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**VISIONS OF CREATION
IN THE LATE MODERN AGE**

By

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In loving memory of
Ruth Stockwell Wheeler,
whose devotion and faith showed the way

Why are we in such slavery, to men of that degree;
Bound to support their knavery when we might all be free;
They'r nothing but a canker, we can with boldness say;
So let us hoist the anchor, left Priest-craft float away.

—Timothy Waterous,
in *The Battle Axe and Weapons of War:
Discovered by the Morning Light,
Aimed for the Final Destruction
of Priest-craft*, 1811

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ABSTRACT

Modern society has made unprecedented scientific and technological advances toward understanding, if not mastering, the world in which we live. Yet the complexities of life in the modern world also disclose a good measure of epistemological and metaphysical uncertainty, amid a wealth of practical knowledge. While contemporary society offers numerous frameworks with which to approach such concerns, these uncertainties reveal perceived limitations in the ability of science and technology to address questions of ultimate meaning and value.

In fact, over the past hundred years, the tools offered by science have often been presumed to be in fundamental conflict with those offered by religion, especially in accounting for how the universe came to be as it is today. This thesis examines four popular versions of the creation story—*creation science*, *intelligent design*, *theistic evolution*, and *creation spirituality*—and the manner in which their principal proponents have, over the past generation, offered distinct visions of science, humanity, and the divine. Specific attention is paid to how, by combining elements of science and religion, these cultural entrepreneurs address the legitimate source and scope of knowledge and revelation, amid competing claims to truth, in a highly pluralized milieu.

Introduction

Modern society has made tremendous scientific and technological advances toward understanding, if not altogether mastering, the world in which we live. Modernity's successes and failures have been far ranging; its consequences, both intended and unintended, frequently reveal a stranger that has been invited to live and thrive among us, in the guise of a familiar friend, in a taken-for-granted world. Yet the complexities of modern life also disclose a good measure of epistemological and metaphysical uncertainty amid a wealth of practical knowledge. While contemporary society offers numerous frameworks with which to approach competing concerns, such uncertainties point toward perceived limitations in the ability of science and technology to address, conclusively, questions of ultimate meaning and value. The various *-isms* of modern life, rather than resolving these matters, throw into stark relief the difficulties that humans encounter in trying to construct a socially consistent and coherent view of the world.

The ideals of progress and mastery, as conceived in the modern West, surely remain operative in the American context. The dominance of these ideals in our culture requires that individuals come along for the ride, regardless of their respective levels of cognitive and normative comfort along the way. While some members of American society regard modernity as a journey of great adventure and untold promise, others are less confident about or downright hostile to the notion that absolutes are not assured. The pace of such a journey, as well as the overall distance traversed, draws attention to

conceptions of human agency, autonomy, and authority, as well as humanity's relationship to the natural and supernatural realms.

Learning to read the signposts along the way is a major facet of modern life. What once seemed obvious often can no longer be regarded as such. The culturally authoritative (Protestant) ethos that informed Americans' public and private lives has been further eroded by the globalization of our economic, political, and social spheres. Indeed, what once helped to shape a relatively stable sense of reality, history, and values is now open to scrutiny and reevaluation from seemingly countless directions.

For the contemporary American who engages himself daily in the social world, there are many challenges: a plurality of life-styles; a bewildering array of political, social, and economic interests; intermittent clashes of culture, in which odd bedfellows form expedient though short-lived alliances; and direct conflicts and confrontations with what, despite our efforts, still appears to be a harsh and unpredictable world. The need for clarity, if not certainty, is especially evident when one considers the pressures placed on individuals and social groups to keep pace—or to get out of the way.

Over the past hundred years, modern individuals have had access to a variety of cultural tools with which to manage their understanding of the world and their relationship to the cosmos. Most often, however, the tools offered by science have been presumed to be in fundamental conflict with those offered by religion, in terms of explaining how the universe came to be as it is today. Over the past generation or so, a number of enterprising educators have sought to demonstrate that elements of science and religion can be combined. Some of these cultural entrepreneurs have emerged from

predictable quarters within American conservative evangelicalism (in which creationist arguments have been circulating long enough to generate a good deal of internal diversity), while others have come from directions that are anything but conservative in their orientation.

This thesis will examine four versions of the creation story, each of which presents a distinct vision of science, humanity, and the divine, and each of which addresses the concerns of a particular social community. In addition to the evident desire to reconcile science and religion, these belief structures also signify an increasing gap between elite and popular conceptions of knowledge in contemporary America. Each belief system engages the dominant intellectual engine of modern society, science, in an attempt to make sense of the world and humanity's place in it, without surrendering the search for ultimate, or transcendent, meaning. Each has a story to tell, about a specific road taken—and a preferred destination.

The Belief Structures

Three Facets of Creationism

Contemporary creationism, at its most superficial level, reflects an ongoing response from within conservative Protestantism to the challenges posed by modern science, particularly natural science and the theory of evolution. Today's variety of creationism reflects a continued dialogue with modernity, but with significant polemical twists in two cases. Overall, current efforts signify a bold revision of the creationist project, in which

the presumably outmoded and discredited creationism of yesteryear has adopted a new and, to varying degrees, more sophisticated intellectual identity.

This study considers three facets of contemporary creationism—*creation science*, *intelligent design*, and *theistic evolution*—all of which support the notion of a universe that has been created and sustained, to one extent or another, by a supernatural agent or force. It should be noted, as well, that there are as many Protestant creationist narratives as one might care to shake a stick at, but these particular points of access have been selected in order to illustrate creationism's concerted efforts not only to appropriate the tools of modern science but also to engage the mainstream culture at large.

Creation Science

Rather than remain humbly situated in the silent retreat that followed the infamous Scopes trial of the early twentieth century, the self-styled creation scientists who first emerged in the 1960s, and subsequently gained influence within fundamentalism throughout the 1970s and 1980s, have based their arguments on a mode of refutation that is intended to beat evolutionary theory at its own game. Creation scientists seek to unmask bias and debunk the theory of evolution by appealing to and engaging in what are considered to be the universal principles of science.

Efforts to reconcile the modern scientific enterprise with the inerrancy of the Bible's account of creation, exactly as presented in Genesis, reflect the power and privilege afforded science as an epistemologically valid framework. As such, creation science signals a notable capitulation to the dominance of the scientific worldview and

provides a worthy example of “cognitive contamination” in progress. The flip-side to this situation is glimpsed, as well, in a program of “cognitive containment.”

Henry M. Morris, president emeritus of the Institute for Creation Science and a founding leader of the movement, has dedicated his adult life to giving creationism what amounts, in today’s parlance, to an “extreme makeover.” Morris has attained the status of an *éminence grise* within the creation science movement and among fundamentalists. His unyielding program seeks to reconcile biblical literalism with universal scientific principles and thereby illuminates the tensions and ambiguities inherent within fundamentalism’s response to the modern world.

Intelligent Design

In the early 1990s the intelligent design movement emerged to reconfigure a traditional argument that focuses on the irreducibly complex nature of the natural world and the logical necessity of a master planner. Intelligent design provides a robust intellectual response to some of the most problematic issues encountered within creationism and seeks to avoid the stigma attached to fundamentalism. By instituting a new plan of attack upon the epistemological and metaphysical foundations of scientific naturalism, intelligent design stakes a claim that extends to both elite and popular conceptions of knowledge; it also directs attention to the significance of “insider” and “outsider” status.

This rapid-fire reconfiguration was guided in the movement’s early stages by the movement’s unofficial spokesman, Phillip E. Johnson, who batters theistic and non-theistic opponents alike with the rigors of logic, drawn from his experience as a legal

scholar. The recent furor in Dover, Pennsylvania, reflects the reengagement of an old argument—dressed in new garb and advanced by articulate academics.

Theistic Evolution

The third facet, theistic evolution, presents a particularly wide spectrum of views. Here, the reconciling modes of creation science and intellectually stringent framework of intelligent design meld with more conventional views, moving in the general direction of integrative historical, theological, and scientific relevance. Such a standpoint is assailed by opponents as an unacceptable accommodation to secular culture; indeed, creation science and intelligent design were each launched as tactical assaults on trends that have accepted such adjustments.

Physicist and astronomer Howard J. Van Till focuses on reinvigorating a theologically aligned model of integration. His efforts to avoid needless controversy point to considerable tensions within the broader evangelical position vis-à-vis the scientific worldview and secular culture. For those Christian believers who can part company neither with a biblically informed perspective nor with a scientifically satisfactory formulation, Van Till wishes to offer a more intellectually honest approach than he thinks is found within either creation science or intelligent design.

Creation Spirituality

Creation spirituality emerged initially, during the late 1970s and early 1980s, as a contretemps between the hierarchy of the Catholic Church and a renegade Dominican

priest whose attempts to revivify the essence of early Christian belief and practice sparked controversy. A socially, theologically, and scientifically integrative movement, creation spirituality rejects an anthropocentric view of creation and instead embraces a cosmic perspective that is not only compatible with the modern scientific outlook but embraces evolutionism to the *n*th degree. By dispensing with what is considered to be purely dogmatic and counterintuitive precepts, this movement attempts to shake loose—indeed, to dislodge permanently—the roots of traditional Augustinian Catholicism’s acceptance of original sin, in support of an eco-theologically correct cosmology.

Matthew Fox, the aforementioned renegade, was formally dismissed from the Dominican order in the early 1990s, for his refusal to curtail his teachings. Now an ordained Episcopal priest, the founder and leader of the creation spirituality movement focuses his energies on promoting the wisdom of indigenous peoples and advocating the recovery of what he asserts is Christianity’s oldest tradition, as well as reinvigorating theologies and practices that support personal wholeness, planetary survival, and universal interdependence.

The wisdom of divergent traditions and cultures is combined in creation spirituality with an emergent scientific understanding of the universe. Central to its message are the notions that God permeates all things and that humanity was created in a state of blessing rather than tainted by original sin. Fox’s vision is augmented by the “geologist” Thomas Berry and the physicist/mathematical cosmologist Brian Swimme, both of whom have been greatly influenced by the thought of Teilhard de Chardin.

Berry, a Passionist priest and retired educator, is known as a cultural historian whose work presents a synthesis of Eastern and Western theological and cosmological traditions. His “New Story” offers an updated cosmology for implementing the type of social, economic, and political change that is deemed necessary to save the planet. Berry has focused principally on offering the existential means with which to save humanity from a self-induced pathological alienation.

Swimme concentrates on facilitating an evolved consciousness that integrates the lessons offered by quantum physics, molecular biology, and chaos theory with an ethically informed ecology and in which science is the source of revelation. He offers his expertise in translating the specifics of one, an empirically and theoretically sophisticated knowledge base, into a general understanding of the other, a metaphysical foundation for ecologically correct living.

Examining the Belief Structures

The primary literature within these movements is rich in argument, counterargument, and, to a large degree, of a furious debunking nature. Each movement asks the modern individual to reconsider his or her attachment to specific belief structures. Each appears to seek the emancipation of society from the perils of false belief. Each advocates radical renewal or reform, through a distinctive brand of intellectual activism. Significantly, each attempts to locate the *legitimate* source and scope of knowledge and revelation, amid competing claims to truth.

Such claims reflect the arrangement and manipulation of myriad ideas, interests, and social facts in a pluralized world. One is left to ponder the extent to which average Americans are even capable of understanding some of the complex arguments presented, or whether we, as a society, are content to leave the arguing to the experts. The status-interests of elites are crucial in this respect, wherein matters related to intellectual honesty and academic freedom are placed alongside matters of ultimate meaning.

A fluid line exists between cognitive and normative objectives within each of these belief systems. This line bisects claims regarding the ultimate *perfectibility* of humanity. Both popular and elite conceptions of science lie at the heart not only of how claims to certainty are judged but also an understanding of how the game is to be played. Put differently, a substantially pluralized milieu focuses our collective and individual awareness on the belief structures of those social groups who “run the show,” to use historian Martin Marty’s phrase, and those who have been shut out.

This thesis looks at how four creation stories in particular relate to concepts of cultural authority and religious identity in the modern world. Each of these stories is called upon to sustain a robust search for meaning in an era that is marked by dissension, the vociferous proclamations of the rights of individuals and social groups, and a very palpable sense of the need for unity and order amid material and spiritual uncertainty. This is no small task, to be sure. As divergent as they might appear at first glance, these systems of realignment reflect the desire of humans to access verities that do not fly in the face of a suitably modern understanding of the world and the universe.

Part I

Chapter 1

Creation Science

The historian George Marsden has observed that “a fundamentalist is an evangelical who is angry about something.”¹ The social reality within which contemporary creationism is situated illustrates that emotion is an especially compelling factor. Creation science is a potent manifestation of that anger, as well as the expression of a decisive commitment to combat the social conditions that underlie it. This militant stance, so ably described by Marsden, is evident in the arguments presented by creation science against the twin evils of modern pluralism: materialism and relativism.

Secularizing forces within American culture have prompted ardent responses from religious actors, all across the theological spectrum, throughout this nation’s history. But it is the perceived *victory* of anti-theist frameworks, in particular those established and supported by a culturally dominant scientific elite, that have prompted the ire of a subset of conservative Protestants over the last half-century. The social context for this response is especially evident in broader terms that relate to the pluralizing influences of higher education and of the secularization that has taken place within academia.

The historian Ronald Numbers has noted the impact of these influences on the post-secondary education of conservative Christians, particularly fundamentalists. Such conditions have accounted, in large part, for the approaches taken by proponents of

¹ George M. Marsden, *Understanding Fundamentalism and Evangelicalism* (Grand Rapids: William B. Eerdmans Publishing Company, 1991), 1.

creation science, intelligent design, and theistic evolution in recent decades. Whereas Bible believers of the mid- to late-nineteenth and early-twentieth centuries subscribed to creationist beliefs precisely because the Bible told them it was so, and the beliefs functioned as part of their taken-for-granted knowledge, subsequent generations attended institutions of higher learning that in turn reflected secularizing and relativizing trends already well under way in other facets of a rapidly modernizing (and urbanizing) nation.

