# **Beyond Scientific Creationism**

John K. Reed, Peter Klevberg, Chris Bennett, Jerry Akridge, Carl R. Froede, Jr., Thomas Lott\*

# Abstract

C cientific creationism's surprise attack rocked the late Twentieth Century  $\bigcirc$  intellectual establishment-acolytes of the worldview of Naturalism. Who could possibly imagine that religion would mount an *empirical* attack on evolution and its handmaiden, uniformitarian history? But that was decades ago, the shock has worn off, and surprise alone will not finish the job. Empirical arguments developed by an unfunded, outcast minority cannot penetrate the hidebound armor of modern Naturalism despite its many empirical flaws, because at its core Naturalism is not an empirical construct but an integrated worldview. To finish the job started by the scientific creationists, that worldview must be shown to be contrary to truth and thus destroyed. We advocate the primacy of formal over empirical arguments because: (1) they transcend disciplinary boundaries, (2) Naturalism is highly susceptible in that arena since its virulently anti-Christian exterior rests on presuppositions derived from Christian theology, and (3) a formal approach is consistent with Christianity's historical strengths (and Naturalism's inherent weaknesses) in theology and philosophy. A well-founded formal attack would also by example correct derivative and serious modern misunderstandings about the nature of knowledge and truth. Once Naturalism is demonstrated formally invalid, empirical research can take its proper role of building science and exploring natural history within the default, superior Christian worldview. Some Intelligent Design advocates have initiated this argument with great effect against biological evolution, but they fall short because they fail to recognize uniformitarianism as foundational to modern Naturalism.

- Chris Bennett, B.S., 14778 Plumas Drive, Chesterfield, MO 63017
- Jerry Akridge, B.S., 2626 Pine View Drive, Arab, AL 35016
- Carl R. Froede, Jr., B.S., P.G., 2895 Emerson Lake Drive, Snellville, GA 30078-6644
- Thomas Lott, M.S., 2815 Norwood Hills Drive, Katy, TX 77450
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# Introduction

We have been educated by our modern intelligentsia to believe that Western history consists of a glorious classical age of Greco-Roman culture, followed by 1,000 dark, dirty, and dangerous years of Christian superstition. As the story goes, this unhappy state of affairs lasted until a hardy group of fearless intellectuals rediscovered classical thought, introduced the world to science, and brought the light of the Renaissance. After a prolonged struggle against ignorance (with a few nasty religious wars thrown in), they finally reached the intellectual nirvana of the Enlightenment. The same intellectual elite would have us believe that only fundamentalist morons spout their humorous (or is it dangerous?) nonsense, usually in the

<sup>\*</sup> John K. Reed, Ph.D. (corresponding author), 915 Hunting Horn Way, Evans, GA 30809

Peter Klevberg, B.S, P.E., 512 Seventh Avenue North, Great Falls, MT 59401

dark rural recesses of the "Bible Belt." It makes for high drama, but:

The reason that we didn't know the truth concerning these matters is that the claim of an inevitable and bitter warfare between religion and science has, for more than three centuries, been the primary polemical device used in the atheist attack on faith. From Thomas Hobbes through Carl Sagan and Richard Dawkins, false claims about religion and science have been used as weapons in the battle to "free" the human mind from the "fetters of faith" (Stark, 2003, p. 123).

It was against this backdrop that scientific creationism burst on the scene in the last half of the Twentieth Century. Naturalists<sup>1</sup>, convinced that such troubles were behind them, were shocked, and decades of complacency led to embarrassing defeat in a series of early debates spearheaded by Dr. Henry Morris and Dr. Duane Gish. Their embarrassment was only slightly less than their anger and they quickly labeled creationists as the epitome of anti-intellectual superstition. But victory and defeat in these types of battles are not measured in tenure, publications, and grants within an entrenched elite, nor in judicial decisions, nor even in the number of pandering Christian academics. As the evolutionists are fully aware, they are measured by the surprising (to them) numbers of the general public who still have not bought into their worldview.

So what has been gained over the past decades? As with most issues, the news is mixed. There is no doubt that the topic of origins has become an issue for lively debate rather than a relic of the past. A minority of religious colleges rejects evolution and some even deny uniformitarian history. So do many individual Christians, but their leaders are often at odds with them, as is reflected by rifts in conservative denominations—rifts that run (with few exceptions) between the laity and the elite. A few organizations promulgate the creationist message and publish scientific journals, as opposed to the thousands supporting Naturalism. No secular educational institution presents creationism as a serious alternative. Most prominent Christian colleges and seminaries (even those of conservative denominations) reject a young age for the cosmos, and do well to express polite doubts about Neo-Darwinian evolution. In spite of the labor of the pioneers, the edifice of evolution still strongly resists biblical history as it always has. It could be argued that progress has been made within the church, but not the world.

If the modern creationist movement was such a shock to the secular establishment, why has it not made greater inroads into modern education? What will it take to complete the revolution begun by those courageous scientists and engineers? The tide is clearly not advancing as it once did, and it is the Intelligent Design proponents, not the creationists, who are creating the greatest turmoil at present among secularists. The first generation is passing the torch to the next and as we look ahead, we must consider a more effective strategy for our time so as not to lose the ground already gained. While a commitment to truth remains constant, flexibility in method is often needed. We suggest that it is time for such flexibility: if Naturalism is not defeated as a worldview, then we face the possibility that creationism may end as an historical footnote; an oddity of late Twentieth Century American culture.

We propose a method that we believe will rekindle the intellectual revolt against secular mono(a)theism—a belief that heartily deserves a place amid the ruins of failed ideas. To this end, we propose:

- that the debate must be broadened beyond the empiricist boundaries of scientific creationism because Naturalism, though empiricist in its epistemology, is not itself an empirical construct;
- that Naturalism is vulnerable to formal arguments because it rests on Christian presuppositions that wait like hidden explosives for the detonating spark of logic;
- a method to find and ignite these formal flaws, and finally;
- that advocates of Intelligent Design recognize uniformitarianism as a foundation of modern Naturalism (although we applaud them for attacking Naturalism as a worldview).

# Historical Overview

# Victory of Uniformitarianism and Evolution

The "discovery" of "deep time" was one of the most significant events in the history of modern thought. James Hutton (1726–1797) and John Playfair (1748–1819) paved the way for Sir Charles Lyell (1797–1875) and his *Principles of Geology*, the bible for uniformitarian geologists of that

Naturalism, as used in this paper, is the worldview which comprises metaphysical materialism, epistemological positivism, and historiographic uniformitarianism. While Naturalism could be subdivided into Secular Humanism, Marxism, and even Cosmic Humanism (i.e., Noebel, 2001), the structure with regard to the nature of being, the mode of knowing, and history is similar enough in all to treat Naturalism as perhaps a "mega-worldview" for the purposes of the origins debate. Evolution has the distinction of being both integral to this worldview and one of its most effective weapons.

day. Lyell's uniformitarianism is remembered by its famous though imprecise maxim, "the present is the key to the past," and the often misunderstood quote of James Hutton:

If the succession of worlds is established in the system of nature, it is in vain to look for anything higher in the origin of the earth. The result, therefore, of our present enquiry is, that we find no vestige of a beginning,—no prospect of an end. (Hutton, 1788, p. 304).

