather than only compromise. Thus, church members who disagree with her are not condemned or bitterly attacked.

While history and hermeneutics are covered, this is primarily a personal account with frequent quotations from letters and appeals to experience. Her style is conversational; applying anecdotes, popular psychology, and offering simple advice. She supplies useful lists of literature and support groups, and gives fascinating case histories.

This reviewer became readily empathetic, despite all contrasts in background, because the pastoral concerns in this book were so well expressed with individual encounters. A fine sense of irony marked the story of being shouted down by a woman who vehemently insisted that their sex must remain silent. Cost of discipleship was underscored by traumatic experiences, particularly in regard to her husband losing his job when an anti-ERA group distorted the author's remarks on equality in a biblical context. That painful development increased her determination to maintain ethics which were neglected by well-intentioned special interest groups on each side of the issue.

The ethical concern, search for peace and justice, and theological considerations make this book relevant to other controversies. Patricia Gundry approaches a delicate issue carefully as well as honestly, in a pattern which is applicable to similarly divisive issues, such as the history of this planet. She distinguishes between God and the church, and notes that "we must also begin to separate truth from experience" (p. 70). These separations could be paralleled in science for improved understanding.

Admirably unpretentious, she speaks of the advantage from being without credentials and authority, having to be prepared and dependent upon the grace of God (p. 97). Invitations came to speak in places closed to higher-profile feminists, because she was non-threatening. Here again is a lesson for dealing with diverse issues: seeking peace amid confrontations.

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THE WELL-SPRING OF MORALITY by J.D. Thomas. Abilene, TX: Abilene Christian University Press, 1987. 112 pages. Hardcover.

The author says that the origin of our sense of right and wrong is the really important issue in this study. Thomas has served as an elder of a church, has written numerous books and articles, and has spoken in thirty countries of the world. Education, reason, pleasure for the many, Stoicism, and evolution do not produce an absolute ethical or moral standard but a "public moral standard, based upon the authority of God's revelation" is capable of doing it. He believes, since "human nature is basically the same in all ages . . . a universal moral standard is not at all illogical or unreasonable." It is reached by faith in God's revelation.

Thomas maintains that "the past thirty-five years, more or less, have witnessed a tremendous moral change in America." This change has resulted in the sexual revolution, home and family life disintegration, greater greed, the lust for power, and drug abuse. The ways of knowing the solutions are reason, empirical observation, intuition, and authority. A thorough study of authority, including aberrant perspectives, is made, and reasons for accepting the Bible as the ultimate authority are given. The Sermon on the Mount is considered the greatest moral summary ever delivered. After stating the major philosophical arguments for God's existence, Thomas analyzes principles of interpretation of the New Testament and ways of applying the standard of Christian morality to the ethical problems of today, as previously mentioned, as well as to abortion, gambling, and suicide.

At the end of each chapter, review questions stimulate one's memory and reaction to the chapter's ideas. A bibliography is appended, but no index is included. This valuable book will increase one's appreciation for today's moral dilemmas and their treatment.

Reviewed by Russell L. Mixter, Professor Emeritus of Zoology, Wheaton College, Wheaton, IL 60187.

Letters

Ananias, Sapphira, & Christian Community

I have received several letters similar to the one printed in the journal by David F. Siemens, Jr. (Vol. 39, No. 4, Dec. 1987, p. 250) about my Dec. 1986 *JASA* article on community, but hesitated to respond because it is my perception that my original discussion was not ambiguous in the least. I certainly did not imply, or even mean to imply, that Ananias and Sapphira died *because* they lacked community, and for this reason withheld part of what they had promised. I had always understood that it was because they, as the Scripture clearly states, lied to the Holy Spirit. I did not discuss this incident extensively, partly so as to fulfill the editor's requirements to reduce the length of my original manuscript. I not only did not state that they were killed because of not expressing community, but clearly stated that I used this passage only to *illustrate* that "community concern was not a Christian option, but a requirement that was practiced by all of the faithful." My sources for this conclusion were a number of Scriptures as well as the early Christian historical records which discuss extensively this behavior.

The issue is, why did Ananias and Sapphira feel compelled to give such a large amount of money to the church so that it could aid the community? It was obviously because they perceived that this act was a Christian obligation. Where did they get this view? It was due to the teachings of the early church, as recorded both in the Scriptures and in the early church writings penned by the early Christians themselves. They obviously had second thoughts about giving up so much, and if it were not for the values and norms as well as the pressure from the Christian community to donate money from their sale, they certainly would have not felt so compelled. We cannot assume that the prominent leaders in this church had deceitfully convinced Ananias and Sapphira that they were giving the money to God, but the church leaders were in fact appropriating it for their own use. I concluded that the above was obvious, and needed no elaboration in my article. I am thus rather surprised that one could so greatly misinterpret my discussion to the extent of claiming that I implied that their deaths were due to withholding "part of the sales' proceeds." I consulted a number of commentaries and Bible dictionaries and found that, without exception, all of those that I consulted fully support the interpretation discussed above. For example, *The Interpreter's Dictionary of the Bible* states that Ananias was a Christian who noted "the favorable attention bestowed upon those Christians who sold their property" and so brought the receipts of the property that they sold "to the Apostles for distribution among the believers" and with the connivance of his wife, Sapphira "held back a portion of the price, while pretending to give the entire amount to the Apostles for distribution." The act of giving to the poor was thus taught as highly laudatory by the church. Otherwise they certainly would not have felt the compulsion to, not only withhold part of their sale funds, but also to deceive others relative to their doing so.

Some commentators, such as *The Interpreter's Bible* vol. 9, p. 74, used this discussion as a basis to discuss the extreme importance of community in Christianity. The aforementioned reference noted that many persons "pursue their private ways with little or no concern for the rest of mankind" and that many of these "insulated units of humanity finally break down into lonely fragments of forlorn life." This discussion then notes that many people in the former state eventually come to the realization that community is, indeed,