It is difficult to tease apart the various strands that have converged to initiate what sociologist Christian Smith characterizes as a veritable revolution in the realm of overall cultural authority within the modern Western world, inasmuch as creationism today embodies the powerful resurrection and careful elaboration of culturally resonant ideals. Marsden traces creationism's intellectual roots to our nation's allegiance to Scottish commonsense realism, which allows for a broad diffusion of knowledge among individuals and delimits an elite's overall claim to authority. In addition, he notes within creation science a stringent, Baconian understanding of science based on inductive reasoning. This observation is refined by sociologist Michael A. Cavanaugh's view that creation science demonstrates a peculiar penchant for "doubting Thomism" that is well situated within a tradition of Protestant scholasticism.²

The anthropologist Susan Friend Harding notes that the approach of conservative Protestants to creationism changed considerably in the 1960s and 1970s. It was during this period that fundamentalists became especially inflamed by—among other things—neo-evangelicals' flirtations with "progressive creationism," which allowed that each day

² Michael A. Cavanaugh, "A Sociological Account of Scientific Creationism: Science, True Science, Pseudoscience" (PhD diss., University of Pittsburgh, 1983), 90.

within the Genesis account could encompass vast ages of evolutionary development, with God stepping in to activate certain processes. Henry M. Morris and John C Whitcomb stepped forward to lead a powerful fundamentalist revolt against accommodation. Their goals marked a distinct change, as Harding observes: “Whitcomb and Morris hoped to do more than recoup lost ground by promulgating a strictly literal creationist position. What made their rhetoric of strict creationism culturally productive and innovative rather than merely reactive was its assumption of the very apparatus that had defeated them, the apparatus of science.”³ Significantly, the appropriation was based on an inductive, commonsense understanding of what is empirically available to *all* Bible believers. This view reflected how a newly emerging cohort of college-educated creationists approached secular culture—conceding, in effect, the need for overall plausibility.

It is crucial to note here, nevertheless, that what may appear to the merely curious or especially displeased onlooker as a monolithic movement is, and has long been, a tremendously messy affair: The transdenominational submovements that comprise fundamentalism and evangelicalism are as varied and complicated as the secular culture that creationists seek to clobber. To this, the interested—if somewhat confused—observer must add an additional significant feature: the self-imposed separatism (notably premillennialist) that characterizes the fundamentalist identity. In the end, it is a highly specific understanding of humanity’s relation to a transcendent reality, one that defines the lives of individuals and the course of human history, which pulls together the divergent pieces for adherents.

³ Susan Friend Harding, *The Book of Jerry Falwell: Fundamentalist Language and Politics* (Princeton: Princeton University Press, 2000), 214.

Harmonizing Science with the Bible

As the acknowledged founder of the creation science movement, Morris remains today, at age 87, the most prolific and indefatigable champion of fundamentalist teaching. His national prominence began with the 1961 publication, with Whitcomb, of *The Genesis Flood: The Biblical Record and Its Scientific Implications*, in which they sought to harmonize belief in a recent creation, as established in the Bible, with scientific principles. *The Genesis Flood* galvanized Bible-believing Christians in a manner that the larger culture neither understood nor appreciated at the time but that nonetheless served to acquaint a segment of conservative Christians with the certainties of modern scientific principles, if not actual practice.

Morris has acknowledged that, as a youth in Texas, he was a more or less religiously indifferent Baptist, although he did generally accept the notion of theistic evolution. Shortly after graduating, Phi Beta Kappa, in 1939 from the Rice Institute, in Houston, he became convinced of the infallibility of the Bible as God's Word, and soon thereafter became an enthusiastic advocate of the views of George McCready Price, a Seventh-Day Adventist and amateur geologist whose model of earth history posited a worldwide flood.

In 1961, after Morris had earned a PhD in hydraulic engineering from the University of Minnesota, he and Whitcomb (a New Testament scholar and fellow disaffected member of the neo-evangelical American Scientific Association) published *The Genesis Flood*, which not only reintroduced Price's views but also asserted that biblical catastrophism was supported by scientific principles and physical evidence. This

text's assertions remain in force today for fundamentalists. The preface to its sixth edition, in fact, can be read as a manifesto:

We believe that the Bible, as the verbally inspired and completely inerrant Word of God, gives us the true framework of historical and scientific interpretation, as well as of so-called religious truth. This framework is one of special creation of all things, complete and perfect in the beginning, followed by the introduction of a universal principle of decay and death into the world after man's sin, culminating in a worldwide cataclysmic destruction of "the world that then was" by the Genesis Flood. We take this revealed framework of history as our basic datum, and then try to see how all the pertinent data can be understood in this context.⁴

Thus Morris and Whitcomb rehabilitated Price's idiosyncratic ideas and augmented his emphasis on the significance of the Bible's account of the Noachian deluge. In presenting what they contended was physical evidence for a recently created earth, they wished to discredit uniformitarian geology, which they argued could not be reconciled reasonably with the divinely revealed biblical account.

Morris's own educational and professional training is integral to understanding the overall character of creation science as it emerged in the 1960s and as it developed thereafter, for his expertise in hydraulics and engineering forms the basis of his argument.⁵ It also signals, as noted, the appearance of a cohort of creationists who were situated within an emerging knowledge class.

The direct correlation of the biblical record with the physical record is the crucial component of how creation science relates science to divinity and to humanity. In

⁴ John C. Whitcomb and Henry M. Morris, *The Genesis Flood: The Biblical Record and Its Scientific Implications* (Phillipsburg: Presbyterian and Reformed Publishing Company, 1961 [forty-fourth printing, 2003]), xxvi.

⁵ Numbers and Cavanaugh each note the significance of educational and vocational factors that strongly influenced the character of the creationist revival in the 1960s and 1970s. Some of these factors, such as the preponderance of engineers among the ranks of both leadership and adherents within the movement, remain evident today.

contrast to Price, Morris did not allow for the presence of a lifeless earth before Eden. Rather, he argued that the entire universe was no older than 10,000 years and that some physical laws, namely the second law of thermodynamics, did not exist before Adam and Eve sinned. A faithful reading of Scripture stands as the timeless basis for a truthful and scientifically accurate reading of earth and human history; indeed, Scripture itself is considered to be a factual, journalistic account of earth history. God is regarded as transcendent and authoritative in all matters relating to spirit and to matter, and nature as the record of God's will for humanity, in all places and epochs. Creation therefore reflects God's intention and purposes, throughout time and space; it likewise bears witness to the consequences of humanity's fall from grace. The dominant image of humanity is one of sinful and disobedient creatures. Science, as a human activity, merely reflects the significance of an even greater ultimate reality, for which a commonsense realism is sufficient to apprehend the truth of Creation.

The fact that *The Genesis Flood* found a popular audience indicates that a portion of American Bible believers could plausibly embrace such an approach.⁶ It also reflects the determination of fundamentalists and neo-evangelicals to take a firm stand, particularly among their own ranks, regarding just how far modernity would be allowed to penetrate conservative Christianity. Generally speaking, although the book did attract attention, its strident claims to legitimacy were ignored by the secular scientific

⁶ Numbers discusses creationist efforts in Great Britain, Australia, and New Zealand during this period. Cavanaugh similarly notes the Anglo-Saxon character of creation science, particularly in relation to its foundations in Protestant scholasticism and religious rationalism.

community, and neo-evangelicals tried their best to ignore it as well. This merely convinced Morris and Whitcomb of their righteousness in opposing the dominant culture.

Candidly acknowledging that biblical presuppositions colored their conclusions, Morris and Whitcomb noted, “But uniformitarian scholarship is no less bound by *its* own presuppositions and these are quite as dogmatic as those of our own! The assumptions of historical continuity and scientific naturalism are no more susceptible of genuine scientific *proof* than are Biblical catastrophism and supernaturalism.”⁷ This sort of approach, which I call the “presuppositional gambit,” stands at the center of all creationist claims, regardless of whether they are proponents of a young earth, an old earth, or an in-between earth. It functions, to use sociologist Peter Berger’s quite apt phrase, to relativize the relativizers. In the case of Morris and Whitcomb, the strategy accompanied fundamentalists across the threshold as they entered what Cavanaugh describes as an “alternatives industry,” thereby “creating the appearance of alternate intellectual positions.”⁸

Significantly, Morris asserted in later works that the Bible contains actual scientific claims. If the Bible could be shown to demonstrate precise scientific information, it surely cannot be judged to be merely allegorical. The point is not merely that the Bible contains scientific information; it also *predicts* certain scientific facts exactly as they are understood today.⁹ This pronounced focus on scientific premises is

⁷ Ibid, xxi.

⁸ Cavanaugh, 74.

⁹ The concern for prediction reflects Morris’s personal interest in the Book of Revelations. See Henry M. Morris, *The Revelation Record: A scientific and devotional commentary on the prophetic book of the end times* (Wheaton: Tyndale Publishers and San Diego: Creation-Life Publishers, 1993). Tim LaHaye and

evident in *Scientific Creationism*, which was published in two editions, one for a general audience and one for students, in 1974. Each edition presents evolutionism and creationism as equally weighted scientific models. Here there can be little doubt that Morris wanted to disassociate himself from the “crank factor” inherent in appearing to be the immediate successor of Price, and thereby establish for himself a more credible, professional reputation. In addition, broader educational and legal concerns were becoming increasingly important within the wider culture, which in turn required a heightened commitment to science education. Morris was astute enough to realize that his position as a leader within a reconstituted creationist movement required a degree of flexibility. If his own theological commitments were not particularly flexible, at least his responses to the realities of his own time and culture were, and that to a large degree has been true of modern fundamentalism’s ability to package and promote its message.

But, Is It Science?

Ultimately, however, a serious dilemma confronts Morris and those creationist colleagues who take this particular tack: The account of creation as presented in the Bible remains the same, regardless of what scientific principles are supplied as evidence for God’s purposes. The various scientific disciplines with which Morris and creation scientists must engage, and the theories advanced within these highly specialized fields of investigation, continue to develop. Morris’s books and tracts are filled with recycled materials, of his own and that of ICR colleagues, so that arguments remain much the

Jerry Falwell contributed forewords to this publication. Notably, this text’s premillennialist views are not officially endorsed by the Institute for Creation Research, the organization founded by Morris in 1970.

same. Thus he does not appear to be making demonstrable contributions to science.¹⁰ In this sense, it would appear that merely assuming the *role* of a scientist is adequate for the purposes of adherents who share Morris's ideological commitments. Cavanaugh calls this feature of creation science a "parody of skepticism."¹¹

Scientific Creationism reflects the advantages gained by the creation-science movement since the initial publication of *The Genesis Flood*. Subsequent works have affected a much more polished and substantially less hysterical tone, which no doubt reflect the social and religious capital accrued by the creation science movement as a whole within fundamentalism over the past forty years.

The technological immediacy of the Internet in reaching Bible believers and in advancing creation science's message is likewise notable, inasmuch as practically every article, booklet, or tract ever authored by Morris is available online. "Creation and Its Critics: Answers to Common Questions and Criticisms on the Creation Movement," a booklet written and published by Morris in 1986, subsequently posted and copyrighted in 2004 on the Institute for Creation Research's Web site, differentiates between what might be regarded as classic Christian creationism and the creation science construct. ICR's institutional function as a resource is quite clear in this context. Morris's role as founder (and, now, president emeritus; his son, John, serves as president) of both the institute and a leading light in the movement lends additional credibility.

¹⁰ He does, however, repeatedly point to "research" conducted by ICR staff as conclusive evidence that his arguments are, and always have been, headed in the right direction. The institute's activities include expeditions to Mount Ararat in search of Noah's ark and to the Grand Canyon, as well as an accredited graduate degree program.

¹¹ Cavanaugh, 7. Harding also notes a similar inclination toward parody, specifically with reference to an exhibit that appeared in a creation science museum.

The distinction between biblical creationism and creation science reflects how Bible believers regard themselves and the movement: To put it politely, fundamentalists are no longer willing to be the butt of people's jokes about being behind the times. Direct engagement within the cognitive territory of science means that fundamentalists intend to show the world, and themselves, that they have not been left behind. Morris most assuredly is the master of an apologetic that informs Bible believers that they can, and indeed must, challenge the surrounding secular culture.

The question-and-answer format of "Creation and Its Critics" provides a handy guide for the rebuttal of assertions regarding creation science's agenda. The text also presents a type of shorthand that adherents can use to remind themselves of their cause. The move to put creation science on a legitimate par with evolutionary science must occur on a number of fronts; public education is one among many venues (though it is the political vantage point of public education that attracts the most attention).

Yet Morris does not really appear to want to convince the general public of creation science's message; his efforts are aimed at bolstering fundamentalist beliefs from within and reinforcing Bible believers' resolve to stay the course. At the heart of creation science's quarrel with evolutionary theory lies a disdain for the type of speculative reasoning that is endemic to developmental explanations of creation. The level of abstraction used in deductive reasoning leads to conclusions that cannot be empirically observed or verified; commonsense realism simply cannot allow for what Morris brands "secondary assumptions." In the end, as Marsden notes, the all-knowing, all-seeing character of evolutionary science simply asks too much of Bible believers.

The creation science movement has been able to initiate and sustain a unified opposition to evolutionism by drawing attention to philosophical presuppositions and by offering what they consider a plausible alternative. Classificatory schemes based on a Baconian style of fact-gathering (both scientific and biblical, which are fused for Morris and fundamentalist stalwarts) offer Bible believers a comprehensive framework for their beliefs. Alas, a return to this sort of paradigm has not satisfied all opponents of scientific naturalism in their battle against the dominant secular culture.

Chapter 2

Intelligent Design

Proponents of creation science worked tirelessly, throughout the 1980s especially, to provide a coherent and credible critique of evolutionary theory. Such efforts attracted attention largely because a contingent of fundamentalists insisted on pressing its agenda within the visible sphere of public education. Not all adherents of creation science agreed with this tactic, however, and schisms have occurred regularly within the creationist movement (ICR itself is the result of a disagreement between Morris and creationist colleagues) regarding the push to gain recognition in public schools and the pressure to test this strategy in the courtroom.

While ICR contributed source materials and manpower in the struggle to achieve equal time in science education, the organization did not officially support or coordinate such controversial activities. Instead, it concentrated on disseminating its message among Bible believers, through an established network of independent churches; active engagement with sympathetic community organizations; personal appearances and the participation of staff in publicized debates; mass distribution of a variety of materials designed for use in home-schooling; production of radio and TV broadcasts as well as audiovisual materials; and expansion of a graduate degree program. Such strategies have rarely amounted to anything beyond preaching to the (paying) converted.

Overall, it has been a relatively easy matter for broad segments of American secular and religious culture alike to dismiss creation science as a marginalized venture of somewhat silly proportions (considering its boisterous claims, for example, to have documented fossil proof that dinosaurs and giant humans lived at the same time). Despite the fact that the movement has been feared in some quarters, given its influence within conservative political administrations and the visible backing of religious leaders such as Tim LaHaye and Jerry Falwell, creation science has lacked the type of intellectual prestige that would appeal, in a broad sense, to American society's affinity for expert knowledge. The most effective charge against the "particles-to-people" front, then, has not been led by advocates of creation science.

