

Foreword

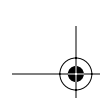


The first time I contacted Phillip Johnson, he wasn't sure he wanted to talk to me. I had just read the manuscript of his first book, *Darwin on Trial*, and I was calling to request an interview.

The difficulty was, I was a contributing editor for the *Bible-Science Newsletter*, an unabashedly creationist publication (now defunct). As an adult convert to Christianity, Johnson was ready to question Darwinian materialism, but he wasn't sure he was ready to associate with outright creationists. He even consulted a friend over whether to grant the interview.

Fortunately, the friend was a close associate of mine as well, Charles Thaxton. (I had met Charlie in 1971 at L'Abri in Switzerland, where I heard him lecture on the flaws of evolution.) Thaxton encouraged him to go ahead with the interview, and thus began a personal friendship and professional association that have continued ever since.





In introducing this book I would like to cast a glance back over the past several years and describe the innovative ways Johnson has transformed the terms of the evolution debate. Having been involved in the debate for more than two decades (since 1977), writing on science and worldview issues, I can describe the lay of the land both before and since Johnson joined the fray. For those who have followed the evolution controversy for many years, this will explain what is new and significant in the Intelligent Design Movement. And for newcomers, it will be a helpful introduction to the current state of the debate.

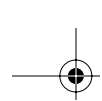
Moreover, because this current book is the most personal of Johnson's published works, it seems appropriate to focus on the man himself and his influence. His innovative mode of operation can be instructive for Christians working in other areas as well, serving as a positive model for cultural engagement in any field or discipline.

Asking the Right Questions

Johnson's single most important contribution has been a keen sense of strategy. Christians trained in the sciences had done (and continue to do) excellent work in reviving and advancing standard critiques of evolutionary theory. But scientists are typically less adept at thinking strategically and mobilizing a movement.

The result was that theists across the spectrum fought each other instead of joining together to oppose the hegemony of materialistic evolution. I have vivid memories of acrimonious debates between various groups: young-earth creationists, old-earth creationists, flood geologists, progressive creationists, "gap" theorists



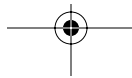


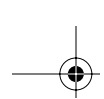
and theistic evolutionists. They argued over the interpretation of terms in Genesis and the length of the creation “days.” They argued over whether the Genesis flood explains the fossil record and how much “process” God employed in creating the world.

And as battling believers splintered into antagonistic groups, secularists were happy to fan the flames. As Johnson puts it, “They all but said, ‘Let us hold your coats while you fight.’” Secularists had no need to work at marginalizing Christianity through a strategy of “divide and conquer” because Christians were doing all their work for them.

When Johnson entered the arena, he immediately launched a new strategy. Call it “unite and win.” He rallied Christians behind the crucial point of confrontation with the secular world—the issue that stands at the heart of the conflict between Christianity and secular academia.

And what is that? It’s the question of philosophical naturalism: Is nature all there is? Can natural forces alone explain the universe and everything in it? Did life arise by blind, materialistic, Darwinian processes, or does the evidence point to other forces? In confronting secular culture, these are the right questions to start with; all others are secondary. Christians may argue about the details of how God created or the timing of creation; but they all agree that the universe is the handiwork of a personal God. Likewise, on the other side, evolutionists may argue over the precise mechanism and timing of evolution—for example, whether natural selection needs to be supplemented by other mechanisms—but they agree that the overall process is blind, undirected, purposeless. Asking the right questions means bracketing



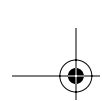


peripheral issues in order to focus on the crucial point of whether the universe is an open or a closed system—and whether science therefore should be limited to naturalistic theories only or consider *any* theory that adequately explains the evidence, even one that invokes an intelligent agent.

In many ways, Johnson was applying the same principle in science that Francis Schaeffer had articulated in his cultural apologetics. One factor that made Schaeffer so effective was that he clarified the search for truth by sketching, in stark outline, what the basic choices are. When it comes to first principles, there are not really many viable options—indeed, only two. Either the universe is a closed system of cause and effect, or it is an open system. Either it is the product of impersonal, undirected natural forces, or it is the product of a personal agent. Every worldview has to start somewhere, Schaeffer used to say, and either we can start with time plus chance plus the impersonal, or we can begin with a personal being who thinks, wills and acts. As a student at L'Abri, I listened to one of his best-known lectures, “Possible Answers to the Basic Philosophical Questions,” where he argues that if an impersonal beginning is inadequate to explain reality, then we have undercut a vast variety of philosophical systems without having to debate the myriad details that distinguish them.

In a similar way, Johnson cut through the conflicting claims of a vast variety of positions on origins by showing the crucial role played by initial philosophical commitments: Either nature is all that exists, and science is permitted to consider only naturalistic theories—in which case science is little more than applied naturalism—or there is something that transcends nature, and we





must define science in terms that allow it to follow the evidence wherever it leads.

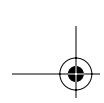
Uniting Christians Behind the “Big Ideas”

One of the beauties of Johnson’s approach is that it has the potential to unite Christians across a broad spectrum. They might disagree over such details as the age of the universe, but all orthodox Christians can concur in rejecting a blind, mindless, materialistic mechanism for the origin and development of life. Johnson’s approach is sometimes described as a middle ground or compromise position, but that’s a misunderstanding. In fact, what he has proposed is not one more competing position at all; he has offered a logical analysis of the foundational ideas that unite *all* Christians, regardless of the details of their positions.

Having united on these defining principles, Christians may well discover a new spirit of unity and charity for taking up the old contentious issues once again. They can now treat the questions that once divided them as the subjects of friendly in-house debates. They can engage in amicable discussions over the interpretation of Genesis, the age of the universe, the range and limits of microevolution and common descent, and so on. Such lively debate is what science is all about.

Indeed, it’s not too much to say that the Intelligent Design Movement has largely achieved this unity. It has become a “big tent” drawing together Christians across a wide range of disciplines and positions, from strict young-earth creationists to theistic evolutionists (at least those among the latter who acknowledge a role for divine direction). Along the way, the movement has





picked up allies and cobelligerents among Jews, Muslims and even secularists who are willing to challenge the hegemony of naturalistic evolution.

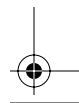
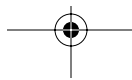
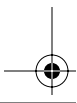
Dividing the Opposition

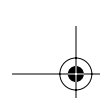
The flip side of Johnson's strategy is to divide the opposition—and once again the starting question is the role played by philosophical naturalism.