Lyell went on to become internationally famous, and a leader of the Nineteenth Century scientific establishment, even though:

> Lyell's great treatise is not, as so often stated, a textbook summarizing all prevailing knowledge in a systematic way, but a passionate brief for a single, well-formed argument, hammered home relentlessly (Gould, 1997, pp. 104–105).

Lyell's "passionate brief" prevailed, and by 1850 the idea of a global flood was widely rejected. Once the Mosaic account of the Flood had been overthrown, the stage was set to attack the creation of fixed species. This task fell to Charles Darwin (1809–1882), Lyell's protégé. The voyage on the Beagle, *The Origin of Species by Means of Natural Selection or the Preservation of Favoured Races in the Struggle for Life*, and *The Descent of Man*, collectively mark the trailhead to evolutionary dogmatism.

Huxley, Spencer, Haeckel, Gray, and a host of others championed Darwin's ideas, presenting the issue as one of enlightened science versus outmoded religion. This false representation was widely accepted (as it is today) and was aided by such men as Archibald Geikie (1905) in his book, Founders of Geology. Geikie presented Hutton, Playfair, and Lyell as bold empiricists struggling to overcome a blind religious catastrophist elite. Even avowed Marxist and Harvard paleontologist, the late Dr. Stephen Jay Gould, recognized Geikie's presentation of the "empiricist myth" as "cardboard," (Gould, 1997, p. 67), but the fable prevails. Few today recall that Darwin's most vigorous critics in the late Nineteenth Century were scientists like Louis Agassiz and Lord Kelvin. In that tradition, modern anti-evolutionary efforts have also been led by scientists, both secular and Christian. Darwinian evolution and uniformitarian geology became the dogma of modern scientific education advocated by the professional scientific class, a group wielding undeniable cultural influence. Following the public relations coup of the Scopes Trial, the evolutionary establishment became so firmly entrenched that the Darwinian Centennial celebration in 1959 was primarily an exercise in self-congratulation by the intellectual elite of the day.

#### Epistemological Background of that Victory

The triumph of Enlightenment Naturalism included: (1) a

divorce between philosophy and theology; (2) the abandonment of ancient common sense; and (3) the appropriation of parts of philosophy by science. Science continued its intellectual conquest until eventually even history was swallowed: a key step, since history has always been recognized as a bulwark of Christian faith (Schlossberg, 1983). The philosophical steps that led to our present state followed a progression from supernaturalism to Naturalism (Sproul et al., 1984; Schaeffer, 1982; Adler, 1993; and many others). Adler (1965) diagnosed four problems that have plagued modern thought and laid a foundation for modern Naturalism:

- A tendency to reject the wisdom of the past and engage upon individual, convoluted system building (e.g., Descartes, Kant);
- A tendency to retain old errors in new systems, such as the medieval concept that philosophy could supply sure and certain knowledge;
- A tendency towards what he called "suicidal epistemologizing"—making epistemology prior to instead of posterior to other branches of first order philosophy and focusing on what cannot be known instead of what is known; and
- A tendency towards what he called "suicidal psychologizing"—substituting the psychologizing of common experience for common experience itself as a philosophical method.

What Locke did was to make the simple but disastrous error of obliterating all first intentions by treating all ideas as if they were primarily *objects* of the mind or *second intentions* employed by the mind to consider its own ideas... Ideas ceased to be *that by which* we know the world about us, and became *that which* we know—almost all that we know....

I need not dwell here on the far-reaching consequences of this fundamental substantive error—the subjectivism and the solipsism...together with all the skeptical excesses that it led to, and the epistemological puzzles and paradoxes that confronted those who tried to hold onto the most obvious features of our experience after they had been psychologized into myths and illusions (Adler, 1965, pp. 268–269).

In addition to these errors and their virtual destruction of first order philosophy, Adler (1965) noted a tendency on the part of philosophers to ape science and mathematics, not recognizing that although philosophy (*sensu stricto*) has an empirical function, it does not share the investigative aspects of science or the precision of abstract mathematics. He notes the frustration of philosophers relative to these disciplines:

This sense of inferiority has, in turn, two further results. It has driven some philosophers to make all sorts of mistaken

efforts to imitate science. It has led others, such as the positivists in our own century, *to turn the whole domain of first-order inquiry over to science*... (Adler, 1965, p. 272, emphasis added).

It is not coincidental that "modern science" (per Schaeffer, 1982, pp. I:223–227) was first known as "natural philosophy." That moniker conveyed two deep insights: (1) natural science had a method and area of inquiry distinct from the broader domains of philosophy and theology, and (2) natural science was not "neutral" but intrinsically dependent upon a philosophy of life or worldview. To follow the path of natural science was to limit oneself to empirical inquiry due to the nature of the subject matter, not to claim that the empirical was the totality of reality. This first break was healthy; it has been termed the "scientific revolution," and its history is well documented (Morris, 1984, pp. 25–33; Schaeffer, 1976). What followed was not healthy: a radicalization of science which blurred the boundaries of the method and domain of science and which lost its perspective of subordination to a foundational worldview (Klevberg, 1999). This distortion was called "modern modern science" by Schaeffer (1982, pp. I:229–231, 308–310), and calls for its correction have been voiced elsewhere (Plantinga, 1990; Middelmann and Wilder-Smith, 1980; Schlossberg, 1983).

Christianity rests upon the Bible. The Bible in turn rests upon confidence in history in general and in revealed history in particular. The fatuous cliché, "the Bible is not a textbook of science," merely distracts from the fact that it is the only reliable textbook of ancient history. Naturalists have always seen that more clearly than Christians and it is little wonder that Naturalists strive so hard to replace biblical history with "scientific history." The recent flare-up over the introduction of a book advocating the Christian historical perspective on the Grand Canyon (Vail, 2003) is an excellent illustration of their intensity in this battle.

Over the past two centuries, the obstacle of Christian theology has become less and less relevant among the educated elite. With the bulwark of theology out of the way, first-order philosophy virtually committed suicide through the reactions and counter reactions to a number of "start from scratch" system building efforts. Thus a vacuum was created begging for a different kind of knowledge. The stunning progress of science and technology filled it, but science, not satisfied, has attempted to swallow all empirical ground previously held by philosophy, history, and theology. With minimal opposition, it is little wonder that Naturalism so easily succeeded.

