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Intelligent Design

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TRIJGENT DESIGN

Is this movement evidence that science is at last in search of God?

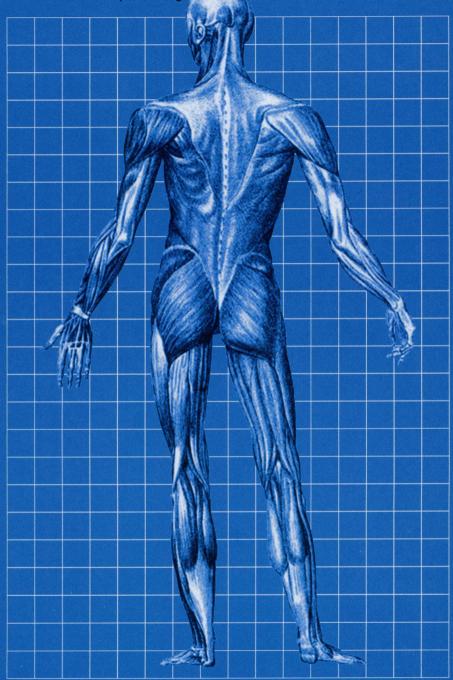
wo centuries ago, French mathematician-astronomer Pierre-Simon de Laplace developed the nebular hypothesis. It proposed that the solar system originated by condensation from vaporous matter. Laplace, who had become a famous scholar, decided to present one of his books to the Emperor Napoleon. Having been told in advance that the book made no mention of God, the emperor asked Laplace why he had not even mentioned the Creator of the universe. Laplace replied tersely, "I had no need of that particular hypothesis. That Laplace saw no need for God reflects an attitude dominant in scientific thinking during much of the past two centuries.

At the time Laplace was expounding his views, theologianphilosopher William Paley was arguing that God is necessary to explain the complexities of nature.

His now-hackneyed illustration: If you should find a watch on the ground, you would conclude that the watch must have had a designer; it didn't just happen. Likewise, other complex things such as living organisms must have had a designer.2 It turns out that a watch—with all its gears, springs, regulator, etc.—is very simple compared to the complexity in biological systems.

Do complex organisms really have a designer? Oxford University's Richard Dawkins has called Paley's argument "wrong, gloriously and utterly wrong." He argues that Darwinian evolution has taken the place of a designer, and that "Darwin made it possible to be an intellectually fulfilled atheist."3 Despite such pronouncements, Paley's argument

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The American Association of Petroleum Geologists Explorer for January 2000, warned geologists to stay out of the creation debate: "A scientist who goes and debates with these folks is going to get chewed up. . . . They've got all sorts of buzzwords and keywords that they can trip you up with, if you aren't familiar with their tactics."

for design is again being given serious consideration in intellectual circles. Many scientists are not satisfied that the order and complexity we see about us is just accidental; rather, they have concluded that there is a master mind behind the universe.

"Reasonable" Enlightenment

The 18th-century "Enlightenment," which emphasized reason over religion and tradition, sparked the skepticism, nihilism, agnosticism, and relativism of the next two centuries. The work of the famous philosophical group called the Vienna Circle, which met regularly in Vienna, Austria, during the early part of the 20th century, epitomized this thinking.

Comprising philosophers, scientists, and mathematicians, Circle members emphasized positivism, which affirms that the only valid knowledge is scientific—in particular, that which can be observed. This mechanistic or naturalistic approach to reality excludes God as a valid causal agent. During the last half of

the 20th century, positivism endured some severe criticism, and occasionally there has been serious discussion in intellectual circles about whether there is, in fact, a Designer.

During the past decade, the question has been debated in several important conferences. Examples include the "Cosmos and Creation" conference at Cambridge University (1994), the "Mere Creation" conference at Biola University (1996), the "Science and the Spiritual Quest" conference at the Berkeley Campus of the University of California (1998), and the "Nature of Nature" conference at Baylor University (2000). At these meetings, first-class scientists were the presenters, and several Nobel laureates participated. Out of the conferences two leading groups have emerged: One inclines to theistic evolution (God using an evolutionary process), and the other to progressive creation (God gradually creating more advanced forms of life over billions of years). The latter identifies itself as the "Intelligent Design" group.