Consider the definition of science itself. Most people hold an idealized image of science as impartial, unbiased empirical investigation. But in practice, Johnson argues, science has been co-opted into the camp of the philosophical naturalists and is often little more than applied naturalism. The effect is that the only theories considered acceptable are naturalistic ones.

Without this biased definition, Johnson argues, naturalistic evolution would not hold the privileged position it currently enjoys. If evolutionists are pressed for actual observable, empirical evidence in favor of their theory, inevitably they reach into the same grab bag and pull out the same examples of small-scale change, things like different breeds of dogs or variation in the size of finch beaks or radiation-induced mutations in fruit flies or the development of resistance to insecticide.

Exactly what do these changes amount to? They are small-scale adaptations that allow the organisms to survive under adverse conditions—in other words, minor adjustments that allow them to *stay* dogs or finches or fruit flies *or whatever they already are*. In no case do these minor variations demonstrate that the organism is changing into something new or that it originally evolved from





something else. As Johnson has pointed out, the only reason people find such limited change convincing is that they have already been persuaded on *other* grounds—on philosophical grounds—that naturalism is true, or at least the only stance permissible within science. And once people have made that commitment, they can be impressed by relatively minor evidence.

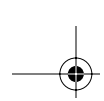
Harvard biologist Richard Lewontin gave the game away in a highly revealing article in the *New York Review of Books* a few years ago—an article Johnson quotes frequently. Lewontin writes that science itself has been refashioned into a machine for cranking out strictly materialist theories. (In his words, science has been turned into “an apparatus of investigation and a set of concepts that produce material explanations.”) The reason science has been so redefined, Lewontin writes, is “because we have a prior commitment, a commitment to materialism.”

This stunning admission confirms what Johnson has long insisted: what drives the show is not the facts but the philosophy.

Yet it is certainly not the image of science cherished by most ordinary people, which is why Johnson’s strategy is so devastating. His goal is to divide evolutionists according to these opposing definitions of science, to force out of the closet the doctrinaire ideologues—those who define science as a machine for churning out theories that fit their “prior commitment” to materialism—and set them apart from genuine scientists who are willing to follow the facts wherever they lead, regardless of the philosophical implications.

This crack in the scientific establishment is the target of what Johnson calls his “wedge strategy.” By breaking open the ideolog-





ically closed scientific establishment, he hopes to create a new atmosphere of freedom, releasing science from the shackles of philosophical materialism.

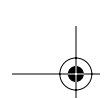
Putting “Religion” Back on the Table

Johnson’s innovative manner of framing the debate has been astonishingly effective in winning a respectful hearing in the secular world—certainly much more so than any previous attempts to challenge naturalistic evolution. One reason for his success is that his critique arises from within science itself instead of coming from outside.

In the nineteenth century, the Romantic movement arose as a reaction against the materialist, mechanistic science of the Enlightenment. Ever since, criticisms and protests have been raised from a variety of perspectives by artists, philosophers, theologians and others. Yet most scientists easily brushed these aside, because the arguments came from outside science, and for the modernist mindset, whatever falls outside science does not qualify as genuine knowledge.

Thus neither traditional creationism or theistic evolutionism made any significant inroads into the scientific establishment. Creationism began by asking, How do the teachings of the Bible relate to science? This is a perfectly valid question, just as believers should also ask how the Bible relates to economics or politics or the arts. Yet it is not the way to craft a message that secularists will hear. Critics could easily characterize creationism as the bald assertion that “God did it—end of discussion.” The appeal to the Bible was dismissed as a “science stopper”—something that ends





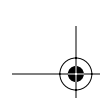
investigation and undercuts science. Mainstream scientists could ignore even cogent and compelling critiques of evolutionary theory if the only alternative seemed to be a leap from science into theology.

Theistic evolutionists took a different tack—but yielded parallel results. They were content to let the secularists define scientific knowledge so long as theology was allowed to put its own spin on whatever science decreed to be true. They gave up the claim that God's existence makes any *scientific* difference and accepted the scientific theories proposed by materialists and atheists, asking only to propose a theological meaning behind it all—not detectable by scientific means, admittedly, but known by faith.

In such a case, however, what would this theological meaning amount to? Theology is no longer acknowledged as an independent source of knowledge; it is merely a spiritual spin on the otherwise materialistic account given by science. Since this approach does not threaten the ruling regime of materialistic science, the scientific establishment is generally willing to tolerate it as a harmless delusion for those who need that kind of crutch.

Thus in different ways both traditional creationism and theistic evolutionism were dismissed as “religious,” which in secular circles is a term of abuse meaning myth and fantasy. What makes design theory new is that it does not start by asking what the Bible teaches; it starts by asking what can be known by scientific means: Can the identifying marks of design be detected empirically? And thus it reconnects Christian theology to the empirical world and restores its status as a claim to cognitive knowledge. Theology is





no longer a matter of merely subjective “belief” but a genuine knowledge claim.

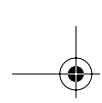
Developing a Positive Case for Design

With Christians tangled in endless arguments over Genesis 1, Johnson redirected the debate along fruitful lines by jumping over Genesis and focusing on John 1:1. “In the beginning was the Word”—the *Logos*—the Greek word for reason, intelligence, rationality, information. The great confrontation in science today is between those who say life can be explained without recourse to reason or intelligence, and those who say life embodies information—the Word—and must be explained as the product of an intelligent agent.

The most dramatic supporting evidence for intelligent design comes from the discovery of DNA. Molecular biology has revealed at the core of life a code, a language, a message. As a result, the origin of life has been recast as the origin of new, complex forms of information. How do we explain the sequence of symbols in a message—any message? The sequence of letters in a book is not random, nor does it follow a rule or law (i.e., it is not a regular, repeating pattern, like a macro on your computer). Instead, the sequence has a third kind of structure that scientists call “specified complexity”—which means a complex sequence that fits a preselected pattern.

Specified complexity can be identified by rigorous mathematical formulas (as William Dembski has shown in *The Design Inference*), which means scientists are now equipped to go beyond merely negative critiques of naturalistic evolution by identifying





the positive marks of design. In all cases where we *know* the source of information, like books and computer programs and musical scores, that source is an intelligent agent. It is logical to conclude that the source of information in living things is likewise intelligent.