#### The Worldview of Naturalism

Today, Naturalism is the dominant worldview of Western

Materialism Positivism metophylic Solution historiography Uniformitarianism Uniformitarianism

Figure 1. The worldviews of Naturalism and Christianity are contrasted by a triad of metaphysics, epistemology, and their basis for history.

intellectual culture. Its advocates trace its roots to ancient Greece and Rome, but Enlightenment Naturalism is a post-Christian absence of conscious faith in which ultimate reality is reduced to physical matter (Figure 1), a metaphysic that is paradoxically a denial of metaphysics. The reductionistic nature of Naturalism is perhaps one of its most profound weaknesses, a weakness conveniently obscured by the rapidity of scientific and technological advancement (Plantinga, 1967; Schaeffer, 1982, pp. I:309–310). In classical terms, Naturalists jettisoned Plato and Aristotle for Democritus. The position and motion of matter/energy cause everything that has happened, is happening, or will happen. God is a false myth, the supernatural a dream, the soul an illusion, and the afterlife nonexistent. In short, only fools or weaklings cling to religion.

Since reality is defined as matter and motion, there is no essential difference between mind and matter. This corollary has created many thorny philosophical issues for proponents of Naturalism, such as that of human freedom in the face of an inevitable determinism (Øhrstrøm, 1990). A crucial corollary to metaphysical materialism is the epistemological primacy of science. No God means no revelation, and thus theology is a waste of time. Reality is restricted to physical phenomena, and knowledge consists of the best human understanding of these phenomena. The logical connections between metaphysical materialism and epistemological positivism are an important point of internal consistency in Naturalism. Science, and only science, offers hope for sure and certain knowledge. David Hume captured the spirit of positivism early on in his famous conclusion:

> When we run over our libraries, persuaded of these principles, what havoc must we make? If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, "Does it contain any abstract reasoning concerning quantity or number?" No. "Does it contain

any experimental reasoning concerning matters of fact and existence?" No. Commit it then to the flames: for it can contain nothing but sophistry and illusion (Hume, 1777, section 12).

Following the empiricist trail of Hume and his predecessors, Auguste Comte (1798–1857) became the progenitor of modern positivism. Comte proposed the evolution of knowledge: from primitive theology, on to philosophy, and finally positive science. Although extreme forms developed in the Nineteenth Century have been widely repudiated, the general concept remains the dominant epistemology of modern scientists today.

> Most scientists today are positivists, claiming, along with Comte, that all valid descriptive knowledge of reality belongs to science.... The dogmatic claims of positivism are widely prevalent at the end of the twentieth century, not only among scientists, but also among all those who have been miseducated in our colleges and universities, as well as in the unthinking multitudes who are overly impressed by the achievements of science and technology (Adler, 1993, p. 76).

One of the diagnostic features of positivism is its swallowing of other disciplines, such as history.

This attempt to make history scientific originated in the positivism of Auguste Comte. The term positivism was used to contrast the reliable methods of natural science with the ethereal speculations of metaphysics; and while later positivistic historians may not accept other parts of Comte's philosophy, the term itself is not too inaccurate. The aim is to discover laws by empirical observation (Clark, 1994, p. 99–100).

Because of its belief that reality is matter in motion and is understood through the method of positive science, Naturalism faces a profound dilemma regarding history. It needs a strong theory of history to support the concept of evolution and natural history (its heavy artillery in the war against Christianity). But the logical consequence of a strong positivism appears to preclude history, since only knowledge based upon observation is valid. Furthermore, any theory of history needs nonscientific presuppositions.

> The basic propositions are, first, that the present relics of the past cannot be interpreted as historical evidence at all unless we presume that the same fundamental regularities obtained then as still obtain today (Flew, 1997, p. 49).

Science applies special forms of observation to physical phenomena (i.e., experimentation with controlled repeatability). Experimentation is impossible with reference to the singular events of the past. However, in order to argue against Christianity, Naturalists must be able to both accurately describe history and interpret it (Figure 2). We are often puzzled by events of 100 years ago. Historians fight



Figure 2. Meteor Crater, Arizona. Crater, viewed from the rim. 1891. For many years, scientists argued the origin of this feature. Photograph by G.K. Gilbert. Image courtesy of the United States Geological Survey.

over those that happened thousands of years ago in the midst of abundant textural and archeological evidence. How then can there be confidence when Naturalists glibly make a leap of faith back in time three to six orders of magnitude further? Any sane consideration of the enterprise forces us to conclude that it has moved from the realm of the merely difficult to that of the impossible.

Only one thing can salvage history for Naturalism – unlimited extrapolation. What then can lay such a foundation from the (observable) present into the (unobservable) past? Lyell, who was known as a great observer of geologic phenomena, held to a strict uniformity of rate and process because he understood the philosophical meaning of uniformitarianism. Uniformitarianism offered to save history for science by abducting it from the Bible. But over time, uniformitarianism has lost the philosophical purity it once enjoyed. One of the generally ignored aspects of the development of geology is the slow, but dramatic erosion of the concept as proposed by Hutton and Lyell. Two centuries of examining the Earth's crust have demonstrated that geologic processes operated in the past in ways unknown and unobserved today (Figure 3). Observation (supposedly the most valid basis for knowledge) has invalidated the basis for a credible history for Naturalism, but no one seems to have caught on. That itself is incredible!

To escape the contradiction, geologists today recognize that rates and even processes differed in the past, but resort to a bait-and-switch defense of uniformitarianism as "methodological" to preserve their ability to interpret the past (Gould, 1965; 1984; Klevberg, 2000, pp. 36–38; Reed, 2001). Methodological uniformitarianism is nothing more than the assertion that the laws of nature operate consistently through space and time, a fundamental axiom of science predating Lyell by centuries. But Lyell defended



Figure 3. Grand Canyon National Park, Arizona. Grand Canyon, viewed from in front of the El Tovar Hotel. August 30, 1905. Radically varying interpretations of Grand Canyon between uniformitarian and creationist geologists illustrate the role of interpretive templates. Photograph by R. Arnold. Image courtesy of the United States Geological Survey.

much more than "methodological" uniformitarianism; he safeguarded a uniformity of rate and process (Figure 4).

The difference between Lyell and his intellectual children is that Lyell was a better philosopher. He fought catastrophism because it supported the dominant worldview of Christianity. He could not afford any concession to Cuvier or Moses without risking all. An atheistic view of history requires the extrapolation of scientific certainty into deep time, which in turn requires strict uniformity. But



Figure 4. Niagara Falls, New York and Canada. American Falls, viewed from Goat Island. 1895. Niagara Falls was one of Lyell's examples of steady rate uniformitarianism. Meyer and Williams (1999) documented its failure to do that from strictly empirical grounds. Photograph by G.K. Gilbert. Image courtesy of the United States Geological Survey.

modern scientists are not sensitive to these philosophical distinctions. Since the Naturalists have long ago won the debate, scientists no longer feel the need to avoid any stain of catastrophism. But ignorance cannot make the problem go away. Thus, they are stuck on the horns of their dilemma: Lyell's uniformitarianism is philosophically necessary, but empirically discredited.