Instead, a threat has emerged with the intelligent design movement. Since its inception during the early 1990s, intelligent design has sought to accomplish what creation science was singularly ill-equipped to achieve: an intellectually compelling refutation of the concept of evolutionary theory. While it has continued a portion of creation science's argument—namely, that evolutionary theory constitutes "bad science"—intelligent design engages in a fearsome level of pointy-headed abstraction and philosophical wrangling that the lackluster apologetics of creation science simply cannot muster, especially given the literalist constraints of a biblical chronology.

An effective reformulation of the debate has required that reputable scholars dismantle what the movement's unofficial spokesman, Phillip E. Johnson, calls the scientific elite's "official story" of evolutionism. This goal is best achieved, in his estimation, by undermining the centrality of natural selection as a logical explanation for

the degree of complexity that is found in biological systems. He contends that arguments drawn from specific theological commitments—about the age of the earth or when life itself began, for example—have functioned as distractions that in turn have been exploited by creationism’s powerful foes.¹² Creation science thus has been given a swift kick to the curb, having been judged incapable of engaging mainstream science in a decisive battle. Not only is Johnson willing to launch a more comprehensive attack on scientific culture, he believes he is divinely called and uniquely suited to the task.

Counterfeit Science and Idolatrous Fantasy

Christianity Today, in a cover story from May 2000, characterized intelligent design as “an umbrella uniting various strategies for relating faith and science”¹³ and noted that the movement brings together groups that have otherwise become fragmented across various doctrinal and denominational divides. That rather polite assessment from within the evangelical context fails—understandably so—to reflect the degree to which a heightened intellectual stance appeals to an educated segment of the contemporary creationist fold, thereby lending a legitimized luster to cherished tenets.

The feature article, which discussed the creation–evolution controversy of 1999 in the state of Kansas, observed that intelligent design “is making surprisingly deep inroads

¹² Johnson’s own commitment to Presbyterianism is rarely offered, although he has mentioned it in interviews and acknowledged his congregation in at least one of his books. Critics regularly point to his conversion as an adult, following the dissolution of his marriage, as evidence that he has a religious agenda.

¹³ Nancy Pearcey, “We’re Not in Kansas Anymore,” *Christianity Today*, 22 May 2000; accessed online 20 September 2004, at <http://www.christianitytoday.com/ct/2000/006/1.42.html>.

into mainstream culture.”¹⁴ The work of Phillip E. Johnson reveals that intelligent design addresses the contemporary need for a high degree of epistemological plausibility. In straddling the ground covered by elite and popular conceptions of science, intelligent design professes neither a strict literalist young-earth, flood-geology ideology, nor brooks an easy accommodation to a more acceptable version of scientific naturalism as exemplified by theistic evolution. In fact, Johnson all but ignores the former while he vilifies the latter.

As the Jefferson E. Peyser Professor of Law at the University of California at Berkeley (recently retired to emeritus status), Johnson presents a professional pedigree that is unavailable to the more academically and culturally marginalized proponents of creation science. He received his undergraduate degree from Harvard University and a law degree from the University of Chicago; in addition, he clerked for United States Supreme Court Chief Justice Earl Warren. Johnson thus is an “insider” who is located professionally within a highly secularized culture of experts—a cohort that he skewers intellectually, on a regular basis, with apparent rhetorical relish. His role as a public intellectual who casts himself as an impartial observer is particularly important.

Of the fundamentalist camp, Johnson tends to say very little of a direct nature, other than to explain the literalist position and to comment that it routinely focuses on the wrong issues. He avoids direct engagement with scientific arguments and thereby relegates criticism of creation science to hostile scientists, secular and religious alike. (While it is not difficult to surmise he does so in order to avoid alienating prospective

¹⁴ Ibid.

adherents, it also reflects the fact that intelligent design lacks an identifiable scientific program of its own.) He does note on numerous occasions, however, that stereotypical views regarding fundamentalism itself—such as those held by scientists and other, likeminded materialists—reflect badly on those who are capable of arguing most cogently in support of an intelligently designed and executed creation. He treats ostensibly less offensive theories, specifically those offered across the spectrum of theistic evolution, as examples of the worst possible kind of accommodation to the prevailing materialist worldview.

As a rhetorician and logician, Johnson is relentless in his disputation of scientific naturalism. His insider status as an academic is not likely to be held against him by people who would, in the first place, prefer an intellectually rigorous approach; indeed, he invokes his professional status often. Nonetheless, he propounds a brand of populism not unlike that exhibited by Morris, as in: *Let the people see the facts and the evidence, and then judge for themselves what is true. The reality of God ultimately will win out—it always does.* The former view is explicitly stated, while the latter is implicit, but there is the consistent message that the irreducible complexity of nature reveals an intelligent cause; humanity, for its part, has been endowed with the ability to discern patterns in nature but is often misdirected in its exercise of free will and common sense.

The Web site for *The Wedge of Truth* reflects both an informed populism and a commitment to commonsense realism.¹⁵ In this text Johnson demonstrates his dedication to serving as a teacher, a friend, and a mentor whose intellectual honesty and courage as a

¹⁵ Cavanaugh characterizes this stance, in relation to creation science, as a type of naïve realism that is dedicated to the ideal of True Science. This element is quite evident in intelligent design, as well.

true scholar, amid a hostile and deceitful culture, will help to liberate a tragically misinformed and intimidated public: “Darwinism is materialist mythology. As a legal scholar I know how rhetorical tricks are used to hoodwink people into believing that some ideology must be accepted by all reasonable people because it is ‘scientific.’ I want to teach people to recognize the tricks, so they are not fooled when the scientific method is counterfeited.”¹⁶

Intellectual honesty is the crux of the matter for Johnson. Certainly one cannot expect honesty of materialist ideologues who would use trickery to protect their own status-interests, rather than rely on available evidence and the sort of open-minded inquiry necessary to advance true knowledge. Johnson claims that Darwinists are not engaging in genuine science; rather, they are so thoroughly misguided, they confuse a muddled philosophical reading of the natural world for a timeless truth. The result of scientists’ philosophical presuppositions that discard the possibility of a divine creator, Johnson asserts, is counterfeit science; evolutionists are, in effect, metaphysicians masquerading as scientists.¹⁷

One particularly ironic contention, on both sides of the creation–evolution debate, is that opponents insist on using a method for evaluating hypotheses and evidence that is better suited to science as it was understood and practiced in the nineteenth century. Each side appears to be accusing the other of being insufficiently modern, because each is, in reality, practicing philosophy rather than science. Yet Johnson

¹⁶ Phillip E. Johnson, quote appears in “Where can I find more information?” section, accessed online 20 March 2005, at <http://www.gospelcom.net/ivpress/wedgeoftruth/resources.html>.

¹⁷ Cavanaugh concludes that creationists, specifically proponents of creation science, are in actuality philosophers of science.

himself appears to have much more to say about what science is *not*, rather than what it is. In the end, science emerges as a philosophically useful tool. The prime cause simply is what it is, the ultimate source, for proponents of intelligent design; the exact scientific details regarding creation are as yet unknown, but they certainly aren't the result of blind luck or coincidence, as non-theistic evolutionists would have us believe.

Using and Abusing the Rules of Argument

Johnson's first published book on the topic of intelligent design, *Darwin on Trial*, addressed a scholarly audience. Here, he dismantles the logical and rhetorical opposition, scientific naturalism, in the effort to put an end to materialism's dominance within the American intellectual community and the wider culture. By pointing out errors in logic, such as fallacies and tautologies, in relation to early Darwinist foundations and the project of the more recent "neo-Darwinist synthesis," Johnson stakes clear cognitive territory, claiming that evolutionists are, at best, confused in their understanding of what constitutes proper scientific argument. At worst, materialists are guilty of intellectual sloppiness and downright dishonesty—all in a consistent effort, he says, to keep God out of the scientific realm. The starting point *is* therefore *the* point, with regard to intelligent design's vision of science; it must first posit intelligence to see intelligence. Its vision of humanity follows suit, while its vision of divinity is simultaneously downplayed and accentuated. Purposeful design conveys purpose to all end products, period.

Darwin on Trial reflects Johnson's strongest suit: A solid intellectual offense represents for him the best overall defense in a culture that demands an authentically rigorous, reasoned approach. Such an argument extends his credibility and visibility

within the scholarly community in such a way that scholars sense they can no longer afford, professionally speaking, to ignore his claims or to dismiss him as just another rabid fundamentalist wing-nut who cannot stand the thought of being descended from apes. Of course, there are critics who do just that, but ultimately he who squawks the loudest, and with the best vocabulary, often gets the most attention, as well as the benefit of a plausibility structure (a phrase with which Johnson is acquainted, in fact).

Indeed, as much as scholars and researchers might want to disregard or denigrate intelligent design, they do so today, in Johnson's view, at the risk of appearing threatened at the prospect of a robust and honest intellectual exchange. Put simply, he has taken aim at the professional egos of those who would otherwise choose comfortably to dismiss the claims of creationism; yet he does so in a way that maintains somewhat of a gentlemanly remove, even as he employs fighting words. His tone is that of a courtly scholar who just cannot believe the nonsense he is witnessing within the academy.

In *Darwin on Trial*, Johnson is teaching the teachers about what *really* has been going on, and what is truly at stake. He is particularly concerned to position intelligent design in a positive and sensible light, relative to creation science. He qualifies his privileged status as a unique factor that enhances his ability to argue the facts of the matter, precisely because he is not a scientist. Indeed, he reiterates that he is an "outside observer" whose legal training allows him to understand to what extent the rules of logic have been subverted from the very start:

I approach the creation–evolution dispute not as a scientist but as a professor of law, which means among other things that I know something about the ways that words are used in arguments. What first drew my attention . . . was the way the rules of

argument seemed to be structured to make it impossible to question whether what we are being told about evolution is really true.¹⁸

Moreover, he accuses anti-theist evolutionists of a blatant hypocrisy that is truly almost more than he can bear: “the very persons who insist upon keeping religion and science separate are eager to use their science as a basis for pronouncements about religion.”¹⁹ He notes, also, the anti-theistic conclusions that appear throughout Darwinist literature, in particular about the design and purpose of the universe and that the supposed fact that “humans are the product of blind natural processes that care nothing about us,” are “presented not as personal opinions but as the logical implications of evolutionary science.”²⁰ If saying that humans do not matter and are merely the result of chance is not insulting enough, evolutionary science has the gall to assume the status of a religion. Witness, he says, the “evident zeal of Darwinists to evangelize the world, by insisting that even non-scientists accept the truth of their theory as a matter of moral obligation.”²¹

Johnson contends that Americans have been “hoodwinked” but good by disingenuous and dictatorial scientific elites whose members are so plainly brainwashed and full of pride they cannot—or refuse to—see how thoroughly they have compromised their intellectual and moral standing. It is precisely the moral implications of scientific naturalism that Johnson cannot abide, for there are implicit assumptions that lie behind it, and this is without question his *bête noire*. Once again, he notes the relevance of his qualifications as a legal scholar (one is left to assume, charitably, that a snoozing editor is

¹⁸ Phillip E. Johnson, *Darwin on Trial* (Downers Grove: InterVarsity Press, 1991), 8.

¹⁹ *Ibid.*

²⁰ *Ibid.*, 8–9.

²¹ *Ibid.*, 9.

not to blame for such repetition within five pages of a similar statement) in exposing the illogic behind evolutionary science:

I am not a scientist but an academic lawyer by profession, with a specialty in analyzing the logic of arguments and identifying the assumptions that lie behind those arguments. This background is more appropriate than one might think, because what people believe about evolution and Darwinism depends very heavily on the kind of logic they employ and the kind of assumptions they make.²²

While Johnson indicts the unmitigated arrogance he encounters within the academy, he is careful not to blame ordinary folk for falling into this dangerous trap; the blame instead lies squarely upon the shoulders of professionals who should know better.

The tautological character of natural selection is a case in point, says Johnson:

“When I want to know how a fish can become a man, I am not enlightened by being told that the organisms that leave the most offspring are the ones that leave the most offspring.”²³ It is precisely evolutionary scientists’ inability to show conclusively, by way of the fossil record or any other means, how to account for transitions in the fossil record, that Johnson assails as a dressed-up hocus pocus of the kind for which religious believers are denigrated so mercilessly. Proponents of scientific naturalism have enjoyed an unqualified dominance, but only because others who know better have been willing to look the other way.

Johnson identifies such additional flaws in evolutionary science as faulty deductive reasoning and—when all else fails—the invocation of philosophical necessity. Thus it seems to him that scientific materialists are willing to accept just about anything

²² Ibid, 13.

²³ Ibid, 22.

other than a supernatural reality that posits an intelligent creator. In the end, it is the philosophical commitments of scientific materialists that Johnson aims to unmask; evolutionism is revealed as a moral imperative for those who would keep God as creator forever locked out of humanity's home.

The How-to Approach

Staking out credible territory within academia is not Johnson's sole mission. In *Defeating Darwinism by Opening Minds*, he addresses an audience of sympathetic (and, most likely, beleaguered) parents, high-school students, and teachers. By turns grandfatherly and "hip" in his approach, he demonstrates with humor and humility just how capable he is of reaching everyday folk who must grapple with living in a culture that does not reflect, much less respect, their deepest beliefs.

In making frequent reference to contemporary culture—film, television, popular music, and iconic personalities, for example—Johnson reveals that he is not stuck in an irrelevant past (with the implicit message that unnamed others within the creationist fold most assuredly are). He is, rather, at once folksy, good-natured, fun, accessible, reasonable, trustworthy, and, above all, reliable in his role as a knowledgeable resource for those who feel excluded from mainstream American culture. His playful sense of humor is remarkably engaging and even a bit wicked on occasion: In openly appropriating a phrase used by Carl Sagan, Johnson exhorts students and their parents to learn how to use their "baloney detectors" in the ongoing fight against materialism in general and scientific naturalism in particular. Surely, readers cannot help but chuckle when he refers to the mainstream news media collectively as "Microphone Man."

In effect, Johnson plays the role of a benevolent coach who is willing to let his audience in on the rules of the game, thus helping readers understand the difference that effective debate, on a popular, everyday level, can make. He explains, in plain and direct language, how his readers can talk back to the dominant culture—much in the way that a trusted elder would perhaps advise a youngster on how best to deal with a persistent bully. *Defeating Darwinism* is, for all intents and purposes, a how-to book for those laypeople committed to opposing the prevailing modes of thought in this nation's educational system. If *Darwin on Trial* is aimed to inform the pointy-headed crew of degreed commanders, then *Defeating Darwinism* is surely intended for the ground troops.