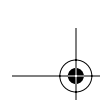
The analysis of information is not new with Johnson, of course. Important forerunners include A. E. Wilder-Smith in *The Natural Sciences Know Nothing of Evolution*, and Charles Thaxton and his coauthors in *The Mystery of Life's Origin* (not to mention the last chapter of my own book with Thaxton, *The Soul of Science*). But Johnson helped press the issue of information to the center of the debate, making it the touchstone for constructing a positive case for design.

Asking the Right Questions in Theology

Having established John 1:1 as the central point of contact between science and Scripture, in this current book Johnson tackles the sticky issue of the interpretation of Genesis. Once again, his strategy is to cut through conflicting claims over the details and focus on asking the right questions. With Genesis, the place to begin is the question of historicity: Do the early chapters of Genesis tell us about events that actually happened?

Genesis was one of the first sections of the Bible to fall beneath the axe of nineteenth-century higher criticism. Critics insist that the early chapters of Genesis are not history but myth—pious inventions. Thus before we examine the details of what Genesis teaches, we must first establish whether it contains any cognitive content at all.





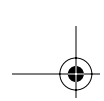
“In the beginning God created the heavens and the earth.” Is this true or false? For many people, even asking such a question amounts to a category mistake. Genesis is a religious document, they might reply—the implication being that religions are not true or false, they’re about people’s “values.” Even sincere believers may feel uncomfortable applying stark categories of true and false to scriptural statements. They may readily agree that religion is personally important (“It gives meaning to my life”; “It is true for *me*”), but is it *objectively* true?

The problem is that many Christians have absorbed a naturalistic framework in practice even if not in belief. Among theistic evolutionists this is often done explicitly. Many reject *metaphysical* naturalism as an overall philosophy but embrace *methodological* naturalism as proper within science. They argue that Christians must play by the rules of science—and the rule is that only naturalistic theories need apply. Johnson tartly replies, “Why should we let the naturalists make the rules? Why should we accept the starting assumption that God has never acted in ways accessible to scientific investigation? Why not challenge the rules and insist that science follow the data wherever it leads?”

Once again we can trace parallels between Johnson’s work and that of Francis Schaeffer, who used the image of two chairs. Sitting in the naturalist’s “chair,” we would see the world filtered through a certain lens; sitting in the supernaturalist’s “chair,” Christians see the world through a much different lens. We are aware of an unseen realm in addition to the seen realm.

In practice, however, Christians are not always consistent. They may be intellectually convinced of the Christian worldview yet





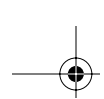
practice their professions on the basis of a naturalistic worldview. This is exactly what happens when Christians accept methodological naturalism in science.

That's not all. When naturalism is accepted in science, its implications spread like a virus to other areas. For example, the assumption that humans are the products of naturalistic evolution leads inexorably to the conclusion that religion and ethics have evolved as well—that they are merely products of the human mind that appear when the nervous system has evolved to a certain level of complexity. In Johnson's punchy phrasing, the choice is simple: Either God created us, or we created God—that is, we created the *idea* of God out of some emotional need or personal experience.

Thus naturalism leads to what is often referred to as the fact-value dichotomy—the mentality that grants science authority to pronounce on what is real, true, objective and rational (“facts”) while relegating ethics and religion to the realm of subjective opinion and nonrational experience (“values”). This distinction turns out to be very useful for philosophical naturalists. Instead of arguing that religion is false, which would arouse public protest, they merely relegate it to the realm of values—which keeps the question of true and false off the table altogether. As Johnson wrote in his earlier book *The Wedge of Truth*, religion is consigned “to the private sphere, where illusory beliefs are acceptable ‘if they work for you.’” In this way, the philosophical naturalist can put on a show of being tolerant and respectful toward religious belief without granting it the status of actual knowledge.

As the Intelligent Design Movement challenges naturalism in





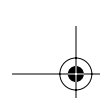
science, it will challenge naturalism in theology and other fields as well, making it possible to restore religion and morality to the status of genuine knowledge. To quote again from *The Wedge of Truth*, we must “assert the existence of such a cognitive territory, and be prepared to defend it.” We must bring theology back into the sphere of public, objective knowledge.

Modeling a New Approach to Cultural Engagement

If Christians need to get out of the naturalist’s chair in their professional convictions, they also need to get out of it in their day-to-day practices and strategies. Here again Johnson has led the way by modeling a new style of leadership.

For example, Johnson actively maintains friendships with leading atheistic evolutionists. Other Christian leaders may talk about having an impact on the wider culture, but in many cases their own lives have become circumscribed by the evangelical subculture. They amass large staffs and jet around the country speaking at conferences, spending much of their time with supporters and donors. By contrast, Johnson has no staff and remains on the cutting edge of contact with the secular world, keeping up personal friendships with many leading evolutionary thinkers. One video (“Darwinism: Science or Naturalistic Philosophy”) features a Stanford University debate between Johnson and a die-hard evolutionist, William Provine of Cornell, who astonishes the audience by commenting that the two of them are really great friends and that after the debate they’ll go out and have a drink together. Even as Johnson achieves a high profile within evangelicalism, he continues to do real, front-line work in confronting the secular culture.



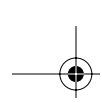


At the same time, Johnson is building up a movement equipped to carry on the cause into the next generation. In the book *Boiling Point*, researchers George Barna and Mark Hatch note that many parachurch organizations today are built around personalities. As the celebrities pass from the scene, their organizations decline and die with them. But Johnson has refused to adopt the celebrity model. As he said at a recent conference, “One of the things that the Christian world is notorious for is a celebrity style of dealing with issues. That puts a big burden on one person. I never wanted a movement like that.”

Instead, Johnson has developed a strategy summed up in his trademark metaphor of the wedge. Because of his position at the University of California at Berkeley and his considerable intellectual gifts, Johnson has functioned as the “thin edge” of a wedge, making an initial crack in the “log” of scientific naturalism. But he has known from the start that the thin edge cannot do the work alone. For his wedge to be successful the opening breakthrough has to be followed by the “thick edge” of the wedge—an expanding group of scientists, scholars and writers fanning out behind the leader. A single high-profile celebrity might succeed in attracting money and media attention, but it takes a large-scale movement to bring about an intellectual revolution.