#### Naturalism Assailed by Scientific Creationism

Most creationists date the revival of modern scientific creationism from the publication of *The Genesis Flood* in 1961. Soon after, the Creation Research Society was founded. By the early 1970s, Drs. Morris and Gish were unveiling scientific flaws in evolution in debates held around the United States, and then internationally. Since then, the modern creationist movement has grown to include a variety of individuals represented by at least three principal organizations, all committed to (1) a traditional interpretation of Genesis 1–11, including creation in six 24-hour days, (2) a young Earth, and (3) a global flood responsible for most of the rock record that uniformitarian scientists assert took billions of years to form. These organizations include the Creation Research Society, founded in 1963; the Institute for Creation Research, founded in 1972; and Answers in Genesis, founded in 1993. Numerous local organizations also work hard to propagate the creationist message.

Modern creationism initially attracted attention because of the emphasis on a *scientific* rebuttal of evolution and uniformitarianism — a method that would prove impossible if there were any truth to Naturalists' claims of a scienceversus-religion conflict. But there were also problems. The scientific approach led to friction between creation scientists and some professional theologians. The theologians were biased against the conservative denominational affiliations of the creationists and hesitated to associate with those the academic establishment had labeled "anti-intellectual." Many sincere theologians were indifferent to the age of the Earth and the length of the creation days, ignorant of the role of uniformitarianism and blind to its challenge to biblical authority. Thus, the early attacks on Naturalism emphasized scientific evidence against evolution.

What has come from the past decades? Thankfully, many individuals have recovered proper confidence in the Bible as an authoritative revelation. Furthermore, Christians have seen the once-invincible aura of uniformitarian history founder on incisive critiques and contrary data. However, no mainline Protestant or Orthodox denomination nor the Roman Catholic Church actively defends a young Earth or special creation as opposed to evolution. Few evangelical denominations do either, and many are rent by strife over the issue. Apart from a few brave teachers, no public university or school condones teaching even a comparative evaluation of creationist and evolutionist natural history. Relatively few private universities do either, and some of the most virulent anti-creationist rhetoric emerges from "Christian" institutions. No major seminary and only a few small ones teach a recent creation and universal Flood. Despite the inroads of the 1970s and the continuing laudable efforts of individuals and organizations, progress on the creationist front appears to have slowed.

Unfortunately, the efforts of such stalwarts as Dr. Henry Morris and Dr. Duane Gish that created such turmoil among Naturalists have given way to those who seek a compromise between the "extremes." The most recent trend in that direction is that of Intelligent Design (ID): prestigious scientists and scholars present complex evidence for the creation, but they either tactfully avoid the young-Earth controversy or affirm its contrary. They are welcomed with comparative relief by theologians who were placed in very uncomfortable positions only a few decades back. One of the leaders of this movement is Dr. Phillip Johnson, author of several popular books (Johnson, 1993; 1995; 1997). He epitomizes both the positive and negative aspects of the Intelligent Design movement. Positively, he has done something that the "scientific" creationists neglected: a logical critique of evolution as it resides within the worldview of Naturalism. Negatively, he has failed to see the internal linkage between Naturalism's epistemology-positivism-and its justification of history in uniformitarianism. We seek to correct this oversight. In summary, scientific creationism was an appropriate argument to start the battle, but it is not the major theme that will ultimately lead to victory.

# **Requirements for Victory**

In the final analysis, Christians recognize that proper theology teaches us to strive for faithfulness, while God provides victory or defeat (II Chronicles 20:15). However, it is certainly reasonable to expect victory, especially when warring against ideas raised up against God (II Corinthians 10:5). No creationist can afford to minimize the spiritual dimension of these battles. What follows is an intellectual strategy that is consistent with biblical truth and hopefully with biblical wisdom. Most of the following points warrant much greater discussion. Therefore, this section is merely a broad outline for recovering a sound, biblical view of natural science and natural history.

#### Understanding via Worldview

If the correct interpretation of Genesis is to regain broad acceptance in the church and grudging respect—or at least fear—outside the church, then the true extent of the obstacles must be recognized. The frontal attack on Darwinian biology and Lyellian geology has rekindled hope, but few have yet to acknowledge the true extent of the opposition, which like an iceberg lurks mostly beneath the surface. Worldviews are the mythologies that underlie culture. Christianity is a worldview. It has been challenged not by improper science, but by a competing worldview that has used science as a cloak to hide its moldy philosophical and theological skeleton. Scientific creationism has torn that cloak, but as long as the bones beneath cling together, there will be no true victory. The next step is to disarticulate those bones. A few have seen that clearly (Johnson, 1997; Noebel, 1991; Schaeffer, 1982); it remains for the rest of us to get aboard.

Creationists need a clear appreciation of the extent of the battle. Scientists commonly shy away from theology and philosophy, and creation scientists rightfully distrust the theologians who have abdicated origins and history. However, we are all theologians by default; it only remains whether to be competent or incompetent ones. The coming generation of creationists must fight a worldview, not simply empirical data and derivative theories. Modern militaries recognize the effectiveness of the "combined arms" model; creationists also need a broad array of intellectual weaponry. Proponents of "Intelligent Design" have seen this more clearly than creationists. We hope that as creationists are willing to learn that approach from these advocates, that they will be open in turn to learning from creationists the need to derail uniformitarian natural history.

#### **Destroying the Foundations**

How does one go about attacking a worldview? First, one must recognize that it is an integrated entity that spans the breadth of intellectual disciplines and is held together by the glue of faith. Thus, a worldview cannot be totally destroyed; it can only be rendered foolish in the eyes of most. Finding and attacking presuppositions or logical foundations is a method that goes immediately to the vitals. We recognize three cornerstones of modern Naturalism: (1) metaphysical materialism, (2) epistemological positivism, and (3) a uniformitarian justification of history (Figure 1). Logical connections exist among each of these. The first two are linked as follows: if reality is matter, then science is the means to comprehend reality.

But Naturalism was shaped by its own early history. Rising in opposition to Christianity, it needed to destroy the Christian monopoly on history. Uniformitarianism provided a philosophical justification for the abduction of history by science. If the present could be perfectly extrapolated into the past, then science could rescue history from its revelatory shackles. Lyell opened the door. That is the connection the Intelligent Design advocates have missed, and that is why despite their brilliant attacks on materialism and positivism, they will not topple Naturalism until history is anchored back in its Christian moorings.

What about evolution? Evolution in one sense is not the foundation of modern naturalism, but in another sense is. It does provide the underlying mythology for modern Naturalism, but destroying evolution will not ensure the destruction of Naturalism. In any case, it has proven itself the most effective weapon against Christianity over the past two centuries. Scientific creationism blunted the blade, but did not break it. That probably will not take place until the worldview that nurtures it is uprooted.

#### A Full Orbed View of Origins and History

Origins and Earth history, however controversial, comprise only one facet of the Christian worldview. Because it belongs to a larger whole, it must be constrained and fenced by other truth. This constraint becomes more powerful when we see that there is a hierarchy of knowledge. What is the basis for deriving such a hierarchy? We suggest that the weighted dependence of one branch of truth on another as a good criterion. The Bible is at the apex, because truth is inherent in God, and man's comprehension of truth relies on God's revelation (and all the more given the effects of sin). Men have labored for millennia to systematize and apply revelation in the discipline of theology. Theology depends on the Bible, and thus is subordinate to it. Philosophy correlates the wisdom of common experience with theological axioms, and is thus subordinate to theology. Philosophy and theology provide axioms for other empirical disciplines and are thus superior to them. It is only out of our understanding of reality and knowledge by theology and philosophy that we find axioms that make science possible. The same is true of history.