In 1997, Science, arguably the world's most prestigious scientific journal, published "Science and God: A Warming Trend?"4 Newsweek for July 20, 1998, featured "Science Finds God." New Scientist (April 22, 2000) and Christianity Today (May 22, 2000) each had three articles dealing with the topic. On May 10, 2000, a briefing about intelligent design was held for the United States Congress. Presenters from the Discovery Institute (Intelligent Design group) emphasized they were there "only to open minds which had been kept closed by an elite scientific priesthood."5

Letters and news sections of scientific journals occasionally join the discussion. The American Association of Petroleum Geologists Explorer for January 2000, warned geologists to stay out of the creation debate: "A scientist who goes and debates with these folks is going to get chewed up. . . . They've got all sorts of buzzwords and keywords that they can trip you up with, if you aren't familiar with their tactics."6 Readers overwhelmingly opposed the editorial's conclusions; most arguing that science should be more open to ideas about creation or God.7 On the other hand, naturalistic scientists like Stephen Gould at Harvard deride such trends, asserting evolution to be "as well documented as any phenomenon in science," and "one of the grandest

triumphs of human discovery."8

The Fine-Tuned Universe

Cosmogony (origin of the universe) has played a significant role in discussions about design. One provocative question is: "What started things before the Big Bang?" That matter and its arrangement in the universe seem especially designed to support life is frequently mentioned as representing a set of circumstances hard to explain on the basis of "chance."

It doesn't take a gambler to know that a coin has one chance out of two of falling "heads up"; a dice has one chance out of six of giving a number five; and if you have one yellow and 99 blue marbles in a bag, there's only one chance out of 100 that you will pick the yellow marble without looking. The probability that the universe just happened to be precisely right to support life just happens to be inconceivably small. As one author put it: "The cosmos seems to be balanced on a knife edge."

Whopper Odds

and we would not have the kind of sun we need to give us the right amount of light.¹⁰ One part out of the number given above is incredibly small; each zero divides the previous value by 10. Three zeros represent one part out of a thousand, and six zeros represent one part out of a million, etc.—an extremely precise relationship.

The mass of a neutron could not differ by one part out of 1000 or stars would collapse into neutron stars or become black holes.11 In the proposed Big Bang model, the expansion rate would have to be within part one out 1000000000000000 (14 zeros), or either no stars would form or the universe would collapse.12 And in forming the universe, electrons should be equivalent to protons within one part out 00000000 (37 zeros), or electromagnetic forces would overcome gravity and we would have no stars.13 Much of the impetus for the design movement seems to be coming from science itself. For example, one list has 29 such necessary characteristics, any one of which suggests that there must be some master mind or designer for our universe.14

The Origin of Life

Recent discoveries in biology also support the argument for design by indicating highly improbable events. The most baffling problem naturalistic evolution faces may be how life could have originated by itself. Calculations based on thermodynamics (energy relationships) indicate only one chance out of the number one followed by five thousand million zeros that the simplest form of life, a mycoplasma, ¹⁵ might have its molecules assembled by random activity. Mycoplasma, which are quite a bit smaller than our ordinary microbes, are considered to be the simplest forms of independent life known.

Another problem for evolutionary biology is the question of the validity of Darwin's survival-of-thefittest model,16 which provides a mechanism for the elimination of weak aberrant types, but not for development of complex systems with interdependent parts. Unfortunately for the evolutionist, most biological systems are of this type. An example would be evolution of a new muscle, which in order to function has to have a nerve that stimulates it and a control system in the brain. Such systems do not function until all necessary components (muscle, nerve, and control system) are present. The control system is not very simple, either.

In a process of gradual evolutionary development, many parts that could not function without the presence of other necessary parts would be not only useless but also an encumbrance. Competition for sur-

In 1916, American scientists responded to a survey of their religious beliefs. The same survey was repeated in 1996. Surprisingly little changed during the 80 years. In both cases, about 40 percent of scientists believed in a personal God, 45 percent did not, and 15 percent did not know.

vival of the fittest would eliminate organisms with extra encumbrances. Thus the very process of natural selection by survival of the fittest—considered the primary mechanism for evolutionary advancement-actually interferes with the evolution of complex structures. For two centuries, evolutionists have searched for a valid mechanism that would evolve complex biological systems, but thus far none has been found.17 Furthermore, as we look at over a million identified living species, we see no newly evolving complex systems. Organisms that do not have legs, eyes, or wings, do not seem to be evolving them.