How does one go about building such a movement? Religion reporter Terry Mattingly published a profile of Johnson that nicely summarizes his modus operandi. To begin with, “Johnson writes his own books” (unlike many big-name Christians who put their names on works written by others). In addition, he lends his name and reputation to help colleagues in the movement develop a higher profile





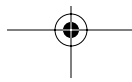
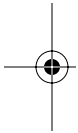
and an independent voice of their own. As Mattingly writes, Johnson is constantly “promoting [books] written by his colleagues” and “he keeps yielding the stage” to them at public events. Johnson even procures funding for colleagues’ book and research projects, and he helped establish the Discovery Institute as an institutional base for the movement. He recognizes the importance of raising up as many voices as possible, each credible in his or her own right, speaking to various aspects of intelligent design.

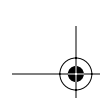
This is genuinely revolutionary, and it deserves to be held up as a more authentic model of Christian leadership, a practical application of the doctrine of the body of Christ: Those who are natural leaders have not been given leadership gifts by God to build a personal legacy but to build up the rest of the body. Our gifts are meant to serve not our own image and reputation but our fellow believers.

Johnson has charted this new course because he is sitting in the supernaturalist’s chair; his sights have been lifted above personal ambition and reputation. As he puts it, he is motivated by “truth and justice.” Yet, he adds with a sly grin, he also “wants to win.” And winning takes a broad-based movement. By rejecting the celebrity model—by building up others instead of seeking to absorb their gifts and calling into his own persona—Johnson is nurturing a movement that will carry the cause forward into the next generation. As Mattingly writes, he “is convinced that aiming the spotlight at others is good strategy. He wants his cause to thrive after he is gone.”

Demonstrating Spiritual Authenticity

Johnson’s decision to sit in the supernaturalist’s chair in both the



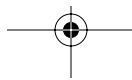


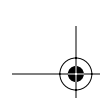
content and method of his ministry is not a result of superior intellectual insight. It stems from spiritual humility and brokenness. Here we touch on the heart of who Phil Johnson is as a person. It is easy for Christians in the public spotlight to conceal their inner lives in order to maintain an invincible external image. Who can afford to be spiritually broken, or to face serious faults or failings, when one has a PR machine to keep cranking? Funds to raise? Donors to impress?

But Johnson has charted a different course—or more accurately God gave him an opportunity for spiritual growth that he could not refuse. In the pages that follow, Johnson describes a spiritual crisis he recently underwent, when a stroke brought him face to face with the possibility of losing some of his mental functions. This was potentially devastating for a man who lives by his intellect, who has won academic honors for his intelligence and whose greatest achievements have been in the life of the mind. He writes: “I wondered if I would ever lecture again, or write for publication.”

This is the way spiritual crises typically come—in the form of loss and disappointment, and the fear and grief that accompany them. We rarely put our deepest trust in the Lord until we face the loss of what we rely on most. Scripture calls it dying to the world. We may believe all the right things. We may conscientiously do all the right things. We may garner all the trappings of success or even be in Christian ministry. But we will not experience true inner transformation until whatever we really live for is shattered, and we are willing to die—willing to give up everything we have loved and lived for, and to cast ourselves completely on the Lord.

For Johnson, that meant primarily his intellectual achieve-



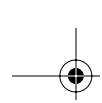


ments. “I had always prided myself on being self-reliant, and my brain was what I had relied on,” he writes. “Of all the bad things that might have happened to me, brain damage was the one I had feared most.” In these pages, we can trace Johnson’s dawning realization that the Lord’s hand is at work even in suffering and loss. He begins to understand how suffering may be, as it was for Job, an episode in the invisible conflict in the heavenly realms between God and Satan. When we are “sifted like wheat,” we can come out with a stronger, more resilient faith. Facing loss, we are struck by how temporal, broken, incomplete and contingent everything in this world is—and we experience an awakening hunger for the transcendent and eternal. God often has to cause our own plans to founder before we can see that he has much bigger plans than anything we hoped or dreamed.

This is the stuff of spiritual growth, but it takes a courageous man to admit it publicly. Instead of buffing and polishing his public persona, Phil writes frankly about his worries and weakness. He describes with admirable honesty the fears, uncertainties and sense of helplessness brought on by his stroke. He talks candidly about outbursts of anger and frustration. Most important, he reveals his growing understanding of his own spiritual need. He came to realize that since his conversion he has been what might be called “a recovering rationalist”—someone who is “not so much a believer in Christ as a skeptic about everything else.”

What an apt phrase, and no doubt it applies to many of us. Certainly for a time after my own conversion, all I cared to read were books on apologetics and cultural criticism. Like Johnson, I was a “recovering rationalist” who stood *against* competing intellectual





systems more than I stood *for* Christianity in all its fullness. It is usually only through personal crises that we are led more deeply into a living trust of the personal God we are so eager to proclaim.

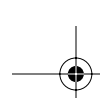
Focusing on the Right Questions

By getting people to focus on the right questions—about science, theology, strategy, faith—Johnson has turned a sterile battleground into a fruitful conversation. This book may well serve as guide for Christians in other fields and disciplines across the board as they too learn how to ask the right questions.

Nancy Randolph Pearcey

June 2002



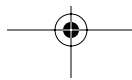


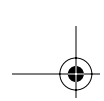
Introduction

THE LOGICAL TRAIN

In a lifetime of studying and participating in controversies, I have learned that the best way to approach a problem of any kind is usually not to talk or even think very much about the ultimate answer until I have made sure that I am asking all the right questions in the right order. When I am too eager to get to the answer, I may overlook some of the preliminary questions because I do not stop to reflect on why they are important and assume carelessly that I must already have answered them.

Similarly, when I want to persuade a lecture audience, I must be very careful to ensure that the audience understands the question correctly before I try to supply an answer. I am often misunderstood because some people who hear that I am lecturing on evolution assume from the title that I must be urging my audience to believe the Bible rather than science. They have been taught all their lives that no one but ignorant Bible-thumpers ever questions Darwin's theory, and they find it much easier to continue with that assumption than to make the effort to learn that there is another way to approach the subject. In consequence, they pay no atten-

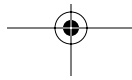


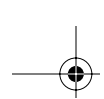


tion to my careful explanation that I will be discussing only the definition of science and the strength or weakness of the scientific evidence that is cited in the literature to support the Darwinian claims. At the first opportunity, the people who have not paid attention to my description of the issue will start proclaiming that the Bible is not a science textbook, that the earth is billions of years old and that the whole controversy was settled in 1925 by the Scopes trial, which they know about only from the thoroughly fictional treatment of it in the play *Inherit the Wind*.