> History requires philosophy. Not only is the need for philosophy seen in the earlier difficulties and puzzles, but it is also seen, where some people do not expect it, in the very definition of history.... The definitions of history, listed above, all reflect the philosophy of their authors. Those authors who have reflected but little on philosophical problems give looser definitions. Those who have puzzled through many difficulties become more pedantic, more careful, more accurate. Implicit in their formulations are their views of man, of society, of God, and therefore of knowledge... whatever his definition and extended views of history are, there must always be an underlying and controlling philosophy. It can be ignored, but it cannot be avoided (Clark, 1994, p. 21–22).

History, however, has a significant advantage over other disciplines. Its boundaries, method, and significant content

are readily available in the Bible, thus providing a validation of that fraction of history within the Christian worldview.

It is difficult for even thoughtful Christians to escape the presuppositions of the age. Positivism is a relevant example. Many do not adequately distinguish between science and history and elevate science to the level of Scripture. We commonly see statements to the effect that science is the "67<sup>th</sup> book of the Bible." Another popular Christian position recognizes the primacy of Scripture, but sees only vague distinctions between science and history. For example, we often see a distinction drawn between "operations science" and "origins science." While this position is closer to truth, neither appears to see clear boundaries between disciplines, because they have abandoned the philosophical basis that allows such demarcations. Three theological axioms are required to clear up this mess: (1) the unity of truth, (2)the multiplicity of human knowledge, and (3) the priority of the end (truth) over the means (method).

These points are somewhat paradoxical: on one hand is the need for the clear boundaries between various disciplines, and on the other, the need to reassert the unity of truth and its primacy over method. There is not room for a thorough discussion of this topic in this paper (c.f., Clark, 1991; pp. 197–228; Morris, 1984; Schaeffer, 1968a; 1968b; 1972), but we would offer one trail through the tangle of modern thought. In both the manifestations of positivism cited above (the equivalence of general and special revelation and the labeling of origins studies as science), there is the recognition that science plays a role in natural history, although in the latter case there is also the correct recognition that natural history is not quite the same thing as controlled experimentation. We believe that this dilemma can be resolved by the application of the eminently sane "mixed question" approach of Adler (1965) to origins and history-two areas that demand such an approach. With this strategy, methodological differences between different areas of knowledge are retained, while allowing roles for more than one discipline. Combined with this approach is the need to subordinate method to the goal of all knowledge-truth. Thus "biblical" creationism does not produce a different quality of truth from "scientific" creationism; rather our quest for the truth about origins integrates knowledge from the Bible and science, as well as philosophy and history. Defining validity by method is a trick of Naturalist epistemology to denigrate absolute truth. We see it commonly in the dismissal of the Christian worldview as "religion" and its own as "science." The unspoken assumption is that the method of science provides hard truth and that of religion, only wishful thinking. It is this method-based, rather than truth-based, approach to knowledge that has allowed Naturalists to separate science from Scripture and then

set them in opposition to each other.

Figure 5 is a diagram differentiating among the various empirical disciplines, correcting the positivist error that any empirical discipline is science (for more details on this arrangement, see Adler, 1965). This error has supplied Naturalism with a tremendous advantage especially in the confusion of history and science. Clear thinking recognizes that:

> Similarly, when scientists (such as geologists, paleontologists, and evolutionists) sometimes attempt to establish the spatial and temporal determinants of particular past events or to describe a particular sequence of such events, they cease to be engaged in scientific inquiry and become engaged in historical research, sometimes called natural history.

Though both history and science are investigative modes of inquiry that submit their conclusions to the test of experience (i.e., the data obtained by investigation), history by its method can answer questions that science cannot answer; and science by its method can answer questions that history cannot answer (Adler, 1993, p. 15).

#### Creation and the Fall

It is easy to get caught up in defending the history of Genesis, and to forget the significance of the events. One that creationists would do well to remember is the Fall and its effects on mankind. Genesis states that after Adam rebelled, it took little more than 1,500 years for all people, with the exception of Noah's family, to give themselves completely to evil. Romans 1–3 summarizes the teaching of all of Scripture when it states that no one is righteous, that man's natural state is to suppress the truth, and that only God's action can overcome this terrible prejudice. Although this is not the place for an expanded debate on the noetic effects of sin, we simply note that the Bible teaches that all men apart from God are strongly biased against God, His truth, and His people.

What does this mean for creationism? First, it should provide clear expectations for the role of empirical arguments on either side. On one hand, evolution and uniformitarianism did not triumph, nor do they continue to enjoy victory, based only on empirical argumentation. Rather, their empirical arguments provide a justification for a deeper, ongoing bias against the Creator and His truth.

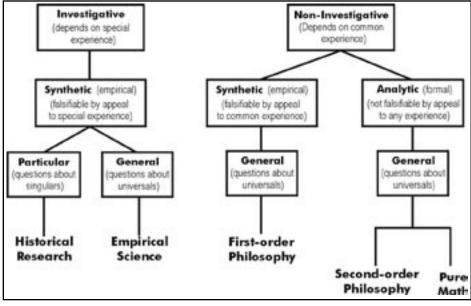


Figure 5. Adler's (1965) divisions of the disciplines. See his discussion for a complete explanation.

Naturalists are committed to their worldview not because of its intellectual supremacy, but because they are committed to its opposition to Christianity. Thus, creationists will not convert the masses that reject God by some "silver bullet" of empirical truth. Should we abandon science or natural history? Of course not! However, we should recognize the true purposes of our research: (1) to support the church in its apologetic task against unbelievers, (2) to fight against the lies of our enemy, and (3) to carry out the command of God to exercise dominion over His creation.

# Formal vs. Empirical: A Necessary Transposition

We noted above the need to destroy the foundations of Naturalism. If Naturalism is the full-orbed worldview that we assert it to be, then such a task cannot be done empirically. It is impossible to empirically overthrow axioms and assumptions. Instead, creationists must make the difficult transition from their primary attack, that of empirical argument to the mode of formal, logical argument. This style will strengthen the Christian attack, because it attacks a point of weakness in Naturalism from a position of strength in Christianity.

A mark of Naturalism's success is the degree to which its epistemology of positivism has dominated thought over the past two centuries. What is positivism? Adler (1992, pp. 31–32) noted:

I know that there are enough varieties of positivism to

permit the professors to retain their individuality, but I insist that behind the multiplicity of technical jargons there is a single doctrine. The essential point of that doctrine is simply the affirmation of science, and the denial of philosophy and religion.