Combating Cultural Imperialism

The Wedge of Truth: Splitting the Foundations of Naturalism presents a synthesis that attests to the increasing visibility and vitality of the movement. To be sure, he continues to attack the logical errors, the fundamental inconsistencies, and the annoying—if not downright intellectually blasphemous—foibles of scientific naturalism; but here he also appears intent on engaging the dominant culture in a direct moral challenge. “The Wedge”—of which he speaks in an eloquent manner—is now a well-established, respectable, and expanding movement that has achieved greater currency within certain segments of American society. Its arguments are being used to expose and further widen the increasingly evident gaps and lapses in naturalism's ongoing program of indoctrination within schools, the media, and the courts, among other influential sectors of contemporary American life. Evolutionism is a metaphorical log that must be split,

little by little, until the whole can be cut down to size and hauled away for good. He characterizes his contribution to this program as follows:

My own continuing work is with the thin edge, which continues to burrow into the log as the thicker parts open up the crack. I want to explain the basic thinking behind the Wedge strategy to the public—especially the Christian public. In particular it is time to set out more fully how the Wedge program fits into the specific Christian gospel (as distinguished from a generic theism), and how and where questions of biblical authority enter the picture.²⁴

In essence, this program opposes the uncritical, rationalizing (in both a psychological and an intellectual sense) forces of popular belief in evolution as well as the elitism that permeates American society. It calls attention to a presumed cultural imperialism that obtains as a result. Such a program can embrace all earnest religious and secular scholars, all honest scientists, all believing parents and their children, all open-minded educators, and anyone else who is capable of following a logical argument. In short, this text is aimed at ordinary people who want to be a part of the solution.

In this sense, intelligent design does unite the faithful, without the distraction of the unwieldy and divisive considerations that have plagued conservative Protestantism's responses to evolutionism. The Wedge is both an instrumental tool and visibly defiant stance. With it, Johnson is putting all committed materialists on notice that Christian believers are armed and cognitively ready. Thus, as he advances his campaign of opposition to the hegemony of scientific naturalism, Johnson is pressing much more openly the religious tone of his message to include a prophetic voice, as in: *Watch out, get out of the way, the Truth is coming. Don't say that you weren't warned.*

²⁴ Phillip E. Johnson, *The Wedge of Truth: Splitting the Foundations of Naturalism* (Downers Grove: InterVarsity Press, 2000), 16.

Ultimately, the full force of Johnson's argument is revealed in his charge that evolutionary science is merely the strategy of an "intellectually bankrupt"²⁵ rebellion against the true foundation of reality, that is, the timeless and unquestionable authority of God's Word. By challenging "Darwinian claims that nature had the power to do its own creating,"²⁶ Johnson establishes his firmest objection to what amounts to an epistemological and moral authoritarianism. In this regard, Darwinism is qualitatively no different than the other godless *-isms* of recent history, in particular, Freudianism and Marxism. The denial of God's creative as well as redemptive power is a temptation that humanity cannot avoid, given its propensity for vanity and pride. Scientific naturalism is merely a manifestation of this sad fact:

Pseudoscience has its origin in the sin of pride, which refuses to respect the limitations inherent in our status as both created and fallen beings. Motivated by the sinful wish to control everything, pseudoscience distorts reality to conform to our desires. Materialism is the characteristic concept by which twentieth-century pseudoscience has accomplished this. Instead of beginning with the Word, materialism begins at the opposite pole with matter in motion. To make the difference clear I sometimes employ a parody of the biblical story:

In the beginning were the particles;
And the particles became complex living stuff;
And the stuff imagined God;
But then discovered Evolution.²⁷

From this vantage point, intelligent design appears to be, for all intents and purposes, a form of intellectual reverse engineering. The fact that laypeople tend to confuse creation science and intelligent design probably irritates both sides to no end, but

²⁵ Ibid, 150.

²⁶ Ibid, 153.

²⁷ Ibid, 155.

it does show that intelligent design has in effect become an alternative for serious, theistic opponents of evolution. Indeed, Johnson has been quoted in *Smithsonian* magazine and even appeared on the History Channel; it is hard to imagine creation scientists' being offered that type of mainstream exposure, other than for purposes of outright ridicule.

Yet for the same reasons that the insular message of creation science lacks significant appeal within the broader cultural milieu, intelligent design seems unlikely to attract the embrace of the more common folk who are situated outside the knowledge class and are less interested in or convinced by philosophical argumentation, despite Johnson's most entertaining attempts. It is difficult, though not altogether impossible, to envision study groups forming among the working- and middle-class, creationist rank and file in order to discuss at length the abstract arguments offered by proponents of intelligent design. This type of constraint surely mirrors the cleavage between popular and elite conceptions of knowledge that obtains more generally within a technologically oriented society. What remains, then, is a more traditional middle ground.

Chapter 3

Theistic Evolution

The creationist narratives discussed thus far have been, and continue to be, held captive to a large degree by long-simmering disputes within Protestantism. Such internal disagreements have witnessed a good amount of finger-pointing with regard to the locus of blame for an endless variety of misconceptions within Christianity throughout the ages. For present purposes, we need only keep in mind that attempts at reconciliation of scientific understanding and religious belief, in the effort to keep pace with the modern world, have been as prevalent as efforts to encourage opposition; nothing inherent to Protestantism itself has required antagonism.

Overall, positions of offense and defense regarding the compatibility of the two modes of understanding the world have mixed freely in a culture that, from its very inception, has been hard pressed to follow tradition merely for the sake of social solidarity. Theistic evolution, for its part, has sought numerous respectful paths that threaten neither epistemological nor metaphysical harm to varying conceptions of humanity's relationship to both science and the divine.

A Complementarian Vision

Howard J. Van Till, professor emeritus of physics and astronomy at Calvin College, openly engages theological concerns in the attempt to provide a complementarian

framework. In his view, a properly interpreted biblical canon offers much-needed theological perspective in comprehending humanity's relationship to nature and to God, while evolutionism, properly grounded as a scientific discipline, provides the necessary empirical and theoretical framework for understanding the cosmos. A thoroughly honest approach to the reconciliation of science and religion demands, for Van Till, that each should remain situated firmly within its appropriate domain.

Van Till's approach to the problem focuses squarely on the divisive character of the evolution–creation debate, especially as it is undertaken today by unyielding creationists and non-theistic scientists. The disagreement, he says, is the product of an especially egregious misapprehension. He proposes, instead, a non-adversarial and mutually informative engagement of Christian theology and the natural sciences. While he does not seek to dislodge science's role in relation to understanding the physical universe, he does acknowledge the obligation of educated believers to confront the bugbear of *scientism* and the misguided attempts of the Christian community to deal with its most unpleasant consequences.

Here Van Till must maintain a delicate balance, for in order to promote and safeguard the proper domain of his preferred approach, natural science, he must also advance arguments against a scientific orthodoxy in much the same vein as Morris and Johnson, but without maiming the scientific program. This Van Till achieves by insisting upon a particularly high degree of rigor in his definition of key terms and by employing the notions of “categorical complementarity,” the “creationomic perspective,” and a “fully gifted creation.”

Throughout this process, he must attend to, with some degree of plausible theological specificity, the concerns of a wide range of evangelicals. He states, in numerous ways, his commitment, as a scientist and a Christian, to answering such concerns in a rational manner that avoids perpetuating unnecessary controversy. Reason and common sense are always bounded, for Van Till, within the context of a covenantal relationship of God to humans. The biblical canon remains the appropriate theological perspective for interpretative purposes, and evolutionary theory remains a valid portion of the scientific framework.

Navigating an Integrated Course

This is treacherous territory, as one might expect, but Van Till has taken as his task the exposure of what he considers vainglorious and ignorant attempts to advance elements of “folk science.” In the mid-1980s, during which time young-earth creationists were gaining momentum in organizing a credible scientific movement, he published *The Fourth Day: What the Bible and the Heavens are telling us about the creation*. This text set the delicate evangelical switch on cruise control and presented a course meant to teach evangelicals how to navigate the competing claims of both evolutionists and creationists without falling into the interminable sinkhole of an ill-informed either/or debate.

From this standpoint, the compatibility of certain categories is expected to yield not only accurate views of the cosmos but also offer a unified understanding of Creation, to which the concept of evolutionary development is reasonably applicable. Such an

understanding is, Van Till insists, “both biblically sound and intellectually honest.”²⁸

Lest there be any question that he intends to safeguard the Bible’s relevance, he makes it clear that he wants “to take the Bible seriously in matters of God’s work as both Redeemer and Creator.”²⁹ First, however, it is necessary to identify clearly the legitimate terms and conditions for both science and theology, as overall patterns of understanding. The implicit suggestion is, of course, that other approaches do not provide legitimate avenues. Thus he works patiently to craft an argument that simultaneously encourages and reassures Christians as to the inherent compatibility of the two dimensions, but within very specific, delimited epistemologically and methodologically permissible lines of inquiry.

Failure to accord the Bible its true status as a covenantal canon results in errors that are endemic to relativism and literalism alike, says Van Till. One must respect the multifaceted character of Scripture, in that it serves to convey testimony, define obligations, and provide instruction. Particularly crucial is the multiplicity of the Bible’s sources, in its historical-cultural context. For Van Till, the Bible’s contents are “divinely initiated revelation.”³⁰ Revelation both reflects and speaks to human experience, through a variety of forms of expression.

Yet there is a problem specific to modern culture that prevents a nuanced appreciation of this range of expression, Van Till observes, inasmuch as contemporary Western culture has lost its ability to understand figurative language. The failure to

²⁸ Howard J. Van Till, *The Fourth Day: What the Bible and the Heavens are telling us about the creation* (William B. Eerdmans Publishing Company, 1986), ix.

²⁹ *Ibid.*, 3.

³⁰ *Ibid.*, 8.

recognize the human dimension of the Bible reflects the influence of science and the inability to understand anything other than very straightforward, descriptive prose. It is thus the style of expression that fosters illegitimate claims, not necessarily science itself.

The result of our culture's inability to understand figurative language, says Van Till, is ignorance and ineptitude when dealing with the uncertain and unfamiliar terrain that accompanies a less-than-literal interpretation of the Bible. Van Till's pithy condemnations of literalism communicate a sense of irony—truly, *just* short of mockery—that winks at those readers who consider fundamentalism's most insistent qualities to be, in polite terms, distasteful. In his characterization of the literalist's fear that a figurative interpretation destroys the timeless truths of the Bible, Van Till turns an eloquent phrase or two: "The doctors of poetry will surgically remove the heart of the Bible and replace it with a flower. It may look nice, but the patient will be dead."³¹ The legitimacy of such a viewpoint, says Van Till, is quite plainly nonexistent: "I must insist that such a fear is not only unfounded but also untrusting; it displays a lack of trust in Scripture's author."³² Thus a moral failing underlies a cognitive failing.

A lack of trust is a particularly significant charge for Van Till, as the Scripture reflects the Bible's inspired ability to speak to humanity's individual and collective experience of the divine. Humanity is capable of reason and in possession of free will, as bestowed by the Creator, but nonetheless in need of redemption. The intrinsic part of "theistic" with respect to *theistic evolution* is always in relation to a personal and communal connection to the saving grace of God, through a personal Savior. True to

³¹ Ibid, 12.

³² Ibid.

form, this is never an unexamined relationship between humans and the transcendent God, as Van Till endorses a thorough-going critical study of the Bible—clearly a stance that is not acceptable within a literalist framework and likewise presents a rather hard row to hoe within certain evangelical contexts. Not surprisingly, he objects to a literal treatment of Scripture as the type of “journalistic account.” Taking the Bible seriously means, instead, discovering the myriad ways in which it speaks directly to an unfolding, historical relationship between Creator and Creation.

Clearly, Van Till’s approach is based on a particular rendering of the relation of the divine to Creation. He acknowledges he was “trained in a Calvinist tradition, largely rooted in Augustinian teaching,” and that his “particular branch of the Reformed tradition is represented by such men as Abraham Kuyper, Herman Bavinck, and G. C. Berkouwer in the Netherlands, and Louis Berkhof in America.”³³ The same degree of rigor that Van Till applies to theological concerns in this vein is directed, in due course, to science—particularly with regard to an Augustinian understanding of what science can and should say about the physical world.

Van Till repeatedly makes statements regarding what it means to take both the Bible and science seriously. He identifies not only the most direct route but also the correct attitude to be taken along the journey. Those who are engaged in the fruitless creation–evolution debate have taken the wrong road because they have adopted an ill-advised attitude toward their travels. They have, in effect, confused themselves and others along the way, by assuming that unquestioning belief in one view necessarily

³³ Ibid, n. 1, 4–5.

precludes the other—that is, a divinely manifested Creation necessarily disproves the theory of evolution (or, for non-theist scientists, the converse). Van Till, as a fully credentialed scientist, earnest Christian believer, and experienced educator, argues in favor of a much more nuanced understanding.

Thus he commends to those readers who wish to take both Scripture and science seriously the principle of *categorical complementarity*, which identifies precisely those questions that can be addressed legitimately to Scripture and those to natural science, in order to better understand the true character of the Creation as a whole. Along the way, he states where he stands as a Christian believer and as a scientist, always with the aim of demonstrating that these views can be reconciled. Success in this regard requires understanding which conclusions are warranted, theologically and scientifically, as well as those conclusions that are the product of mere wishful thinking, if not outright deceit.

It is in this sense that Van Till demonstrates considerable empathy for fellow evangelicals, as his desire to integrate religious faith and scientific understanding places him alongside confused students and their concerned parents, his learned colleagues, and other earnest individuals who find they can, for whatever reasons, neither agree with the demands of a literal interpretation of Genesis nor dismiss with ease the sum of modern scientific knowledge. From this vantage point, he serves as a role model who has found a way in which to bridge two worlds that are seemingly in conflict. *The Fourth Day* represented an effort, in the midst of a fundamentalist storming of the public gates, to present a theologically and scientifically defensible argument that not only supports the two domains but eases varying degrees of cognitive dissonance.

Ultimately, with respect to understanding the primary points of contention within the context of the creation–evolution debate, Van Till identifies those areas in which he can comfortably and credibly offer clarification, noting natural science’s ability to make statements regarding “internal affairs,” which relate to specific physical processes that can be observed or that are theoretically warranted. In addition, he notes the difference between “internal affairs” and “external relationships.” External relationships, which include the ongoing governance of Creation by God, are metaphysical and religious in nature; natural science cannot, and should not, make definitive statements in this arena.