My problem is not persuading readers or hearers that I have the correct answers to the questions I am asking. My problem is rather to persuade those listeners and readers that the questions I am asking are the ones *they* should be asking, and that their education to this point has prepared them to ask the wrong questions rather than the right ones. If I begin an essay by trying to state the answers before making sure that my readers understand the questions, I have only myself to blame when they misunderstand. Likewise, if a reader assumes that he understands the question before he has read my explanation of why I start with some questions rather than others, that reader is not giving himself a fair chance to learn from what he is reading. Trying to get to the answer before one has understood all the right questions is a prime source of error in human affairs.

If I start with the right beginning question and let the answer to that first question suggest the next question and so on through each succeeding step, then the irresistible power of logic will eventually take me to the correct conclusion, even if at first that conclusion seems to be a very long way off. I use a railroad metaphor



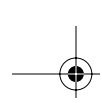


to explain how it works. If the train is up to full speed, and it is on the logical tracks, nothing can stop it from getting to the end of the line except a derailment. The logical train may also be irresistible when the tracks point in the wrong direction and the destination at the end of the line is something no one wanted to reach or ever anticipated reaching when the tracks were laid down and the train started to move slowly ahead on them.

For example, when law reformers in the 1960s liberalized the law of divorce, in the process they transformed marriage (at least as it's understood legally) from a sacred bond to a mere civil contract voidable at the option of either party. Although the reformers did not intend to approve same-sex marriage and probably never conceived of it as a possibility, a sufficiently far-sighted person could have seen that the tracks were headed in that direction. Probably the reformers would have rebuked such a person for opposing liberalized divorce on specious grounds. Now that the train has picked up a great deal of momentum, anyone can see that it is headed toward approval of gay marriage. The train will eventually get to that destination whether most people like it or not, unless some very strenuous work is done to move the tracks and point them in a different direction. Trying to stop the train by standing in its path is a good way to get run over.

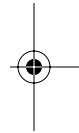
Another thing to keep in mind is that what appears to be a setback, or even a disaster, may actually be a blessing in disguise if it forces us to reassess the direction in which we are headed and make sure that the tracks are pointed toward a destination we want to reach. That is why each crisis is also an opportunity to learn, and why we may not know before we reach the end of the

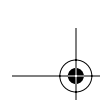




line whether any particular experience was ultimately for good or for evil. Whenever the jolts of life force us to ask the right questions instead of the wrong ones, the experience is likely to be beneficial, even when it's painful. In this book I will explain how I learned the truth of that belief.

The first chapters establish a pattern of beginning with a text and then discussing three “right questions” about that text. However, I do not always keep to that pattern in the following chapters. The experiences that taught me to ask the right questions often came as a surprise, and some of that surprise effect is retained in the format of the chapters.





Biology and Liberal Freedom

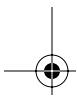
THE HUMAN GENOME PROJECT AND THE MEANING OF LIFE

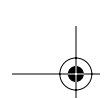


The Santorum Amendment

On June 13, 2001, U.S. Senator Rick Santorum (Rep., PA) proposed a two-sentence amendment to the White House-sponsored education bill that was under consideration in Congress. The Santorum Amendment said simply that “it is the sense of the Senate that (1) good science education should prepare students to distinguish the data or testable theories of science from philosophical or religious claims that are made in the name of science; and (2) where biological evolution is taught, the curriculum should help students to understand why this subject generates so much continuing controversy and should prepare the students to be informed participants in public discussions regarding the subject.”

Senator Santorum explained that as a mere “sense of the Senate” resolution, the amendment included no provisions for implementation or enforcement and hence would not require or fund educators to do anything in particular. It merely acknowledged the



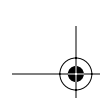


existence of disagreements and controversies over scientific theories, especially biological evolution, and supported the conclusion that science education would be more effective if it prepared students to understand these controversies. Senator Santorum then yielded the floor to Senator Edward Kennedy, who was taking the leading role on the bill for the Democrats. Senator Kennedy enthusiastically agreed with Senator Santorum, urging all senators to vote for the amendment because “we want children to be able to talk about different concepts and do it intelligently with the best information that is before them.” After additional supporting statements from other senators, the amendment passed by a huge bipartisan majority of 91-8.

One might have expected mainstream organizations of scientists and science educators to take the same view that Senator Kennedy had expressed and to welcome the amendment as an invitation to educate the public to understand science as the scientists do. Although I drafted the amendment for Senator Santorum, it did not give any recognition to dissenters from Darwinian orthodoxy such as myself, so the existing science educators would have had a free hand to present the subject as they thought best. Instead these organizations vehemently opposed the amendment and exerted all their influence in an attempt to persuade the legislators to drop it from the final version of the bill.

They almost succeeded: the House of Representatives passed the education bill without a parallel “sense of the House” resolution, but the amendment attracted support from both House and Senate members of the Conference Committee, which had the task of reconciling the House and Senate bills. The science educators’



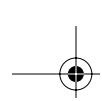


principal, explicit objection to the Santorum Amendment was that it singled out biological evolution as a subject of controversy. They insisted that there was no *scientific* controversy over evolution but merely a religiously or politically based resistance to scientific knowledge, which should not be dignified by allowing it to be expressed in science classes.

Their logic seems to have been that the many persons with impressive scientific credentials who have expressed skepticism toward the theory of evolution must not really be scientists, since they have expressed skepticism toward the theory of evolution. More important, the Darwinist educators cannot afford to acknowledge to either their students or the public that there is a distinction between the data or testable theories of science, on the one hand, and philosophical or religious claims that are made in the name of science, on the other. All Darwinist propaganda depends on blurring that distinction so that a credulous public is taught to accept philosophical naturalism/materialism as inherent in the definition of “science.” On that premise scientific knowledge is deemed the least implausible naturalistic mechanism for creating complex life and therefore true. Sometimes Darwinists say that their naturalism is merely methodological and makes no claims about reality, but of course the method is thought to be sound because it is deemed to reflect reality.