Theology and philosophy have always been strengths of Christianity. Early proponents of Naturalism required a means to neutralize these powerful defenses. Instead of taking them head on, Naturalists found that science could be distorted to make them supposedly irrelevant. Ironically, it was the success of Christian theology that defined a "background" role for theology in its relationship to science and made this attack possible (Clark, 1991; Reed, 2001; Schaeffer, 1976). Once science was established in the forefront of empirical knowledge, it was easy to assert the irrelevance of theology and the primacy of empiricism. Over decades of inculcation, even large numbers of sincere Christians have accepted the claims of positivism. Perhaps, its strength has even influenced the "scientific" creationist approach to the problem of evolution and uniformitarianism.

How should Christians view science? Science is only one aspect of the totality of Christian knowledge that is summed up in the term "revelation." By means of general revelation, man comes to understand himself, nature, and God through the action of his created mind as he apprehends and comprehends himself, nature, and God. But man's mind is finite, fallen, and fighting against the knowledge of God (Romans 1-3). God graciously provides special, direct revelation that supplies absolute truth about Himself, man, and nature through the Scriptures, often correcting human errors in natural knowledge. The revelatory basis of Christianity justifies a strong view of truth. For centuries, philosophers have ignored the Bible and consequently struggled with truth and certainty. Their historical problem has always been how contingent, limited, fallible humans can achieve absolute, unlimited, and infallible knowledge. At present, they appear to have settled for the abolition of knowledge in favor of emotion (so-called "postmodernism").

If Christians retreat from the authority of the Bible, they are swept into that endless philosophical morass. If men depend upon God for knowledge, then acquiring knowledge is not an exploration of the unknown, but the discovery of God's creation that is already known by God. Human limits that result in incomplete knowledge do not mean that truth does not exist, since the infinite God guarantees a unity of truth. Because truth is consistent even when it is not known comprehensively, science is possible. Even today, scientists operate on that assumption as researchers work individually, assuming that their conclusions can eventually be integrated with those of distant colleagues. Thus, the Christian view of truth is essential for science. That being so, science must accept the entire package, and learn to respect its place within Christian epistemology, submitting itself to special revelation and limiting itself to its proper boundaries.

History holds a special role in the Christian worldview, because the Bible uses history and its lessons as much of its medium of truth. Man exists in the context of history and God reveals Himself in the same medium. Thus, like Naturalism, the Christian view of history is closely tied to its epistemology. But the differences between revelation and positivism breed equally severe differences in their outlooks on history (Figure 1). Revealed history is trustworthy and true precisely because it is revealed. The revealed record may not include exhaustive explanations of all events, but it contains sufficient explanations of events that God (who knows and understands all things perfectly) deems important. Because human beings learn well through stories and examples, much of Scripture consists of historical narrative and explanation. Because God is personal and has intervened in space and time, His written revelation of Himself is largely historiographic. Any denial of the importance of history contradicts the validity of the Christian worldview.

# The Formal Argument and Its Advantages

The formal argument against Naturalism rests on that worldview's dependence on science. Science will ultimately betray Naturalism, because science is the child of Christian faith. Although science has been turned to the "dark side," its internal logic screams for close links to Christian theology. Recent studies in the history of science demonstrate this historically, and the dependence of science on theological axioms demonstrates logical links. For example, scientists assume that the laws of nature are not restricted by space or time. This cannot be a "scientific" conclusion since it has not been and cannot be tested empirically in every location at every time in the entire universe.

The fatal flaw of Naturalism lies in this fact: the axioms of science rest squarely in the Christian worldview. In essence, Naturalists have merely purloined the presuppositions of Christianity. It is as though they were crusading against faith while unknowingly wearing large, red crosses on their backs!

> "... Christian theology was essential for the rise of science. In demonstration of this thesis I first summarize much recent historical work to the effect that that not only did religion not cause the "Dark Ages;" nothing else did either—the story that after the "fall" of Rome a long dark night of ignorance and superstition settled over Europe

is as fictional as the Columbus story. In fact, this was an era of rapid and profound technological progress by the end of which Europe had surpassed the rest of the world. Moreover, the so-called "Scientific Revolution" of the sixteenth century was the normal result of developments begun by Scholastic scholars started in the eleventh century. (Stark, 2003, p. 123).

What this means for creationists is that there are limits to the effectiveness of "scientific creationism." To debate only on scientific grounds is to accept the epistemology of Naturalism, supporting the very worldview we are trying to destroy. Christians must reject positivism and uphold revelation. There is another advantage to the Christian way. The debate over origins has always been restricted to "experts" because the public bought the lie of positivism. Christianity opens the floodgates. No longer must believers not trained in one of the sciences cower behind closed doors. Any Christian willing to think with logic and in terms of worldviews can participate effectively in the origins/history debate. We can eliminate the home field advantage of the Naturalists, where the debate was restricted to specialists engaging in "factoid fights"-still too often the common currency of dispute today.

So how does it work? First we must consider the relative positions of theology, philosophy, and science, and the basis for ordering those relationships. All Christians should realize and proclaim that the origins/history debate is a debate between worldviews, not between competing-but-somehowotherwise-neutral scientific theories. Next, we must look at the two worldviews from a different perspective. Many books detail the differences between them, but a more profitable line of investigation is to look instead to their similarities. These similarities are present because the fathers of modern Naturalism were steeped in the Christian worldview and assumed many of its truths without reflection. While modern Naturalism may present itself as an independent competitor to Christianity, antithetical in every way, in reality, it is not. Its Enlightenment founders were more "Christian" than they realized. Therefore, many of the paradigms of Naturalism are supported by presuppositions that are Christian.

Early proponents of Naturalism could not have realized that they were making Christian axioms part of their program. Since presuppositions usually are the part of the iceberg below sea level, most people then (and now) never noticed their existence. If we shine the light of truth on the hijacking of Christian axioms by Naturalism, the Naturalists will have only one way out. They must provide self-consistent substitute presuppositions (with appropriate justifications) to replace the pilfered Christian ones. If they cannot do so, then their worldview will be demonstrably flawed, having failed formal truth tests of consistency and coherence. At that point, the origins/history debate must be settled wholly inside the Christian worldview.

What will that mean? First, the means by which any questions are answered must be consistent with the Christian worldview. Naturalism ignores revelation and theology; Christians cannot do that. As a consequence, the Bible and sound theology must provide necessary constraints for scientific and historical investigations. Next, it means that the big questions must be answered before the small ones. By that we mean that questions pertaining to the meaning of Scripture or theology take precedence over those of science or natural history, because the Christian worldview includes an implicit hierarchy of knowledge.

But, first things first. What are the formal flaws in Naturalism? What follows is a concise summary of several such contradictions from previous work (Reed, 2001).

#### Nature Can Be Known

Science developed when people began to understand nature within the Christian worldview during the medieval period. The Scholastics were forced to choose between the rational universe of Aristotle and that of the Bible, freely created by a transcendent, infinite, eternal, and unchanging God.

> No Christian could ultimately escape the implications of the fact that Aristotle's cosmos knew no Jehovah. Christianity taught him to see it as a divine artifact rather than a self-contained organism. The universe was subject to God's laws; its regularities and harmonics were...a result of providential design. The ultimate mystery resided in God rather than in Nature.... The only sort of explanation science could give must be in terms of descriptions of processes, mechanisms, interconnections of parts. Greek animism was dead.... The universe of classical physics, in which the only realities were matter and motion, could begin to take shape (A.R. Hall as cited in Glover, 1984, p. 83).