Stop Making (Non-) Sense

In *Science Held Hostage: What’s Wrong with Creation Science and Evolutionism*, Van Till and coauthors Davis A. Young and Clarence Menninga stake specific territory in relation to the respective boundaries of natural science and theology. The authors note natural science’s inability to discover meaning:

Natural science is an appropriate and powerful tool for investigating and gaining knowledge about the physical features of the object of its study, but is wholly incapable of discovering its *meaning*. Consequently, to say that this page is nothing but a particular assembly of atoms and molecules, or to assert that the physical universe is “all there is or ever was or ever will be” is to speak nonsense.³⁴

This notion of sense and *non-sense* offers an adequate understanding of “good” versus “bad” science:

³⁴ Howard J. Van Till, Davis A. Young, and Clarence Menninga, *Science Held Hostage: What’s Wrong with Creation Science and Evolutionism* (Downers Grove: InterVarsity Press, 1988), 16. Here the authors are referring to a statement made by Carl Sagan in the popular PBS series “Cosmos.” Notably, Van Till does not display much self-restraint when it comes to Sagan.

Furthermore, to assert that natural science is capable of answering all meaningful questions about reality or that those questions answerable by natural science are truly meaningful is also nonsense. Such outlandish assertions are not claims made by natural science itself; they are the philosophical-religious assertions of what is better known as *scientism*. To have a healthy respect for what we can learn by studying the world of atoms and molecules is good science, but to claim that natural science is the only path to knowledge or that it is applicable to everything is an arrogant expression of scientism. The distinction between science and scientism ought never to be overlooked.³⁵

Certainly, in identifying certain categories of questions that can be answered with a high degree of credibility, the authors are asserting that they are the true scientists and that, surely, *they* understand what lies within the proper domain of scientific inquiry and what belongs within the realm of transcendent meaning: “Questions concerning transcendent relationships lie outside of the domain of natural science. . . . The silence of natural science on such matters must be honored by both theists and non-theists. Both must resist the temptation to coerce science into warranting (in the sense of proving) their particular religious perspective.”³⁶

Having jabbed opponents on both ends of the scientific and theological spectrum with the pointed pin of intellectual rigor and integrity, Van Till and his colleagues convey their views of science, humanity, and divinity to a segment of evangelicals who have their own doubts and misgivings regarding literalism in particular and who wish to avoid the charges of ignorance and deceit more generally. This most certainly includes members of a particular subsection of (presumably, college-) educated Christians who wish to avoid becoming lost amid the veritable “57 Varieties” of creationism.

³⁵ Ibid.

³⁶ Ibid, 19.

There are, in fact, two areas in which science must maintain what Van Till and his colleagues characterize as a “respectful silence.” The first area is the ultimate origin of the universe: “We are not saying that the question concerning the origin of the universe cannot be asked; we are only saying that any consideration of its answer takes us beyond the domain of natural science and into the domain of philosophy (metaphysics) or religion.”³⁷ Moreover:

Questions of *origin*—the ultimate source of existence itself—are profoundly important questions. Their answers, however, will never be derived from the results of natural science. They are religious questions that must be directed to whatever serves as the source of one’s answers to religious questions. The natural sciences, because of limitations in both the object and the domain of their investigation, have no choice but to remain silent.³⁸

The second area involves a distinction between *behavior* and *governance*. Behavior, readers are informed, lies within the domain of science, while governance lies outside the boundary: “natural scientists are concerned to describe the observable behavior of some physical system and to discover the general patterns of behavior into which any specific phenomenon can be placed. . . . The search for a comprehensive set of interrelated patterns is the heart of the scientific enterprise.”³⁹ Exactly why the physical world might behave in a particular way, especially with respect to any kind of patterned behavior, is entirely another question. Thus, “Questions of origin and governance—important questions both—must be directed toward whatever serves as the source of answers to one’s religious questions.”⁴⁰

³⁷ Ibid, 21.

³⁸ Ibid.

³⁹ Ibid, 22.

⁴⁰ Ibid, 25.

What doubt can there be that such mild-mannered and relativistic positions as these are thoroughly repugnant to adherents of creation science and intelligent design alike? Yet it is exactly the search for identifiable, consistent—and interrelated—patterns that lies at the center of each of these narratives of creation.

Safeguarding the Canons

“The Fully Gifted Creation,” which appears in *Three Views on Creation and Evolution*, offers the views of scholars who are young-earth creationists, old-earth (progressive) creationists, and theistic evolutionists. This type of publication is representative of the context in which Van Till’s work appears, typically within anthologies, on the Internet, and in magazines. Since the advent of the intelligent-design movement, he often is paired by magazine and book editors with Johnson, in point-counterpoint fashion, as in “God and Evolution: An Exchange.”⁴¹

Van Till states in *Three Views*, in a note at the bottom of the first page of his contribution, that he disagrees strongly with the editors’ decision to refer to his viewpoint as theistic evolution; he prefers that his position be known as “the fully gifted creation perspective.”⁴² In reiterating his contention that the creation–evolution debate is “an outgrowth of a serious misunderstanding both of the historic Christian doctrine of creation and the scientific concept of evolutionary development,” he adds:

⁴¹ Michael Bauman, ed., *Man and Creation: Perspectives on Science and Theology* (Hillsdale: Hillsdale College Press, 1993), 269–293. This text originally appeared in *First Things* (June/July 1993), 32–41, and has been posted on the Internet in that format as well.

⁴² Howard J. Van Till, “The Fully Gifted Creation,” in *Three Views on Creation and Evolution*, J. P. Moreland and John Mark Reynolds, eds. (Grand Rapids: Zondervan, 1999), 161.

I would even be so bold as to add that the misunderstanding of the historic doctrine of creation may be as widespread within the Christian community as it is outside of it, and that the misunderstanding of the scientific concept of evolution may be as widespread within the scientific community as it is outside of it. If this assessment is correct, then the controversy constitutes a regrettable mistake that must be repaired if the Christian church wishes to be effective in its presentation of the Gospel to a scientifically knowledgeable world in the centuries to come.⁴³

Noting that the creation–evolution debate has led many faithful Christians to conclude that there are only two, diametrically opposed perspectives, Van Till states he is among those trained in the natural sciences “who feel strongly called to offer a perspective very different from either of the two views ordinarily presented.”⁴⁴ This calling, he says, reflects his heritage: “For me, a Christian who was privileged to be born into a denominational community with a rich theological heritage, this sense of calling arises out of a deep desire to maintain both Christian faithfulness and intellectual integrity. I was taught that maintaining both is not only possible, but also what God desires from me.”⁴⁵ This sort of confessional statement regarding his own good fortune to have been raised in such a community appears often in Van Till’s writings; the cynic could say he is thumbing his nose at those poor ignoramuses who have not been so fortunate, while the more gracious observer might note he is merely pointing out that he is proud of a tradition that allows for such singularity of conscience and that he wishes others to identify with a similar outlook. Regardless, a revitalized interest in a classically oriented theological tradition is quite important to Van Till, as the Augustinian notion of

⁴³ Ibid.

⁴⁴ Ibid, 163.

⁴⁵ Ibid.

a fully gifted creation provides for him the basis for an outright rejection of the prevailing either/or format.

The “preachers of naturalism,” as he refers to anti-theistic evolutionists, are revealed to have encroached on territory that already has been covered appropriately within theology. Privileged knowledge comes at a price; Van Till understands quite well the costs associated with the truth claims that are advanced within both the scientific and religious realms. In arguing the merits of creation’s fully functional economy, based on readings of Basil and Augustine, Van Till attempts to devise an exchange rate that fixes the relative value of both theological and scientific currency within contemporary culture. The question remains, in terms of his efforts specifically and those of theistic evolution more generally: Who is buying?

Part II

Chapter 4

Creation Spirituality

In contrast to the lockstep approach evident within conservative Protestantism, creation spirituality offers an integrative framework that depicts spiritual and scientific modes of understanding as evolving, interlocking pieces of an infinitely larger cosmic puzzle. The belief structure, itself situated broadly within a Catholic sensibility, reflects the theological backgrounds and scholarly interests of its principal proponents—Matthew Fox, Thomas Berry, and Brian Swimme. Their overall goal, put simply, is to reestablish a premodern sense of awe and reverence toward the natural world, in preparation for a universal transformation of consciousness. Such a transformation is considered the only pathway to planetary survival and entails a complete resacralization of the world.

By turns expansive and integrative, creation spirituality calls for a postmodern celebration of diversity and pluralism, in a global context and on a cosmic scale. It melds a broad array of viewpoints plumbed from mysterious yet fathomable (not to mention culturally fashionable) depths: ancient wisdom and medieval mystical traditions; beliefs and rituals of indigenous populations; bits of psychological insight culled from sources such as Carl Jung, Otto Rank, and Gestalt therapy; feminist critiques of patriarchal power; and cutting-edge, speculative scientific thought of the sort that would render creation scientists positively apoplectic.

Fox, the movement's founder and chief theologian, is aided in the construction of a new spiritual paradigm by the cultural historian Berry and his close associate, the mathematical cosmologist Swimme, whose combined and individual efforts reflect a distinctly developmental, evolutionary understanding of the universe (for which they acknowledge their indebtedness to Pierre Teilhard de Chardin). The resulting "New Story" offers a culturally and scientifically relevant, up-to-the-minute narrative that addresses the morally indefensible and ecologically unsustainable consequences of modern industrialism. Through this reconstituted storyline, adherents learn that correct *consciousness*, rather than correct belief, is the key to a sustainable future. Spiritual seekers are exhorted to reclaim—for the benefit of not only humanity but all species and the entire planet—traditions that have been lost or obscured throughout centuries of (principally Western) human history but that remain, presumably, within sight and reach of the world's indigenous peoples.

Science plays a pivotal role in this process, supplying evidence that not only supports but that demands a specific type of reconciliation between matter (eco) and non-matter (spirit). Thus creation spirituality is upheld by much more than a suitably "modern" scientific worldview and apparatus. Newer modes of (as well as attitudes toward) scientific investigation—*e.g.*, chaos theory, quantum physics, and molecular biology—provide the revelatory basis upon which humans are deemed capable of constructing a fully integrative understanding of planetary health and cosmic well-being. Most assuredly, Fox and his colleagues say, the natural sciences have failed to establish humanity's proper relationship to and ultimate responsibility for Creation. The "new"

sciences, on the other hand, are able to reaffirm spiritual beliefs as intuitive, transcendent truths that are linked to a renewed image of the divine as a type of creative energy and deep, but accessible fount of wisdom. In short, it is the ultimate beneficence and wisdom of Gaia, the earth herself, who will save humans from their arrogance.

A reinvigorated cosmology offers panentheism as the foundation for a living, holistic spirituality, which reorients adherents toward a transcendent consciousness that has itself evolved as an intelligent, meaningful, and animating force, throughout all stages of development.⁴⁶ Inasmuch as human intervention has disrupted the balance of nature, the effective recovery of what humans once understood and experienced (given their prior intimate relationship with the universe) is deemed necessary. Not surprisingly, the themes of intimacy and loss are recurrent throughout creation spirituality.

By virtue of its ability to encapsulate (and, wherever necessary, translate) elements of premodern existence that supplied a cohesive sense of cosmic order and meaning, creation spirituality appears to be reengineering its very own postmodern version of the “mythological matrix.” Peter Berger’s observation—that modernity has in no way finished off the mythological matrix—is especially apt here.⁴⁷ In particular, the work of sociologist Wade Clark Roof, regarding the spiritual beliefs and practices of the Baby Boomer generation, attests to the allure of belief structures that make possible a

⁴⁶ While theological content in today’s version of intelligent design must, of necessity, remain nonspecific, creation spirituality thrives on the evocation of mysterious powers and unified sequential processes, scientific and spiritual alike; natural selection is not the least bit inconveniently blind or random, in this case. Thus adherents of creation spirituality might be considered contemporary “virtuosi of uncertainty.”

⁴⁷ Peter Berger, “God in a World of Gods,” www.firstthings.com/ftissues/ft9308/articles/berger.html, accessed on 25 May 2005. Originally published in *First Things* 35 (August/September 1993), 25–31.

durable synthesis and reconciliation of worldviews, but with sufficient wiggle room left for personal considerations and preferences.⁴⁸

Even so, it would be unwise to dismiss creation spirituality's efforts, to evoke both the look and feel of a mythological matrix, as simply a "hippy-dippy" attempt to reenchanted the modern world—in this case through the monumental marvels of science and misty-eyed extravagances of eco-spirituality. Creation spirituality in fact seeks an aggressively targeted (that is, manifestly marketable) reinfusion of spiritual principles and values into daily life, through the culturally calibrated screen of science. It steeps for adherents a potent blend of meta-psychological, meta-scientific, meta-physical, and meta-religious beliefs and attitudes that can be applied to worldly as well as spiritual concerns. The result is a plausibility structure that is particularly attractive to receptive members of the knowledge class who not only accept the significance of science and technology generally speaking but likewise yearn for a mystical, "plugged-in" sense of purpose and meaning to life. Cultural activism and moral suasion appear to be the stock and trade of those individuals to whom it most appeals.⁴⁹ Rather more than a mere syncretistic fandango of modernity, then, creation spirituality partakes of the adaptability and versatility that characterizes the modern marketplace of ideas and practices.

⁴⁸ Wade Clark Roof, *Spiritual Marketplace: Baby Boomers and the Remaking of American Religion*. (Princeton: Princeton University Press, 1999). Roof's analysis is invariably clearer in its typifications of Boomer spirituality than of conservative religious movements.

⁴⁹ Sylvia MacPhee, "Creation Spirituality: An Eco-Spiritual Movement for the New Age," PhD dissertation, 1996, Northeastern University. MacPhee's study focused on 13 New England "connectors" (regional volunteers), the majority of which had been raised in observant Catholic homes. Three females were active members of religious orders, while former seminarians had long since left the Church. Activity in locally based volunteer groups and in mainline Protestant denominations, as well as affiliation with national public-interest organizations, was evident among this group of largely middle-class, college-educated, middle-aged adherents.

Indeed, the entire project depends on a cadre of cultural entrepreneurs who market their ideas directly—in seminars and workshops, on the lecture circuit, and by way of cyberspace. One might think of the cultural entrepreneurs who initiate and guide this process of realignment as “spiritual relocation professionals,” in that they provide a comprehensive plan of action, by which adherents and seekers can evaluate their cognitive and normative commitments. Such professionals provide valuable assistance, in identifying an improved home base (within a duly enlarged cosmic order); in arranging to pack up metaphysical belongings (reconnecting spiritual seekers with a range of revered, if somewhat esoteric, teachings); and in managing the process of moving along (a profound spiritual journey shared routinely in intimate settings, as well as in numerous print and online publications). In this sense, Fox, Berry, and Swimme are relocation experts par excellence: they are, at heart and in practice, experienced educators whose visions of personal, societal, and planetary advancement require nothing short of a pedagogical revolution.