Public opinion polls consistently show that a very substantial proportion of the American public is skeptical of the theory of evolution—at least when it is offered as a complete explanation for the history of life—a skepticism that scientific organizations deplore. How is public skepticism over evolution ever to be

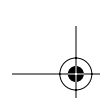




addressed unless educators recognize its existence and use their best efforts to educate the public in the errors in the public's way of thinking? Education in other subjects aims at helping students to understand the subject as completely as possible. However, education in biological evolution (Darwinism) must aim at keeping the students and the general public confused so they will continue to accept philosophy as science and not perceive that the scientific evidence is not consistent with the *scientific* philosophy (naturalism) that the ruling metaphysicians of science want them to believe. Darwinism and clear thinking are at odds with each other.

In the end the amendment survived virtually unchanged in the report of the Conference Committee, which was approved by both houses of Congress with the final version of the education bill, signed by President Bush in January 2002. The Conference Committee report is not itself an operative provision of the statute, but it is the primary source of legislative history to which a judge or administrator would turn to interpret the meaning of key terms that *are* operative in the statute, like *science* and *education*. What I had hoped to accomplish with the language of the amendment was primarily to make it very difficult for public school authorities to justify firing or disciplining a teacher who informs students of the weaknesses of the Darwinian theory, rather than teaching it in the authoritarian and dogmatic manner that Darwinians have been able to enforce up until now. Beyond that, how much effect the amendment may have depends on what the public makes of it. If people at the grassroots level are active in raising objections to Darwinian dogmatism, the amendment will protect their legal





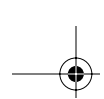
position. If the people allow themselves to be cowed by the authority of the current rulers of “science,” then Darwinian dogmatism will go on much as it did before the amendment was passed.

To understand why educators find biological evolution so difficult an issue to handle, it will be helpful to consider the differing interpretations in the media of the first results of the massive Human Genome Project, probably the most ambitious biological research effort in history. Unless people keep their common sense firmly under wraps, most instinctively recognize that a supernatural intelligence must be at work in the wonders of biology. It takes years of indoctrination to learn to ignore the evidence of intelligent design that is so apparent before our very eyes.

The Human Genome Project and What It Means to Be Human

On June 26, 2000, President Clinton announced that the scientific effort to sequence the human genome had met with its first substantial success. Scientists warned that it might be a long time before tangible benefits like cures for diseases resulted, but the accomplishment nonetheless generated a mixture of elation and suspicion. Elimination of genetic diseases like cystic fibrosis obviously would be desirable if it could be achieved, but the program of the more ambitious genetic wizards goes well beyond curing or preventing specific diseases. They yearn to produce better people by redesigning the human genome, which they take to be a cobbed-together product of unguided natural evolutionary processes consisting largely of “junk DNA” along with a smaller number of genes that code for proteins.

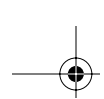




Whatever technologies the scientists invent will inevitably be for sale in the amoral international marketplace, where enforcement of any ethical restraints may be extremely difficult. For example, parents who can afford to pay may one day be able to purchase genetic makeovers that could enable them to have “designer children” who are healthier and smarter than those of their less affluent neighbors, thus perpetuating a genetic caste system. The promised biotech wonders may be a long time in coming, but in the very near future, information from genetic testing may be used to make some persons unemployable or ineligible for insurance coverage.

President Clinton tried to provide some reassurance against these widely recognized dangers, vowing that “as we consider how to use new discoveries, we must also not retreat from our oldest and most cherished human values.” Specifically, the President said, “All of us are created equal, entitled to equal treatment under the law.” Created? The claim that all humans are created equal is a creationist notion that implies other species are inferior, presumably because only humans bear the image of the Creator. President Clinton did not mention the possibility, now widely advocated or even taken for granted in elite scientific and philosophical circles, that what biologists are telling us about life and evolution has made our oldest and most cherished values obsolete. For example, many scientists and philosophers now say that to award a special status to human beings (that is, to “us”) is an anthropocentric sin called *speciesism*, akin to racism and sexism. The core message of evolutionary biology is that humans are not created at all, much less created in the image of God, but are merely a random product



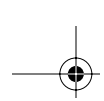


of evolution like every other species. In that case, to declare humans to have some unique status above that of other species may be as arbitrary as to declare one race of human beings superior to the others.

This challenge to human pretensions to superiority comes from biological evolutionary theory, but its philosophical implications are causing immense difficulty for biologists by inspiring the growth of an animal rights movement that does not accept the legitimacy of animal experimentation. The issue of animal testing first arose with respect to those animals that are most similar to man, such as chimpanzees, but the logic has been extended even to laboratory rats and beyond. In consequence laboratories that use animals for experiments have had to become fortresses, and the scientists fear for their very lives. None of this is surprising if you take seriously the premise that experimentation on animals is morally equivalent to performing the same experiments on human beings.

Insofar as the genome project leads to further findings of similarities between men and animals, it may have the ironic effect of encouraging further acts of terrorism against biologists. However that story may develop, the formal celebration of the initial success of the genetic sequencing provided evidence that creationist premises remain influential even in the vehemently materialist culture of biology. President Clinton exulted that “today, we are learning the language in which God created life; we are gaining ever more awe for the complexity, the beauty, the wonder of God’s most divine and sacred gift.” Dr. Francis S. Collins, the scientific director of the government’s Human Genome Project, used similar



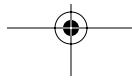


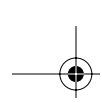
words, saying, “It is humbling for me and awe-inspiring to realize that we have caught the first glimpse of our own instruction book, previously known only to God.”

Taken at face value, these statements seem to say that genome research actually *supports* the view that a supernatural mind designed the instructions that guide the immensely complex biochemical processes of life. To put the same point negatively, Clinton and Collins seemed to be repudiating the central claim of evolutionary naturalism, which is that exclusively natural causes like chance and physical law produced all the features of life, including whatever “instructions” are contained in DNA. Whatever Clinton and Collins may think about the matter, however, the vast majority of biologists, especially prestigious biologists, emphatically deny that God had anything to do with evolution, and contemptuously dismiss what they call “intelligent design creationism” as inherently unacceptable to science, regardless of the evidence.