This new paradigm gave the world a mechanistic flavor. God was a superior engineer and man could comprehend His marvelous works. Since God created freely, creation could not be understood by fixed rational principles, but by critical reflection on observation and revelation. Final cause existed in the will of God, was relegated to theology, and left science unencumbered by teleology.

Modern Naturalists reject the Christian doctrine of creation, but retain the derivative mechanistic method of studying it. Thus they have kept the empirical tradition without being able to justify its use. Also, they cannot explain final cause in its historical context. They reject both Aristotle's view that purpose is inherent in nature and the Christian view that purpose is imposed upon nature. Thus, their only logical alternative is that purpose does not exist relative to nature, but if purpose does not exist neither is there any purpose in their science (or their lives) nor is there a logical basis for expecting nature to act purposefully, a feature often observed.

#### Man Can Know It

If nature is a scientific wonderland, can anyone play? If scientific thinking comprehends physical reality, there must be a connection between human thought and nature. How can scientists act as objective observers unless they transcend nature? How can they transcend nature if they are simply a part of the system? During the formative years of modern science, those questions posed no problem because man: (1) was created in the image of God, (2) was an immortal spiritual being, transcending nature, and (3) had the promise of dominion over the creation, implying the ability to comprehend it.

Naturalism attempts to preserve man's scientific potential by making him the pinnacle of evolution and holding out the possibility of future evolution into "gods." But man, the pinnacle of evolution, is still a part of the system; without the imago dei there is neither transcendence to support objective study, nor does wishful thinking about future godhood secure the promise of dominion. The internal logic of Naturalism is better reflected by those who assert the place of plants and animals to be equal or superior to that of man. Thus, Naturalism traps man within nature without any of the attributes that permit him to be a scientist, but still he practices science-because he believes that it disproves Christianity.

#### **Knowing and Time**

History in the worldview of Naturalism seems doomed to determinism, rendering it and man's study of it of no consequence. Faith in the value of history and in man's central role results from a thoroughly Christian appreciation of the relationship between God and man played out on the stage of time. Part of that relationship is the freedom of man relative to nature (see above). Naturalists have removed God, but cling to their own significance through the pursuit of "missions" in life. They never ask why they should bother to "save the whales" in a deterministic world. This misplaced mission-oriented character of man reveals yet another stolen Christian presupposition. This inability to live within the confines of a worldview at odds with God's created world is what Schaeffer (1982, pp. I:129-142) called the "point of tension." And tension it is-Naturalism has no valid basis for history.

Similarly, concepts of linear, unidirectional time, the idea of progress, and of transcendent purpose in history

tianity a concept of "creation" (the Big Bang), followed by a period of conservation of the created order, followed by the end of the universe as we know it (oscillation to another big bang). Similarly, Naturalism has stolen the idea of progress from Christian theology. The Bible presents history as moving from the starting point of Creation to a purposeful end (Judgment). Inherent in the biblical presentation of redemptive history is the idea of progress, man moving toward the fulfillment of ultimate perfection on a new Earth. Naturalists assume linear, progressive time in evolution, but are stymied when pressed for a goal. "Increasing order and complexity" seems quite devoid of any purpose or moral imperative. But the comparison of these similarities-millennia old in Christianity; centuries in Naturalism—certainly suggests that Naturalists have been caught once again with their hands in the cookie jar of Christian axioms.

# **Grasping History**

The primary historiographic axiom of Naturalism is uniformitarianism, a logical necessity that allows unlimited extrapolation of observation (positivism) backward in time. Logic demands the pure uniformitarianism of Hutton and Lyell.

> But Lyell held a complex view of uniformity that mixed this consensus about method with a radical claim about substance-the actual workings of the empirical world. Lyell argued that all past events-yes, every single one-could be explained by the action of causes now in operation. No old causes are extinct; no new ones have been introduced. Moreover, past causes have always operated-yes, always-at about the same rate and intensity as they do today. No secular increases or decreases through time. No ancient periods of pristine vigor or slow cranking up. The earth, in short, has always worked (and looked) just about as it does now (Gould, 1997, p. 105).

The only problem is that observation, the *sine qua non* of positivism, contradicts this view of history. How did he get away with it, and more importantly, why do his disciples continue to?

> Lyell then pulled a fast one-perhaps the neatest trick of rhetoric, measured by subsequent success, in the entire history of science. He labeled all these different meanings as "uniformity," and argued that since all working scientists must embrace the methodological principles, the substantive claims must be true as well. Like wily Odysseus clinging to the sheep's underside, the dubious substantive meanings of uniformity sneaked into geological orthodoxy-past an undiscerning Cyclops, blinded with Lyell's rhetoric - by holding fast to the methodological principles

that all scientists accepted (Gould, 1997, p. 119).

Reed (2001) argued that Lyell's trickery was not valid. But avoiding for now that level of analysis, there is a more fundamental dilemma faced by Naturalists—the Christian origin of the uniformity axiom that underlies any definition of uniformitarianism. It does not matter what kind of tortuous explanations of "catastrophic uniformitarianism," have made their way into geologic literature, we only need to realize that Naturalism cannot justify faith in invariant natural law apart from God. Positivism demands justification via observation, but the universal axiom of uniformity cannot be so demonstrated. Lyell got away with it. Today we know better, and Naturalists are once again left needing a justification that does not exist in their worldview.

#### Finding the Juncture of Truth and Reality

The fundamental assumption of knowledge in general and science in particular is the conjunction existing among human knowledge, reality, and truth. Creation, and only creation, supports this very basic requirement. God is ultimate reality, and if God tells us to understand Him and enjoy an intimate relationship with Him, then it stands to reason that man can understand reality. If God created the physical universe, then His image-bearers could be expected to acquire a valid, though not comprehensive, understanding of nature. Absolute knowledge exists; God has it. Thus, while we do not know everything, what we know is guaranteed to be true if it corresponds to God's knowledge. Revelation provides the means to test correspondence.

To put it in practical terms, how can we justify the multimillion-man research effort of science? Most scientists assume that the parts will fit after the work is done. This bold assumption makes sense in the Christian worldview: man's similarity of thought is guaranteed by the image of God as is the unity of truth. But why should there be an integrated truth to discover in Naturalism, and even if there were such a thing, how could man put it together? There cannot even be any assurance that what scientists think has any relationship to truth or reality. The last four hundred years of philosophy have emphasized the uncertainty of knowledge apart from revelation: scientists have been far too busy operating (usually unconsciously) in the Christian worldview to keep up.