Uncomfortable Questions

Contributing further to suspicion that there is a designer is the notorious absence of fossil intermediates between major groups (classes, phyla, and divisions) of organisms. But it is especially between the major groups—where we have the largest gaps and where we would expect the largest number of evolutionary inter-

mediates—that they are conspicuously absent.¹⁸ Where we would expect many thousands, only a very few can be suggested as intermediates.

Added to the question of lack of intermediate fossils is what evolutionists call the Cambrian Explosion where, at about the same level in the fossil record, practically all the animal phyla suddenly appear. According to standard evolutionary interpretations, this explosion at about 560 million years ago represents the appearance of most major kinds of animals. As we look up and down through the fossil-bearing layers of the Earth, we find that organisms remain essentially at the one-cell stage during the first 84 percent of assumed evolutionary time (3500 to 560 million years ago). After that, the evolution of practically all major animal phyla occurs during the Cambrian Explosion in less than 3 percent of evolutionary time (560 to 460 million years ago). Some scientists even suggest that most evolution occurred during only one-tenth of that time, which is only

0.3 percent of evolutionary time.19 Samuel Bowring of the Massachusetts Institute of Technology, who has been working on the dating of the Cambrian Explosion, says: "What I like to ask my biologist friends is, How fast can evolution get before they start feeling uncomfortable?"20 All this does not bode well for a supposedly ongoing evolutionary process that also needs all the time it can find to try and accommodate extremely unlikely favorable incidents. According to fossil distribution patterns, there isn't enough time left in the standard geological time scale for the improbable events of evolution.21 To some, the

Cambrian Explosion looks much more like some kind of creation or design than random evolutionary activity.

Praying Scientiests

In 1916, American scientists responded to a survey of their religious beliefs. The same survey was repeated in 1996. Surprisingly little changed during the 80 years. In both cases, about 40 percent of scientists believed in a personal God, 45 percent did not, and 15 percent did not know. The survey questionnaire was explicit about what is meant by God, specifying, "I believe in a God in

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intellectual and affective communication with humankind, i.e., a God to whom one may pray in expectation of receiving an answer. By 'answer' I mean more than the subjective, psychological effect of prayer."²²

This surprising result raises sobering questions related to the design argument: When so many scientists believe in God, why does science usually insist that a designer be excluded from scientific explanations? At present it is well nigh impossible in scientific reports and textbooks to invoke God as a possible active factor. When close to half of the scientists believe in a personal God who answers prayer, yet exclude him from scientific explanations, we are faced with a significant incongruity. The aphorism: "Many scientists believe in God, but only on weekends," reflects that incongruity.

Science, as generally practiced during the past century, has accepted all kinds of theories, but not that of a designer God. To include God is considered to be unscientific. This conclusion certainly was not that of Kepler, Boyle, Newton, Pascal, and Linnaeus, who laid the foundations of modern science. These pioneers believed in a Creator who had established the very laws of nature that made science possible. Science and God were compatible.

When so many scientists believe in a personal God, and when such compelling evidence exists for a

designer; can science keep on pretending that there is no God? Yes, but it cannot then continue to make claims of arriving at truth about ultimate beginnings and the meaning of existence, while defining itself as a naturalistic discipline that excludes God. Science works well in the experimental realm, but does poorly in areas such as religion, free will, morality, and purpose. Science will never find God as long as God is excluded from its explanatory menu. Science made its greatest philosophical error two centuries ago when it tried to explain everything within its limited naturalistic stance.

The Designer and the Movement

Is the design movement a step back toward the position of science's pioneers? Or is it just another bewildering stepping stone in humanity's search for, and often rejection of, truth? The dominant proponents of the design arguments studiously avoid any references to a six-day creation. And any scientific evidence for a recent creation is avoided. Certainly, an objective appraisal must conclude that the design movement is not toward the Bible. But an equally objective appraisal must conclude that the movement does make a valuable contribution from the perspective of what nature has to say. And what nature is saying is that an abundance of scientific data is very difficult to explain if one does not believe

in an intelligent designer. This conclusion challenges science's naturalism and contributes further to scientific data that corroborates the Bible.

Science's philosophy has changed over the centuries; sometimes dramatically. Today the premier status science has held within the realm of philosophy as a whole is being challenged. Will science respond by returning to a strong naturalistic stance? Or will the design argument help science move toward the philosophy it had several centuries ago, when God was accepted as a dominant cause?

God only knows.

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