For example, Dr. David Baltimore, a Nobel laureate and president of the California Institute of Technology, wrote in the *New York Times* that the genome project had revealed that “our genes look very much like those of fruit flies, worms and even plants.” Baltimore argued that this finding implies that “we are all descended from the same humble beginnings,” which he thought “should be, but won’t be, the end of creationism” (David Baltimore, “50,000 Genes, and We Know Them All [Almost],” *New York Times*, June 25, 2000).

Because current scientific doctrine holds that the genes contain a sort of recipe for creating a human, Dr. Baltimore’s logic seems



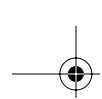


to imply that discovery of those genetic similarities should put an end both to the idea that humans (or other organisms) were created and to the idea that *Homo sapiens* is sufficiently different from other organisms to merit any unique status. So much for the traditional, theology-based view that humans are all created equal to each other and superior to everything else.

Another genome scientist wrote to the *New York Times* that President Clinton's references to a language in which God created life "could not be further from the truth," and that these words would only "give more ammunition to creationists to further their destructive social and political agenda" ("Eureka! A Key to the Code of Life," *New York Times*, June 28, 2000). The scientist did not say what that destructive agenda is, but by raising this objection he implied the possibility that biologists may reject the concept of design in biology because they dislike the possible religious, political or moral implications rather than because their data compel that conclusion. In that case, the rest of us may wonder where biologists got the idea that they should have authority over religion, politics and morality, and whether they may turn out to be the ones who are furthering a destructive social and political agenda.

Some scientists seemed much more receptive to the idea that the evidence from the genome project points to an intelligent designer. Gene Myers, a computer scientist who was instrumental in assembling the genome map for Celera Corporation, told a science reporter for the *San Francisco Chronicle*, "What really astounds me is the architecture of life. The system is extremely complex. It's like it was designed. . . . There's a huge intelligence





there. I don't see that as being unscientific. Others may, but not me" (Tom Abate, "Human Genome Map Has Scientists Talking About the Divine: Surprisingly Low Number of Genes Raises Big Questions," *San Francisco Chronicle*, February 19, 2001).

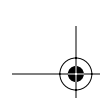
Abate was also astonished to discover that the geneticists were estimating that the total content of the human genome amounts to only about thirty thousand genes, approximately the same as the mouse genome. Larger estimates have since appeared, but the underlying problem remains: it is an interesting fact that our genes look very much like those of fruit flies, worms and even plants, but this fact does nothing to explain why humans are so different from fruit flies, worms and plants. If identifiable genetic differences do not account for our uniquely human characteristics, then perhaps the true lesson of the Human Genome Project is that genes are not nearly as important as we have been led to believe. This possibility must be very disquieting to investors who anticipate huge profits from the exploitation of technologies for manipulating all the uniquely human genes that haven't been found.



Knowledge and Belief

One might expect that there would be a healthy debate in intellectual circles over whether the appearance of design in biology is real or illusory, and how the evidence of biology may bear on the proposition that humans are created equal to each other and superior to all other forms of life. The reason that debate does not occur is that the intellectual culture of our time enforces a distinction between belief and knowledge, and between faith and reason, which makes it virtually impossible to ask the right questions.



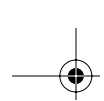


The difference between belief and knowledge is easy to state but often subtle in application. Knowledge is objective and valid for everyone; belief is subjective and valid only for the believer. One rough way of expressing the distinction is that knowledge may be taught in the public schools and universities or used as a foundation for law making, whereas beliefs are confined to private life—unless they are beliefs that have the approval of the cognitive elite, which claims the power to draw the boundary between belief and knowledge.

The paradigmatic illustration of the distinction is the assumed contrast between scientific *knowledge* and religious *belief*, supplemented by the parallel contrast between scientific *reason* and religious *faith*, which rationalists assume to mean belief without reasons. The fundamental rule of cognitive modernism is that every rational person accepts scientific knowledge because it is by definition based on reason and evidence, even if the evidence can't be produced and the reasons seem unreasonable to many, whereas religious belief is at most optional because it is conclusively presumed to be based merely on subjective preference or indoctrination. Persons who internalize these distinctions automatically classify references to God as nonrational and hence not to be taken seriously as truth claims, although they may have to be treated tactfully for political reasons.

Following the same logic, guidelines for teaching science in the public schools routinely specify that science is committed to explaining all phenomena in terms of natural causes only. In strict logic this leaves open the possibility that some phenomena (such as the DNA instruction book) really are the products of supernat-



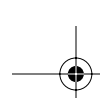


ural causes and hence cannot be fully explained by a science pre-committed to naturalism. In practice modernist intellectuals are extremely reluctant to concede such a possibility because to the naturalistic mindset that conclusion implies “giving up on science” and embracing ignorance.

Because philosophical naturalism is thus incorporated in the very definition of *science*, most biologists think it is as much a scientific fact that the genome is the product of natural causes alone as it is that DNA is composed of organic chemicals. Hence science cannot recognize an instruction book in the genome other than in a metaphorical sense, because an unevolved intelligence capable of writing instructions would be supernatural. As one naive biology professor explained in a letter to *Nature*, the world’s most prominent scientific journal, “Even if all the data point to an intelligent designer, such an hypothesis is excluded from science because it is not naturalistic” (Scott C. Todd, “A View from Kansas on That Evolution Debate,” *Nature*, September 30, 1999, p. 423).

More politically sophisticated biologists do not express themselves so candidly because they know what the hated creationists would make of the admission that biologists sometimes disregard the data if it points in a direction they consider unacceptable on philosophic grounds. More commonly, scientific naturalists simply invoke the cultural power of “science” to confirm the claim that the evidence supports their philosophical position, even when the evidence consists of nothing more than similarities between various kinds of organisms. One could employ the same logic to prove that the nine symphonies of Beethoven had no composer since they all employ similar musical elements.

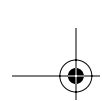




Individual scientists who do believe in a supernatural reality had better be careful to keep their religion safely insulated from their scientific responsibilities. The professional ethos on this subject was nicely encapsulated in a *Scientific American* magazine profile of Dr. Francis Collins, the director of the Human Genome Project who shared the stage with President Clinton. Collins is an evangelical Christian who publicly identifies himself as such, and this is a curiosity indeed for a scientist at such a prestigious level. In what the editors probably intended as a display of tolerance, they lauded Collins because he “strives to keep his Christianity from interfering with his science and politics.” Of course, the same editors would never write a similar sentence about an atheist, such as that “Richard Lewontin strives to keep his atheism, his Jewishness and his Marxism from interfering with his science and politics.” Lewontin, a Harvard genetics professor who occupies a place near the top of the scientific pyramid, wears his atheism, his ethnicity and his politics on his sleeve. A member of a disfavored group had better not think he can get away with the same thing.