In summary, Naturalism is formally invalid because it relies on axioms antithetical to its methods and conclusions. Naturalism sprouted from the soil of Christian presuppositions. Larceny is profitable as long as no one notices, but when the spotlight is aimed in the right direction, the long arm of logic must act. The formal weaknesses of Naturalism are reflected in the success of Dr. Phillip Johnson's works. We contend that unless Naturalism can recreate these axioms and justify them in a way that is consistent with the rest of its worldview, creationists should be screaming that the entire worldview is false and should be ignored in discussions about origins or Earth history. All of the empirical data in the world cannot save Naturalism from formal flaws.

> The philosophy which forbids you to make uniformity absolute is also the philosophy which offers you solid grounds for believing it to be general, to be almost absolute. The Being who threatens Nature's claim to omnipotence confirms her in her lawful occasions. Give us this ha'porth of tar and we will save the ship. The alternative is really much worse. Try to make Nature absolute and you find that her uniformity is not even probable. By claiming too much, you get nothing. You get the deadlock, as in Hume. Theology offers you a working arrangement, which leaves the scientist free to continue his experiments and the Christian to continue his prayers (Lewis, 1961, p. 106).

# Quo Vadis?

The battle against Naturalism irrevocably changed late in the Twentieth Century. Resting on a string of successes that dated back to the Enlightenment, evolutionists were stung by their weaknesses against the frontal assault launched by the scientific creationists. Evolutionist after evolutionist fell in debates on university campuses. They were even forced into court to explain to sympathetic judges that the Christian brand of origins was just religion, while theirs was science, the mother of air conditioning for the courtrooms, computers for the clerks, and convenient polyester robes. In short, they were on the defensive for the first time in more than two centuries. It was difficult to argue that the laws of Thermodynamics and gaps in the fossil record were just some of that "ole time religion" that had managed to find its way out of its closet. Courtroom successes revealed only the sympathetic religious commitment of Naturalists on the bench.

But just as the evolutionists began to adjust and use their advantage of an overwhelming number of entrenched academics, they were rocked by a new challenge. Qualified scientists who were not creationists began to argue that evidences of "intelligent design" existed in nature. They did not argue the age of the universe or the Earth, which eliminated some of the more popular arguments against the scientific creationists (radiometric dating, age of starlight, etc.). Even worse, a lawyer named Johnson began to write books poking holes in their assumptions and challenging their worldview. Those books were written for an educated general audience and roused significant interest in university settings. But Johnson has not advanced a creationist argument for a young Earth or a universal flood. As time passes, it becomes evident to more people that issues of origins have more to do with worldviews than with science. The focus of the Intelligent Design movement on evolution has been especially telling, and the outmoded ideal of the white-coated, objective investigator with an answer for every question has slipped into the past. As with any intellectual revolution, a host of confusing compromises has been advanced, muddying the waters for many sincere Christians and interested unbelievers.

The environment is ripe for a new attack on Naturalism by creationists. The times, however, call for a formal attack, not another empirical one. No special education or training will be necessary for the public to see the glaring contradictions in Naturalism. Unless they abandon reason, they will be forced to admit (grudgingly and under compulsion of the truth) that Christianity again has the high ground. Total victory is unreasonable since the inherent biases of fallen human beings will believe anything, even a failed worldview, as long as it is not Christianity. More importantly, it is time to extend the formal critique of men like Phillip Johnson to the third cornerstone of Naturalism—uniformitarianism. This was the first triumph for Naturalism in the Nineteenth Century and remains the most deeply entrenched.

# Acknowledgments

Only God has a monopoly on truth. We acknowledge our heartfelt admiration and intellectual indebtedness to the pioneers of the modern creation movement, to Dr. Phillip Johnson and the other Intelligent Design proponents, and to the centuries of Christian thinkers who developed the worldview that has provided the advantages that we enjoy. We are not accusing the scientific creationists, who have our profound respect and gratitude, of error. All we are saying is that it is time for the creation movement to look forward. There should be no change in the Bible's teachings about Creation and the early history of the Earth, although we do call upon the Intelligent Design proponents to recognize the Bible's clear teaching of a global flood, the role of uniformitarianism in Naturalism, and the necessity of a biblical natural history based on those truths. Furthermore, we strongly encourage the continued empirical investigation and publication in scientific disciplines by creationists within the framework proposed in this paper.

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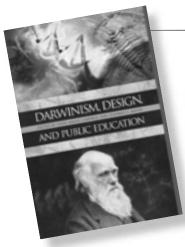
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Book Review

Darwinism, Design, and Public Education by J.H. Campbell and S. C. Meyer, Editors Michigan State University Press, East Lansing, MI, 2003, 634 pages, \$21.

This is another of the many books published by the intelligent design (ID) movement. It is unique in that not only is it published by a secular university pub-

lishing company but also one part is

dedicated to criticisms of the ID movement, mostly by evolutionists or anti-Design advocates.

The chapters by ID proponents, especially Stephen Meyer, take evidence for design to a new level. I especially liked the rigorous analysis with extensive documentation of the Cambrian explosion by Stephen Meyer, Marcus Ross, Paul Nelson, and Paul Chien. Other evidence for intelligent design is provided by articles on information, specified complexity, and irreducible complexity. Biology textbooks undergo a devastating critique for their false icons and misrepresentations of the controversy.

The book delves deeply into the philosophy of science, the difficult definition of science, the various confusing definitions of evolution, legal issues, and especially public education. ID advocates make a strong case that public education should be teaching the origins controversy. The chapter entitled "Teach the Controversy: Is it science, religion, or speech?" by David DeWolf, Stephen Meyer, and Mark DeForrest was especially insightful. DeWolf and DeForrest are lawyers who teach at Gonzaga University in Spokane, WA.

Most of the critics of ID in Part IV were disappointing. The knowledgeable reader should have no trouble seeing the superficiality of their arguments. They rarely challenge the ID arguments in depth but instead rely upon rhetorical arguments. The major case seems to be that it is "religion" versus "science." The assumption is that the philosophy of naturalism should be part of science, including the unobservable and unrepeatable prehistoric past. Phillip Johnson, who somehow is the last author in the "critics" part, sums up the major hurdle for the ID movement, "The greatest hurdle by the intelligent design (ID) movement is to overcome the prejudice that says that to attribute anything in biology to a Designer is to engage in 'religion' rather than 'science""(p. 549). Most of the other critics, some of whom were not even scientists, prove this concern.

As with all ID books, the young earth creationist (YEC) needs to be discerning in reading this book. The critics and a few of the ID advocates have the habit of publishing such statements as, "One of the cardinal points of his [Gish's] theory is that Earth is only a few thousand years old, whereas geology has long ago demonstrated that the real time frame is measured in billions of years" (p. 195). I do not really think such YEC critics have examined the age of the earth, radiometric dating methods, and the Flood in such depth to make such statements. The ID movement is challenging the power elite on the obvious evidence for a Designer from biology (Rom 1:20). It would be most interesting if ID proponents would subject the other issues to the rigor they apply to the philosophy of naturalism and evolutionary biology. I can understand that such an expansion of the ID agenda goal would be problematic for Phillip Johnson's wedge idea but it would be worthwhile to engage YEC about these matters. The Creation Research Society plans to carry this book on its web and in its new catalog, but with a disclaimer.