Creation spirituality bridges, conceptually, the life-worlds of a cohort of liberal Christian laity, former and current members of religious orders, and the more or less comfortably unchurched (as well as, more than likely, stragglers from within the secular ranks of the broader ecology movement). It is based on the modern notions of initiative, self-improvement, empowerment, and advocacy; its beliefs, values, and norms are communicated through educational and psycho-social means that are intended to foster both personal and societal transformation. Such territory is undoubtedly familiar ground to individuals who are well attuned to the pluralizing and relativizing influences of higher

education and mass communications, the transformative power of personal-growth industries, and the wise counsel of media personalities (not so much experts, really, as professional communicators on the order of Oprah Winfrey and Dr. Phil McGraw). It is thus that Fox, Berry, and Swimme deliver their timely messages of hope and unity—viewed through the postmodern prism of truth and myth, combined.

The Promise of a New Reformation

“The Catholic Church as we know it is dead. It is rotten from the inside. . . . I do not believe there is any room left in the Roman Catholic Church for thinking people or people with a conscience of justice to remain there without standing up, speaking out, or just plain leaving. The ship of Peter is rotten to the core.”⁵⁰ These words, written in 2002 by Matthew Fox, leave no question as to the former Catholic priest’s continued hostility toward the religious institution he served for more than 30 years.

The native of Madison, Wisconsin, entered the Dominican Order in 1960, at the age of 20, and was ordained in 1967. He received his doctorate, *summa cum laude*, in the history and theology of spirituality, at the Institut Catholique de Paris, in 1970, and also earned two master’s degrees, one in philosophy and another in theology, from the Aquinas Institute of Theology, in St. Louis. It was amid the cultural upheavals of the 1960s and 1970s that Fox set for himself the ambitious agenda of revitalizing a tradition within medieval Christianity—creation spirituality—he had studied with Father Marie Dominic Chenu, O.P., as a graduate student in Paris.

⁵⁰ “Welcome: Opus Dei Sunday,” Matthew Fox, accessed online 21 April 2005, at <http://www.matthewfox.org/sys-tmpl/htmlpage11>.

Fox's explorations of ancient wisdom literature and medieval mysticism led him to conclude that these traditions might help humans restore their relationships with the planet, one another, and their authentic selves. Critical study of Church history and doctrine convinced him that the Augustinian concept of original sin represented a serious misapprehension of reality that had appalling consequences for all of Creation. He reasoned further, following Aquinas, that a mistake about nature constituted a mistake about God. Additional lessons drawn from Christian mystics such as Hildegard of Bingen, Meister Eckhart, Mechtild of Magdeburg, Julian of Norwich, and Nicholas of Cusa persuaded him that only a renewed awareness of Creation, developed by way of a "deep ecumenism," would restore the depth of knowledge that humans once held, through which an integrated reality might be properly observed and understood.

In *Original Blessing: A Primer in Creation Spirituality Presented in Four Paths, Twenty-Six Themes, and Two Questions*, Fox offers a basic corrective to centuries of Western religious orthodoxy and anthropocentrism, and replaces the notions of sin and redemption with the four paths as they have been "named" by creation spirituality: *Via Positiva* (joy, delight, awe); *Via Negativa* (darkness, silence, suffering, letting go, letting be); *Via Creativa* (creativity); and *Via Transformativa* (justice, compassion, interdependence). Predictably, such ideas landed him in a heap of trouble with the hierarchy of the Roman Catholic Church—specifically, Cardinal Ratzinger, known today as Pope Benedict XVI, who at that time served as chief Inquisitor and head of the Congregation of Doctrine and Faith.

The conceptual shift advanced in *Original Blessing* corresponds to a parallel shift in science, says Fox, in which the mechanistic, Newtonian worldview that informed the early modern period (and which in turn fostered the “parts-mentality” that shaped contemporaneous and subsequent philosophical thought), has been replaced by a fluid and multidimensional paradigm formulated along the lines suggested by Einsteinian and post-Einsteinian physics. Engagement with the creation spirituality tradition reorients the modern understanding of reality in much the same way, Fox insists, by applying the life-affirming modes of ancient wisdom and medieval mysticism, as well as the healing motions of ritual practice, directly to the realities of an ecologically threatened, spiritually malnourished postindustrial world. Moreover, it offers a basis for the recovery of what he maintains is an even older, Hebraic concept of “original blessing.” The foundation for an authentic spirituality thus can be shown to exist in historically situated, if overlooked, modes of relating to the natural world; even better, says Fox, the intrinsic connectedness of the material and spiritual realms is being confirmed by advances in scientific thinking.

In response to Ratzinger’s objections, the renegade priest evinced a still-bolder message that no doubt spit intentionally in the direction of the Roman Catholic hierarchy. *Creation Spirituality: Liberating Gifts for the Peoples of the Earth* constituted a full-bore reaction to his silencing by the Vatican, at Ratzinger’s insistence, in 1988, and was published the year in which Fox was dismissed officially by the Vatican. Thus freed from the strict bounds of Catholic priesthood and inspired by an extended visit to South America during his enforced “sabbatical,” Fox declares that even liberation theology is not radical enough to safeguard the Catholic Church’s relevance with respect to

addressing the true suffering and degradation of the world. Only a new cosmology can liberate the “first world” and help humans redeem themselves in the face of ecological and moral ruin; and science is an instrumentally useful feature of this new cosmology.

In *Wrestling with the Prophets*, Fox equates an emergent postmodern spirituality with a premodern understanding of humanity’s relationship to the natural and supernatural realms, noting a direct connection between creation spirituality and the prophetic calling to interfere with injustice and wrong-doing. He also continues to refute charges that creation spirituality is New Age, arguing that while creativity and play are absolutely crucial components of the new cosmology, sentimentalized religion and junk spirituality are just as harmful and inauthentic as the outmoded notions of superiority that have been supported by Western dualism and anthropocentrism.

The healing of wounds—personal, societal, ecological, and spiritual—is of paramount significance to Fox. Ultimately, his argument rests on the need to overcome dualism, which has enabled a rift to emerge among the components of an integrated reality. In his view, a disintegrative action has occurred on three fronts: 1) between nature (which includes the human animal) and God, at the ecological level; 2) among humans, at the societal level; and 3) between body and mind, at the personal level.

At all three levels, humanity is situated humbly as a constituent part of Creation. Creation spirituality speaks directly to a universal memory of this sense of belonging, as one among many species that nonetheless has special status because it has evolved as the conscience of the universe. Humans are clearly perfectible creatures, capable of locating ultimate meaning; we must, however, recognize our true status and responsibilities in

relationship to the cosmos, rather than merely satisfy our will to dominate and indulge fantasies of mastery. Science has served the latter purpose for centuries, says Fox, but now it can teach us about the former. At both personal/individual and social/communal levels, then, an experience of union with the transcendent Cosmic Christ, the ultimate divine source and creative energy, is entirely possible. First, however, there is much work to be done. It is precisely this sacred and profane work that Fox addresses.

A New Conceptual Cart

As MacPhee notes, eco-spirituality declares the “common core assumptions regarding the nature of reality, which, while effective in the creation and development of the industrialized societies, are no longer valid.”⁵¹ By offering key, integrative concepts drawn from the wisdom of the ancients and the mystics of various spiritual traditions, creation spirituality would appear to offer a new conceptual cart in which to travel more efficiently between micro- and macrocosm. Fox focuses his attention on the theological implications of this journey, while Berry and Swimme apply the horsepower of cross-cultural, historical, and scientific study. Each of these educators applies his notion of the divine, as an ultimate mystery accessed through the Cosmic Christ, toward an integrated manifestation of universal meaning and value. Science provides the necessary link to changing a vital portion of the prevailing paradigm.

Overall, creation spirituality’s proponents share the conviction that the world’s misfortunes, physical and spiritual alike, are the result of ill-conceived belief systems and outdated paradigms. Fox identifies precisely those values in Western capitalist culture—

⁵¹ MacPhee, 14.

competition and progress, autonomy and self-interest—he considers to have been the legacy of an oppressive, masochistic, and destructive sense of sin. The good, postmodern news is, erroneous and harmful beliefs can be changed, in favor of a transcendent (as well as perfectible) vision of not only the present but also the past and the future. The bad news is, this-worldly resistance to spiritual transformation continues to be exceptionally brutal and entrenched.

The complete and successful realignment of the sacred and the profane in a postmodern context entails, for Fox, an unwavering reverence of nature. Anything that denigrates Creation in any sense is branded “modern” and therefore completely antithetical to the planet’s well-being (this includes the scientific and technological enterprises that have regarded nature only as a resource for human exploitation). Though the effort to recover lost or neglected parts of the Christian tradition surely reflects his continuing struggle with the Church’s teachings and hierarchy, Fox is not content simply to pick a schoolyard fight with the Catholic Church, which is but one among a host of belief systems and institutions that breed disaffection and alienation on this planet, by his reckoning. Rather, he takes aim at the epistemological and metaphysical foundations of Western dualism, Cartesian philosophy, and Enlightenment thought, upon which all modern political, economic, and social structures are based. Any thinker who has entered or been accepted into this flawed canon is likewise suspect.⁵² Emphasizing the need to restore balance to all human and planetary affairs of material and spiritual nature, Fox

⁵² If the proponents of creationism profess a decided dislike for such personages as Charles Darwin, John Dewey, and Carl Sagan, then we see a similar, though hardly surprising, disaffection in Matthew Fox for Augustine, René Descartes, and the entire succession of Catholic popes and bishops.

uses a psychological framework to pick apart the modern age, neurosis after neurosis, at all levels of belief and practice. No institution or belief is sacrosanct, except those informed by a reverence for Creation as a whole.

In his attempt to formulate a theological basis for the liberation of humanity from its self-centered interests and pursuits, Fox offers far more than a response to criticism that creation spirituality is simply so much New-Age twaddle. Above and beyond the drumming sessions, the vision quests, and Techno Cosmic Masses (the latter events mix dance, techno and live music, rap, and contemporary forms of media with traditional liturgical practices), one can detect an indisputable concern in Fox for effective ministry and relevant outreach. His vocation remains; whether as an Episcopal or a Catholic priest, he is still very much a teaching theologian.⁵³ The desire to rescue certain aspects of the Christian tradition, especially those features that have been neglected, forgotten, or rejected, reflects a commitment to acknowledge and liberate those who likewise have been overlooked by modern culture. Indeed, Fox shows enormous empathy for everyday folk who struggle with the disorienting effects of relativism and the agonizing freedoms of boundless choice in American society. In this sense, he sees that humans have been the victims of their own “success,” which has most often been the result of scientific and technological prowess.

Moreover, through his efforts to free both Christianity and the West from centuries of Augustinian doom and gloom, Fox conveys the message that failure obtains only where there is a willful lack of imagination and openness to adventure; disbelief or

⁵³ Following his dismissal by the Vatican, Fox sought and was granted ordination as an Episcopal priest.

incorrect belief does not consign one to eternal damnation. Instead, a colossal lack of courage and vision results in inauthenticity and ecological disaster. Thus, for Fox, creation spirituality offers a soteriological answer to the sin of anthropocentrism; the Cosmic Christ, rather than the historical Jesus, serves as the redemptive conduit; and the Holy Spirit presents a reconciling energy that can be accessed by way of any number of wisdom traditions (science represents such a tradition, for Berry and Swimme especially).

In particular, Fox articulates a counternarrative that exposes the West's most treasured preoccupations and hypocrisies. The modern world has both inherited and bequeathed a deeply flawed legacy. He is dedicated to unmasking the fallacious origins of Western cultural dominance and to revealing the Catholic Church's complicity in perpetuating this fraud through numerous forms of idolatry. A new spiritual age must dawn now, he insists, because global imperatives are forcing the first world's hand; science itself serves as an instrumental if highly ironic factor in this recognition (though, notably, Fox does not seem interested in science itself; just how it upholds his spiritual leanings). The world must submit to the verities of the ancients and medieval mystics, who had a greater understanding of nature and enduring truth, or face certain physical and spiritual ruin.

For Fox, the highest communion with the divine—manifested not in an old white man with a beard but in an ultimate creative energy and deep, innate wisdom—is found in the evocative expressions of creativity and imagination, rather than churches or creeds. *Creativity: Where the Divine and the Human Meet* locates the ultimate good of humanity in its capacity to create conditions that are not only favorable to but also produce social

justice. First, however, we must give up our desire to dominate all that we see and touch. Each facet of human existence speaks to the possibility of a truly just exercise of our creative power, which links us to an irreducible divine wisdom and authentic spirituality. It is this creative energy that feeds our ability to find our place in this vast cosmos through such conduits as science.

In *A New Reformation!* Fox offers a summation of creation spirituality's lessons through 95 "faith observations" accompanied by corresponding formulations in the German language. At this stage of his life, as he negotiates a transformation within his own life, Fox appears, in this recent publication, to identify more closely than ever with the great reformer Martin Luther. He is no longer president of the educational organization he founded in the 1970s, and now serves as president emeritus and occupies the university's chair in creation spirituality.⁵⁴ The most prolific of creation spirituality's proponents (with 26 books currently in print), Fox continues to maintain an active schedule promoting creation spirituality and the new cosmology throughout the world. Certainly the cachet of having been tossed out of the Catholic priesthood endures, for his unfavorable reaction to the election of Pope Benedict XVI was broadcast, notably, on such media outlets as National Public Radio and George Stephanopoulos's nationally televised Sunday-morning talk show. Both his insider and outsider status appear to be of value to creation spirituality. The gravitas of the eco-spirituality movement overall,

⁵⁴ Initially established as the Institute for Culture and Creation Spirituality at Holy Names College, in Oakland, Calif., following relocation from Mundelein College, in Chicago, the degree-granting University of Creation Spirituality has been renamed Wisdom University. The new president, Jim Garrison, has repositioned it as a countermeasure against a host of religious, social, and political fundamentalisms. (Garrison, at www.creationspirituality.org/aboutus.html.) A link to www.matthewfox.org is displayed on the university's Web site; Wisdom University Press is the publisher of *A New Reformation!*

however, lies elsewhere, in the work and views of two individuals whose ideas are drawn more explicitly from the lessons of contemporary science.

A Communion of Subjects

As MacPhee notes, Fox the theologian starts from an inward focal point and moves in an outward direction when considering the philosophical and theological dimensions of established traditions within Christianity. The mystical pathway he advocates is oriented toward a historically situated ethic of compassion and justice, with an explicit rejection of banal sentimentality and sterile asceticism. Thomas Berry, a cultural historian, champions a comprehensive, comparative perspective that takes into account the full breadth of time as well as the role of specific developmental processes, a diverse range of civilizational structures, and what one might call the innate grace of great ideas. From this standpoint, he moves slowly, in an inward direction, to consider the implications of a time-developmental (versus what he characterizes as a merely spatial) mode of consciousness that recognizes humanity's responsibility for the environment.