It may seem that Collins *did* let his Christianity interfere with his science when he referred to that “instruction book previously known only to God,” but the circumstances were exceptional. On ceremonial occasions directors of expensive scientific programs are allowed wide latitude to say whatever is necessary to please the taxpayers who have to pay the bill. If Collins were to deliver a lecture on God’s instruction book at a scientific meeting, arguing that the information content of the genome points to an author, the reaction would be ferocious.





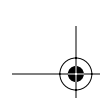
The Right Questions About Science, God and Morality

1 Is it wrong to mix science and religion, or is such mixing inescapable?

In 1981 the U.S. National Academy of Sciences resolved that “religion and science are separate and mutually exclusive realms of human thought whose presentation in the same context leads to misunderstanding of both scientific theory and religious belief.” As with the supposed “scientific finding” that humans have no unique moral or spiritual status, the scientists intended the resolution to be nothing more than a weapon for use against creationists. They apparently gave no thought to the larger implications—whether it is even possible to avoid religious implications altogether when explaining the origins of human life. In fact prestigious scientists continually publish books that so thoroughly mix the two subjects that the word *god* or *gods* even appears in the title, a practice that is well known to boost sales and consequent royalties. For example, see *The Genetic Gods: Evolution and Belief in Human Affairs* by Dr. John C. Advise (Cambridge, Mass.: Harvard University Press, 2001). Dr. Advise, a scientific materialist who thinks his philosophy is required by “science,” writes in the preface, “I hope to diminish the hostility between these differing epistemological approaches (theology and evolutionary biology), [and I also] hope to resolve a central issue in my own life: how to reconcile the intellectual demands and pleasures of critical scientific thought with the sense of purpose and fulfillment that a rich spiritual life can provide.”

When a materialist proposes a reconciliation of science with religion, the terms of the peace proposal usually amount to a



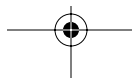


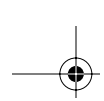
demand for unconditional surrender. The theologians must accept the genetic gods in place of the old God, whose mention is banned not only from science but also from ethical discourse, including the ethics of employing genetic technology. According to Advise:

The many ethical challenges prompted by the new genetic technologies are both complex and profound. In response, not only scientists, theologians, and lawmakers, but everyone must gather at the discussion table to consider rational, humanitarian courses of action. In such deliberations, perhaps the only mode of argument to be firmly censored—the only ‘wrong’ approach—is that in which the moral authority of a god is asserted. As judged by the diversity of opinions held by responsible individuals on ethical matters pertaining to the human condition, any supernatural deity either has been strangely silent on such issues or else has conveyed vastly different messages to different listeners.

2 If God is dead, is everything permitted, or does moral judgment continue as before but on a secular basis?

The early modernist rationalists assumed that the death of God was merely the death of superstition. On that premise modernist man, guided by science, could preserve the best of the old morality (or President Clinton’s “oldest and most cherished human values”) in a revised moral code founded on the solid rock of enlightened secular reason. More recently many have come to doubt that human reason can supply the missing transcendent standard by which differing human moral beliefs can be evaluated. From a scientific standpoint, morality—like religion—is a matter of subjective belief rather than objective knowledge. That makes

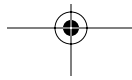
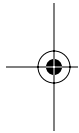


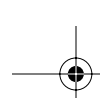


it effectively a matter of personal preference. This does not mean that moral codes will cease to exist (even a gang of robbers or terrorists has one), but it does mean that those codes will be grounded on the preferences of local power holders rather than on universal principles of reason and knowledge. What is right or wrong depends on the preference of whoever has the power to impose his will.

Perhaps no one should have that power, and every individual should have an absolute right to choice. That is the alternative that three centrist justices of the U.S. Supreme Court seemed to embrace in 1992 when they reaffirmed the existence of a constitutional right to abortion. In what lawyers call the “mystery passage,” the justices wrote, “At the heart of liberty is the right to define one’s own concept of existence, of meaning, of the universe, and of the mystery of human life. Beliefs about these matters could not define the attributes of personhood were they formed under compulsion of the State” (*Planned Parenthood of Southeastern Pennsylvania v. Casey*, 505 U.S. 833 [1992], 851 [opinion by Justices O’Connor, Kennedy and Souter]). However, no American law, including laws restricting abortion, seeks to compel “beliefs about these matters.” The only question presented by abortion prohibitions is whether a person is entitled to *act* on his or her beliefs when the action involves a taking of innocent human life.

An affirmative answer to *that* question would seem to justify assassination and even mass murder. Of course, the justices did not mean to endorse such a broad proposition, so they immediately qualified the general language by saying that the right to act on such ultimate beliefs applies only to a woman who is deciding





whether or not to bear a child or terminate the pregnancy. In such a case, “the destiny of the woman must be shaped to a large extent on her own conception of her spiritual imperatives and her place in society.” Thus a court influenced or intimidated by feminist ideology granted—only to one kind of person in one kind of situation—a right to act on her beliefs even at the cost of human life. Readers will readily imagine, however, that many others will think this restriction arbitrary and will wish to extend the same logic to claim a broader privilege for themselves.

③ Is God safely buried, or should we anticipate a resurrection?

The question is not whether some form of “religious belief” will continue, because it surely will, but whether God will always be excluded from the cognitive realm of knowledge and thus remain confined in the never-never land of subjective belief where Zeus, Thor and Santa Claus are to be found. If God is nothing more than a concept in the human mind and has no power to act or speak for himself, then it may seem that man created God and has the power to dispense with his own creation. The right question then is not so much whether God exists as whether the Word of God exists and whether that Word has done something that truth-seekers cannot afford to ignore. These issues are discussed in my previous book *The Wedge of Truth* (Downers Grove, Ill.: InterVarsity Press, 2000), especially chapter seven. I expect there will be a great deal more discussion along these lines as truth-seekers take advantage of the liberal principles of the Santorum Amendment once they fully grasp the religious and philosophical dimensions of the nihilistic philosophy that has seized control of our culture in the name of science.