Berry is a native of the Southern Appalachian hill country of Greensboro, North Carolina, where he was born in 1914, one of 13 children in a Catholic family. He entered a Passionist monastery in 1934 and was ordained in 1942. After receiving his doctorate in Western cultural history, in 1948, from the Catholic University of America, he traveled widely in Europe and Asia and even served for a time as a chaplain for NATO. His subsequent career as a scholar of Asian languages and cultures included academic appointments at Seton Hall University and St. John's University, in New York. While

director of the graduate program in the history of religions at Fordham University, from the mid 1960s to the late 1970s, Berry founded the Riverdale Center for Religious Research, in Riverdale, New York, which he directed until his retirement, in the mid 1990s. In addition, he served as president of the American Teilhard de Chardin Association from 1975 to 1987.

He turned his attention, in the mid-1980s, to the ecological decline of industrial societies. His first full-length book on the subject, *Dream of the Earth*, was published by the Sierra Club and established his reputation as a preeminent eco-theologian (though he prefers to call himself a “geologist”). Subsequent publications have included *Befriending the Earth* (with Thomas Clarke), *The Universe Story* (with Brian Swimme), and *The Great Work*. In retirement, Berry continues to write but makes only limited public appearances. His advanced age means that devotees must now visit him in the countryside of North Carolina, a setting that no doubt contributes to the allure of meeting an esteemed elder of eco-spirituality.

Whereas Fox has focused his considerable energies on exposing the philosophical and theological foundations of injustice in this world, Berry has advanced an interpretative program that aims to reconcile humans with the environment. The goal is one of mutual enhancement, as part of a process in which humans recover their premodern appreciation of and intrinsic link to the universe’s psychic-spiritual and material-physical dimensions. Science, as an exploration of empirical reality, has provided ample evidence of universal verities as experienced intimately throughout successive periods of human history, says Berry. Most recently, in the modern period,

science was severed from its connection to these verities, inasmuch as it became the handmaiden of technological advance.

Berry's collaboration with Brian Swimme has imbued the New Story with some degree of scientific credibility in contemporary terms (at least for adherents of creation spirituality and eco-spirituality, who are no doubt conversant with some of the language). Their coauthored work, *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era, A Celebration of the Unfolding of the Universe*, combines the vast sweep of premodern and human history with the epic drama of stellar development, within a highly compressed survey of planetary and cosmic existence. A new kind of authority is emerging, and it is one that reveals modern industrial society is a "wasteland," rather than a "wonderland." The authority they invoke is not a monolithic exercise of scientific knowledge and technological complexity but rather a refreshed understanding of the ultimate grounding of life and existence. Evolutionary advances in consciousness have included, but are not limited to, the insights of science. Such advances are said to be guided by the planet itself. Needless to say, one could certainly envision a contemporary scientist wondering by what methodology, exactly, such a far-ranging conclusion could be warranted.

Berry states in *The Great Work* that "the only effective program available as our primary guide toward a viable human mode of being is the program offered by the Earth itself."⁵⁵ An all-encompassing change in human consciousness will allow us to recognize this truth and to organize a relevant response; overall, a new ethic is needed to guide

⁵⁵ Thomas Berry, *The Great Work* (New York: Bell Tower, 1999), 71.

human action. A reorientation of human awareness must be engaged at all levels, says

Berry, including education and religion:

Both education and religion need to ground themselves within the story of the universe as we now know it through our empirical ways of knowing. Within this functional cosmology we can overcome our alienation and begin the renewal of life on a sustainable basis. This story is a numinous revelatory story that could evoke not only the vision but also the energies needed for bringing ourselves and the entire planet into a new order of survival.⁵⁶

Humans can rectify at least some of the damage inflicted, Berry notes, but our creative capacities must always be grounded properly within the context of the natural world. An updated cosmology that takes into account the lessons of recent scientific discoveries will allow humans to build a viable future, as inhabitants of a single Earth community. But, first and foremost, Western culture must come to grips with the extent of its addiction to the myth of progress, and confront the economic and political purposes to which straitjacketed versions of science and technology have been put throughout the modern age. Regardless of the epoch or the specific problem, Berry surmises, individual, societal, and planetary crises have all reflected a hidden rage, within humans, at being so powerful technologically, while understanding so very little about the ultimate meaning and purpose of life.

By applying technological solutions to everything in sight, Berry says, humans have replaced awe and reverence for the natural, universal rhythms of existence with an all-consuming passion for management and rationality. There is little question that, in his view, humans live in a virtual version of Max Weber's iron cage, which certainly is not their natural environment. In fact, say Berry and Swimme, our own evolved capacities

⁵⁶ Ibid.

led us to construct this cage, inasmuch as we have misused our creative powers and failed to remain faithful to the wisdom shared so beneficently by the universe (clearly a Romantic lament, if there ever were such a thing). These same capacities—that is, our innate ability to connect with one another and our environment to mutual, unending benefit—will unlock this cage of disillusionment and disappointment. The point of access to freedom, Berry assures adherents, is a comprehensive retelling of the universe’s story, so that we truly understand how humans should relate to the cosmos. It is in this context that the wisdom of science discloses both the unified and continually emergent nature of the universe.

Such a view of science as wisdom—a necessary but not all-sufficient component of his “functional cosmology”—is based on intellectual foundations about which adherents might not be especially knowledgeable (much less care, for that matter). From Aquinas he has developed ideas on the overall integrity and harmonious character of the cosmic order. Through Vico (the subject of Berry’s doctoral dissertation at Catholic University), history is seen as a sequential, ordered process, in which developmental epochs are marked by distinctive types of consciousness. And in the ideas of Teilhard de Chardin, Berry took note of and then developed further the contributions that science can make toward integrating matter and spirit. All of these ideas, combined, reflect a decidedly post-Enlightenment critique of reason and progress as the loci of ultimate meaning. This is true of Fox, Berry, and Swimme.

Ultimately, for Berry as well as for Swimme, the universe serves as the context for absolutely everything. A fresh awakening to the most enduring questions, through the

New Story, is expected to instill in our political, economic, educational, and social institutions and daily life a renewed sense of purpose and order, as well as wonder for life. Such realignment means that the various stages through which the planet's life systems have developed (and of which, significantly, humans are said to be the conscious embodiment) present valuable lessons in an overall curriculum. These lessons have been present throughout the history of the cosmos but have been displaced by an anthropocentrically misaligned faith in modern reason and technical ability. Science has emerged as an unlikely hero, in this context, given the uses to which it has been put throughout the modern period. But all this is changing, Berry assures adherents. Humans, as conscious members of the Earth community, are becoming more aware of their responsibilities.

The next, necessary stage of our development, says Berry, is an "ecozoic era" that will reflect humans' understanding and acceptance of their proper role as members of an integral Earth community. Of course, humans must first come to grips with the sheer "order of magnitude" of this awesome task, and then we must be prepared to grapple honestly with its far-reaching implications at all levels of thought and experience. A truly respectful approach to Creation as whole is possible, he states, only when humans can acknowledge the extent of their culpability in mistreating the planet.

It is important to note that Berry, a Passionist, has not faced the institutional condemnation that Fox experienced. Although Berry has been forthright regarding the need for a new cosmology in his criticisms of the Catholic Church, Christianity, and the West, his focus appears to have been on identifying a central, organizing pattern that will

inform a new ethic of responsibility toward Creation, rather than on perpetually “razzing” the Church. Overall, Berry’s objections to the modern period lie principally in the form of lessons that remain unlearned, especially in terms of humanity’s fixation on mastery, exploitation, and self-centered pursuits. In short, the New Story is intended to serve as a reliable source of much-needed perspective. It serves always to remind us, regardless of our modern follies, that we form a communion of subjects, rather than just a collection of objects. Additional context for reconnecting the severed domains of science and religion is provided, in greater detail, by Brian Swimme.

The Cult of Consumerism

For Brian Swimme, the New Story does not merely replace outdated paradigms; it reintroduces humanity to the universe as a whole, and in a manner that emphasizes an ongoing, reciprocal relationship that reaches back to the very origins of the cosmos. A relevant cosmology will allow humans to forge a mutually beneficial relationship that makes sense today, based on what we now know of the universe’s birth some 15 billion years ago. Contemporary science is capable of taking us back to the start of *everything*.

Swimme is interested specifically in such matters as the “evolutionary dynamics” of the universe; the relationship between scientific cosmology and traditional religious views; the cultural implications of a new cosmology; and the proper role of humanity in the newly disclosed, unfolding story of Earth and the cosmos. Only recently have humans discovered that the universe itself is a creative, emergent, and evolutionary reality, note both Swimme and Berry. This reality has developed—and is still developing—through a vast sequence of irreversible processes; the historically

conditioned Newtonian mindset, which regarded the universe as a container that is filled with a collection of things, is completely passé. Science is understood to be a developmental insight that provides ample evidence, according to Berry and Swimme, of the three overarching principles that characterize our planet and the universe we inhabit: *differentiation* (diversity); *subjectivity* (interiority and self-organization); and *communion* (intimacy and interrelatedness). Seen from this perspective, Creation is part of a far grander process, in which history takes on still broader interpretative dimensions.

The principal message of creation spirituality, as a decidedly postmodern ideology, rests in its efforts to reintegrate spheres that were torn apart in the modern age. The full significance of a realigned awareness of the universe, and the acceptance of a plurality of ideas, is expressed in the respective concerns of Fox, Berry, and Swimme. The disastrous effects of religious and cultural orthodoxies have made a new cosmology necessary, says Fox. In particular, Christianity's notion of original sin and the turn toward the historical Jesus have had devastating results, both material and spiritual. Only a genuine quest for the Cosmic Christ will transcend the serious, anthropocentric errors of particularism and exclusivism, for Fox. Berry argues that industrial society, and the consciousness that fostered it, has caused physical and moral degradation and requires that a renewed commitment to the planet be made, as a part of a much wider, more meaningful and ultimately transcendent community. Active participation in the newly discovered cosmic reality is for Berry a crucial, creative chapter in the overall evolutionary process. For his part, Swimme situates humans fully within an integrated life system and focuses on exploring the overall implications of a scientifically

comprehensive understanding. On the ground, so to speak, he is particularly concerned with dismantling modern consumer culture, which, in his view, is antithetical to spiritual and evolutionary advancement of any kind.

Swimme received his PhD in mathematical cosmology in 1978 from the University of Oregon and taught at the University of Puget Sound (1978 to 1981) before moving to New York City in 1981 to study with Thomas Berry at the Riverdale Center for Religious Research. Interestingly, there is very little information available publicly regarding Swimme's personal background, other than the fact that he is a graduate of a Jesuit college prep school, in San Jose, California. The numerous biographical outlines available online (the majority of which are presented in relation to personal appearances at lectures and workshops) focus on his professional exploits as a nontraditional scholar.

He returned to the West Coast from New York City in 1983 to teach at Holy Names College, in Oakland, where Fox had relocated the Institute for Culture and Creation Spirituality from Chicago, and coauthored that same year, with Fox, *Manifesto for a Global Civilization*. In 1989, he moved to the California Institute of Integral Studies (CIIS), in San Francisco, where he currently teaches cosmology and is director of the Center for the Story of the Universe, which he founded. The center is described as a production and distribution affiliate of CIIS.⁵⁷

In addition to *The Universe Story*, cowritten with Berry, he is the author of *The Universe Is a Green Dragon: A Cosmic Creation Story*, and *The Hidden Heart of the Cosmos: Humanity and the New Story*. In 1996 he produced (through CIIS) the twelve-

⁵⁷ "Brian Swimme Biography and Resources," accessed online 7 November 2005, at www.wie.org/bios/brian-swimme.asp.

part video series “Canticle to the Cosmos.” These and numerous other video programs are available through his Web site. In addition, he founded, in 1998, the Epic of Evolution Society, an international forum for artists, ecofeminists, religious thinkers, and educators. He is quite active on the lecture circuit, speaking frequently at conferences and events on the topics of cosmology and ecology

Interestingly, there is little, if any, mention in Swimme’s work of creation spirituality or Matthew Fox (as is the case in Berry’s published works, although Berry includes Fox in his bibliographies), with whom he shares an uncompromising rejection of dualism and materialism. It is not apparent if there has been a rift between Swimme and Berry, or Fox and Berry, or if a decision was made at some point to broaden the appeal to eco-spirituality, generally speaking, rather than just creation spirituality. There certainly are many points on which Swimme and Fox agree, in particular regarding the modern mind and the great difficulty that Westerners in particular have comprehending the complexity and dynamism of a living cosmos. Such difficulty results in an autism that is manifested at all levels of human belief and action, say both Swimme and Berry. And if creationists object strenuously to the message spread by the preachers of naturalism, Swimme offers a denunciation of the preachers of nihilism and consumerism that is equally damning from the opposite end of the ideological spectrum.

Westerners have succeeded merely in selling themselves a bill of goods, Swimme insists. The overall ingenuity and powerful intellect of modern humans may have led to significant technical achievements, but these accomplishments have come at the

considerable cost of impoverished spirits and minds, as well as a planet that is in great peril. The New Story opens humans' eyes to the truth of existence on this planet as

members of the life of Earth, revolving around the Sun, in the three hundred billion stars of the Milky Way Galaxy, which pinwheels through our Local Group, all of it spinning inside the Virgo Supercluster, which dangles as one of ten million in the great universe. Scientists, and everyone one else as well, can experience only what the universe brings us here. What we know about the universe is gotten by listening to and reflecting on the news the universe brings.⁵⁸

Thus situated, humans must realize that the universe is not "out there"; it is, instead, a part of everything we experience. Today's science reveals this at every turn, he insists, and it is a lesson that must be absorbed despite our difficulty in transcending an inadequate Newtonian sensibility. While science emerges as a truth-telling paradigm for Swimme, much of what he says is often masked in a far larger, much more complex statement of staggering metaphysical proportions. Indeed, the sum of his message as a cosmologist is evident in the following statement:

A re-education of the mind is necessary to make sense of what we have discovered. The central archetypal pattern for understanding the nature of the universe's birth and development is omniscentricity. The large-scale structure of the universe is qualitatively more complex either than the geocentric picture of medieval cultures or the fixed Newtonian space of modern culture. For we have discovered an omniscentric evolutionary universe, a development reality which from the beginning is centered upon itself at each place of its existence. In this universe of ours to be in existence is to be at the cosmic center of the complexifying whole.⁵⁹

The question remains as to what an average reader or a contemporary scientist could conceivably make of the relation of humans to the cosmos and Creation from such statements.

⁵⁸ Ibid, 64.

⁵⁹ Ibid, 86.

More than anything else, it would appear that the social significance of the ideas advanced by Fox, Berry, and Swimme is located in the ability to tap into a *Zeitgeist* of vivid explanatory power and wisdom. Alas, simple answers are for simple minds; the New Story draws strength from its capacity to address extremely complex matters in a friendly, accessible manner. The “new” sciences allow for creation spirituality and eco-spirituality to reach both the depths and the heights, in a way that engages well-educated adherents who seek ongoing spiritual sustenance. Certainly, creation spirituality offers an explicit rejection of Enlightenment values that do not correspond to modern exigencies, as well as a fervent embrace of whatever types of evolutionary, developmental schema that engage a far-ranging pluralism.

Conceptual gaps in modern society that fail to explain both direct and mediated experiences of the natural world are crucial to understanding the appeal of this particular vision of creation. Experience is absolutely foundational for Fox, Berry, and Swimme. Creation spirituality is able to embrace and transcend, simultaneously, an empirically available reality. Toward this end, Fox locates false values within a corrupted system that inevitably leads individuals to despair; Berry traces the civilizational influences of consciousness in relation to principles that govern the cosmos as a whole; and Swimme identifies conceptual stumbling blocks to an adequate and accurate appreciation of life’s spiritual and material dimensions.

Conclusion

The belief systems examined in this study each try to resolve the culturally ingrained perception that the conceptual tools supplied by science and those offered by religion are, by necessity, in fundamental conflict. Such attempts to reconcile competing worldviews reflect the conviction that certain types of knowledge—particularly regarding the material–physical sphere—have been exacted at considerable cost to the religious and spiritual well-being of individuals and the communities in which they live. For their part, the cultural entrepreneurs considered here have tried to demonstrate that tensions between scientific understanding and religious faith do not present insurmountable blocks in the ongoing human process of locating and accessing transcendent meaning. Each individual discussed in this study has traded on, so to speak, available options. These options deal with the concrete realities of a pluralized world.

The comprehensive programs of cognitive and normative realignment advanced by creation science, intelligent design, theistic evolution, and creation spirituality each tackle the sense of loss and disorientation experienced in relation to the epistemological and metaphysical demands of modern life, each from within specific social and institutional locations. Each program claims to identify, and re-engage with, the source of a cohesive, intelligible world; each offers its own version of the creation story that reflects a particular understanding of science, of humanity, and of the divine. With respect to this-worldly behavior and action, each program offers a plausibility structure that is sustained by a historically accessible pattern of meaning, purpose, and order. In

turn, each belief system offers what might best be described as an extensive “theodicy of deliverance” that presents a premodern, rather than strictly modern, promise of reassurance and solidarity. Each program of alignment negotiates structures of individual and social fulfillment in relation to both the divine and the natural world.

What is needed, adherents are told in each case, is the liberation of humanity from the characteristically unwholesome and unholy (not to mention at times unpleasant and inconvenient) conclusions reached by way of Enlightenment thought. Confidence of a different sort must be restored, in terms of discovering and conveying reliable patterns of intelligibility, through correctly conceived and applied educational and scientific (though not necessarily verifiable) programs. Most significant is the ability of these approaches to supply an unassailable rejection of nihilism and to reconstruct an appropriate ethic of responsibility and relationship toward both the sacred and the profane. Adherents thus not only witness but also participate in, through carefully articulated programs of conceptual realignment, in an overhaul of standards regarding cultural authority.⁶⁰

The belief systems considered in this study likewise reflect altered relationships to the institutional and social frameworks from which the outlooks initially emerged. Each program demonstrates, according to its own lights, modernity’s preoccupations with fact-gathering and what sociologist Kelly Besecke helpfully describes as “epistemological

⁶⁰ In this sense, the points made by Christian Smith regarding revolutionary shifts in cultural authority in modern society are quite useful, though most of his effort is expended in the direction of dismantling, once and for all, secularization theory. Still, his arguments pertaining to social change in relation to status-interests certainly illuminate the conditions in which practitioners and theorists of science and religion alike operate in the late modern period.

materialism.”⁶¹ The bone to pick is not simply with a particular church or creed, nor the specific application of doctrinal beliefs with respect to correct ritual practice or entrance to heaven. Emphasis is placed, rather, on the entire edifice upon which belief structures have been built and maintained, throughout the modern period. Adherents can remain active (or nominal) members of specific communities of faith or belief while simultaneously engaging in a systematic process of reappraisal, if they so choose, of specific issues. The important thing is, believers and seekers alike are well aware of the overwhelming need to *justify* their conceptual moorings, commitments, and proclivities in a highly pluralized setting. Starting with the beginning of all things—*i.e.*, creation—is as basic and elemental an expression of the foundation of their beliefs and their existence as can be found; indeed, it has formed the core of Christian thought for centuries. The ultimate source appears to have become both the question and the response to the search for transcendent meaning and empirical veracity.

These considerations suggest that the definitive response to “late modernity” for such movements is not a full-fledged countermodernity, but a perpetually reflexive mode of questioning, described at length by Roof, that requires increasingly sophisticated forms of integrative thinking. The overall plausibility structures of these movements become more “free-floating” for those adherents who have been socialized, primarily through higher education, to command greater degrees of explanatory power. Anchors are no longer lodged mainly in denominational practice but through privately funded and

⁶¹ Kelly Besecke, “Literalism vs. Wisdom: Three Perspectives on Evolution and the Bible,” in Nancy T. Ammerman, ed., *Everyday Religion: Observing Modern Religious Lives* (New York: Oxford University Press), forthcoming (2006). Besecke’s discussion of belief systems that focus on literalism versus wisdom is particularly useful in understanding the conceptual outlines of available options.

administered institutes (such as those established by or associated with Morris, Johnson, Fox, Berry, and Swimme, for example), small-group structures, adult education, and the like, as noted by scholars of religion such as Wuthnow, Bellah, and Roof. This relocation of “local” authority offers an important opportunity to reinforce the social backbone, so to speak, of modern knowledge.

Specifically, beyond the increasingly sophisticated command exhibited by adherents, the arguments presented by these belief structures exhibit, from differing ends of the ideological spectrum, a profound dissatisfaction with the values and mores associated with a cold rationalism and mere fact-gathering. This discontent is augmented by a culturally primed distrust of institutional authority and the vast influence of mass communication, in effect pushing the contestation of ideas and values within American society into a particularly uncomfortable corner. Modern individuals must cultivate the ability to continually orient themselves, and their social communities, in relation to competing versions of reality. In effect, our society continues to grapple with a severe case of conceptual lag. The practical response, for the individuals discussed here, to conditions that engender an overwhelming experience of senselessness or lack of direction, has been to recondition how religious believers and spiritual seekers regard science in relation to understanding the world and the cosmos. Science remains instrumental, but for varying reasons and to varying effects.

While modern society has made profitable use of scientific and technological knowledge, especially with regard to understanding the properties of the universe and the natural world, Howard J. Van Till may well have a point when he observes that modern

individuals seem to have considerable difficulty grasping the effective terms of governance. Complementarian and noncomplementarian worldviews represent far more than coping mechanisms for dealing with a modern, pluralized and globalized world. The belief structures examined in this study, in their own way, offer a counteroffensive to the dangers inherent in knowing too much and too little at the same time. Each system of belief insists that it has reached a limit, with respect to certain features of Enlightenment conceptions of rationalism and what is deemed to be “modern.” Each draws a line in the proverbial sand, epistemologically and metaphysically speaking, that declares, in effect: *This far, but no farther.*

Creation science links the evils of materialism and scientism to a sinful rejection of theism in favor of a dilatory deism, if not much worse. The argument is sustained, for fundamentalists, by the irrefutable evidence that, through an unqualified acceptance of the theory of evolution as fact, the dominant culture embraces a value system that is antithetical to their belief in a personal redeemer and the Word of God as presented in the Bible. For adherents of creation science, *sola scriptura* remains the prime social fact; Henry M. Morris has devised for fellow Bible believers a system that recognizes all else must follow. The relentlessly invasive character of secular culture has led Bible believers to mount increasingly visible—and surprisingly confident—political and social responses. Morris has been especially successful in linking fundamentalism’s homegrown ingenuity and aptitude for organization and volunteerism to support from such nationally and internationally known leaders as Jerry Falwell, Tim LaHaye, and Francis Shaeffer.

Denominational particularities need not hinder Bible believers who operate within independent fundamentalist churches or other separatist contexts. Proponents of creation science have successfully extended the extra-institutional character of fundamentalism by establishing a parallel culture—establishing research organizations such as the Institute for Creation Research, developing and marketing home-schooling materials, and so on. Such a plausibility structure must renew itself from within, continually, in the face of considerable derision from without. The advantages and disadvantages of this are apparent enough, yet the existence of creationist theme parks points to the expectation that the market will continue to support the young-earth variant of creationism.

Once stationed at the vanguard of the modern creationist movement, creation science has been superseded, in recent years, by a more theologically removed option. A new generation of self-styled creation scientists continues to advance the case made so diligently by Morris, but the overall scope of this argument remains constricted by the self-limiting factors of biblical literalism and a hugely dismissive religious and secular establishment. Although this is not cause for great concern among rank-and-file Bible believers, who are familiar enough with isolation and ridicule, an elite from within evangelicalism—determined opponents of the young-earth position—has seized enhanced status for itself and those fellow believers who would wish to distinguish themselves, almost at any cost, from fundamentalists. Their program of realignment, intelligent design, presents an intellectually and culturally respectable alternative that avoids the conceptual quicksand of accommodation.

The foothold gained by intelligent design indicates that a highly abstract, intellectualized approach has worked well, organizationally, for members of the knowledge class, particularly in terms of guiding political and social action. That the leading proponents of intelligent design appear unable to present a coherent scientific program of their own seems to bother only scientists (secular and religious alike) and those who object to creationism more generally. Nonetheless, intelligent design certainly has generated a spirited response from the scientific establishment, which seems to have been the point. It appears quite capable of holding its own, especially with able assistance from organizations such as Seattle's Discovery Institute.

While a recent decision in federal court⁶² may reassure the opponents of creationism, Philip E. Johnson and his colleagues have clearly used the Wedge strategy to its utmost advantage, in a political milieu that afforded increased visibility to the concerns of conservative evangelicals, without invoking that dread appellation, fundamentalism. It took ten to fifteen relatively short years for proponents of intelligent design to distinguish themselves and their program from the less attractive features of young-earth creationism. Indeed, intelligent design appears to have turned the entire debate upside down and inside out, in a manner that promises adherents ringside seats to a continued showdown of competing worldviews. The fact that the argument, creation by design, itself is as old as the hills, in a manner of speaking, does not appear to matter in the least to the contesting parties. The overall strategy has been to win friends and influence enemies within the broader culture. The strength of the movement is evident

⁶² *Kitzmiller v. Dover Area School District*, 379 F. Supp. 2d 680 (Penn. Middle District, 2005).

now inasmuch as Johnson's name has appeared only very rarely in the latest commotion, whereas he had initially served as its principal, though unofficial, spokesman. In this sense, he achieved his goal of forcing the argument into the open; throughout, adherents have been able to observe, from a safe distance.

Theistic evolution, by comparison, appears to be left in the dust, as it offers middle-of-the-road, somewhat muddled fare that depends largely on the demands of the theological structure that struggles to invoke and maintain it. Fundamentalists are at least clear about which beliefs should be embraced and which should be rejected. Howard J. Van Till and like-minded colleagues offer evangelicals a voice of calm and reasoned erudition; yet this sort of an approach seems better suited to polite courses in nineteenth-century apologetics at Christian colleges than, say, than the rough-and-tumble, up-to-the-minute world of 24-hour cable news. The principal challenge of theistic evolution has been to remain faithful to an array of theologically valid visions regarding Creation, without falling prey to the full range of enthusiasms du jour. Indeed, when does one even hear the phrase *theistic evolution*, today, at a time in which popular discourse features such polemically appetizing options as creation science and intelligent design?

While proponents of theistic evolution continue to parse, ever so carefully and with the best of intentions, the terms and conditions under which Creation can be said to reflect God's glory, other parts of the evangelical community have declared that they have had enough of the secular world. Approaches that accept the idea that religion and science can occupy separate-but-equal domains do not provide instruction about how to engage the broader culture, how to defy unbelievers, or how to win court cases. The

middle course thus remains largely hidden in today's culture; it is neither loud nor indelicate enough to demand its fifteen minutes of maximum public exposure.⁶³

From the other side of the spectrum, creation spirituality offers objections to the unfortunate consequences of an Enlightenment rationalism gone-wild: a spiritually and morally bereft materialism, they say, has been propped up in the modern world by the twin evils of consumerism and dogmatism, which have warped humanity and threaten the world as a whole. Through their attempts to provide a comprehensive answer to humanity's quest for both transcendent meaning and planetary survival, Matthew Fox, Thomas Berry, and Brian Swimme offer a "super-sized" cosmology that features reciprocity with the universe, through retrieval of wisdom-based spiritual traditions.

The relationship of creation spirituality to institutional Catholicism is far more complex than that of the varieties of creationism to conservative Protestantism. One can, for example, read Berry and Swimme and fail to catch a glimpse of the Catholic, much less Christian, character of the faith tradition that upholds this system of thought. Indeed, a specific brand of ecumenism is the order of the postmodern day within creation spirituality, and it is developed as part of an overall program of eco-justice. In Fox, adherents at least find a definitive counterpoint to an institutional framework; even when he veers off into mystical flight, his thought is presented consistently in contradistinction to positions held by the Catholic Church. This desire to reclaim ancient and mystical traditions is offered in relation to greater social, economic, and political causes, which

⁶³ While the curious trotting out, in the fall of 2005, of President Jimmy Carter must have pleased some evangelicals and dismayed yet others, the true significance of this gesture was probably lost to the majority of Americans who neither know nor care about disagreements internal to evangelicalism; the media certainly didn't seem to have a clue as to what Carter was trying to say.

science presumably is expected to serve, as well. Ultimately, the continued evolution of human consciousness is anchored, for creation spirituality, to an inclusive and geocentric vision of not only human perfectibility but universal integrity. Science serves as an instrumental force of change; there can be little doubt that “hard” scientists would object to such a “soft” approach. While the belief system’s connection to a Catholic, or broadly Christian, stance is more or less beside the point, in some respects its ties to science are equally tenuous.

A broad diffusion of theoretical and practical knowledge, as well as aptitude, has allowed religious believers and spiritual seekers to engage scientific understanding as a secure basis for belief and action in the modern world. Creation science, intelligent design, theistic evolution, and creation spirituality each have insisted on the re-coupling of science and religion, for their own distinct purposes. Each demonstrates the efforts of specific communities to formulate effective programs of reconciliation and systematic re-enchantment in a world that seems more fragmented than ever.

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www.nwcreation.net

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