Intelligent Design in Biology: the Current Situation and Future Prospects By: Phillip E. Johnson *Think* (The Royal Institute of Philosophy) February 19, 2007

The individuals who make up the Intelligent Design Movement (IDM) came together in the aftermath of the publication of my book *Darwin on Trial* (Regnery 1991, IVP 1993). The defining purpose of the IDM is to advance the argument that neo-Darwinism has failed to explain the origin of the highly complex information systems and structures of living organisms, from the first cells to new body plans. This makes it reasonable to infer that the evidence of biology, if not the philosophy that dominates this science, suggests the need to consider that some intelligent cause may have played an indispensable role in the origin and development of life.

The claim that evolutionary science has discovered and verified a mechanism which can account for the origin of biological information and complexity by involving only natural (unintelligent) causes is supported by an immense extrapolation from limited evidence of minor, cyclical variations in fundamentally stable species. The current leading textbook example of the standard neo-Darwinian mechanism involves a species of finch on an island in the Galapagos chain. Two scientists named Grant published a famous study of variations of the beaks of these birds, later popularized in a book titled *The Beak of the Finch*, by journalist Jonathan Weiner.

The Grants had been measuring finch beaks over many years. In 1977 a drought killed most of the finches, and the survivors had beaks slightly larger than before. The probable explanation was that larger-beaked birds had an advantage in being able to eat the last tough seeds that remained. A few years later the rains returned, and the average beak size went back to normal. No new organs appeared and there was no directional change of any kind, just a back-and-forth cycle from small beaks to slightly larger beaks and back to small. Nonetheless, that is the most impressive example of natural selection actually observed making changes that Darwinists have been able to substantiate after nearly a century and a half of searching for evidence that the mechanism of random variation with differential survival has the transformative power that it would need to have to accomplish everything that the textbooks ascribe to it.

To make the story look better, the National Academy of Sciences improved on some the facts in its 1998 booklet on *Teaching about Evolution and the Nature of Science*. This version of the story omits the beaks' return to normal and encourages teachers to speculate that a "new species of finch" might arise in 200 years if the initial trend towards increased beak size continued indefinitely. When our leading scientists have to resort to the sort of distortion that would land a stock promoter in court, you know they are having trouble fitting their evidence to the theory they want to support.

There is an immense gap between the creative feats that Darwin's mechanism is supposed to have accomplished in taking life from a unicellular starting point up to the highly complex plants and animals of today, including humans, and the modest temporary variations that it has actually been observed to produce in nature. My hope was that the scientific community would agree that it is legitimate to question whether known natural (unintelligent) mechanisms can produce the immense quantities of genetic information that would be needed to generate complex new kinds of organisms, provided that the questioning was based upon scientific evidence rather than religious doctrine or scripture.

The argument for intelligent design in biology was soon taken up in books by two highly qualified authors, biochemistry professor Michael Behe, author of *Darwin's Black Box*, and mathematician/philosopher William Dembski, whose book *The Design Inference* was published after peer review by Cambridge University Press. (More popular-level books by Dembski are available from internet booksellers.) Many individual scientists showed significant interest in these books as well as my own, and expressed their skepticism of the claim that known material mechanisms could account for the origin of the complex specified information required for the intricate functional activities of the living cell, let alone the information needed to coordinate the functions of thousand or millions of cells involved in the life processes of a multi-cellular animal.

To my disappointment, however, influential scientific organizations formed a solid bloc of opposition to the consideration of whether evidence points to the possible involvement of intelligent causes in the history of life. Nevertheless, the subject is sufficiently fascinating, that orthodox scientific bodies have had to take strenuous action to keep it from cropping up in science education, and even in scientific journals. As the case of philosopher Antony Flew demonstrates (see below), the argument has persuasive power. If independent thinkers in science felt free to write about the possibility of intelligent causes in the history of life without suffering adverse consequences, the literature on it, professional and popular, would probably be substantial and lively. That is why those who do not want the concept of intelligent design to flourish find it necessary to enact explicit rules against allowing scientists and others to discuss the possibility that there is a real intelligence behind complex genetic information.

I had hoped that the mainstream scientific profession could be persuaded to consider objections to Darwinism that rely solely on empirical evidence and logic and were directed only to the adequacy of the Darwinian mechanism, rather than to defending the chronology of the Book of Genesis. This was not to be, however. Darwinists, including many in positions of authority in science, reacted by stigmatizing the concept of intelligent design in biology as "creationism," as if it were another attempt to defend the literal creation chronology of the Book of Genesis, rather than a scientific movement that relies only on scientific evidence and logical analysis. Although the IDM did not identify the designer as anything more than a source of biological information, there was little doubt that believers in the Christian God, including me, would find scientific acceptance of ID highly encouraging.

That was enough to rouse Darwinists and other secularists to dismiss the entire concept as "religion," and thus "not science," thereby disposing the conflict to their satisfaction on the basis of a stereotype rather than on an analysis of specific evidence and arguments. The governing board of the American Association for the Advancement of Science (AAAS) passed a resolution declaring that the intelligent design theory is not science. This action signaled that the AAAS board was worried that, if editors and peer reviewers were permitted to exercise their informed discretion in reviewing manuscripts for publication, some papers would eventually appear in the professional literature seriously discussing the possibility that intelligent causes were necessarily involved in generating biological innovations.

That such a worry was realistic was demonstrated in October 2004, when a review article by ID theorist Dr. Stephen Meyer passed peer review by scientists employed in mainstream secular institutions and was published in the *Proceedings of the Biological Society of Washington*. Darwinists were so alarmed by the publication of Meyer's article that they mounted an angry campaign of protest against it. The governing Council of the Society was so overwhelmed that it repudiated the article as inappropriate for publication in its Proceedings, citing the AAAS policy, and reassuring critics that "the topic of design will not be addressed in future issues." Following this disavowal, Darwinists mounted a furious campaign to discredit the editor who had approved Meyer's article for publication, accusing him of being a closet "young earth" creationist.

The near-hysterical brouhaha over Meyer's article did have some positive aspects. Darwinists have persistently criticized the theorists of the Intelligent Design Movement for taking their arguments directly to the public, implying that these theorists are trying to avoid the professional scrutiny that accompanies publication in scientific journals. The truth is otherwise. ID theorists have been eager to pursue any opportunities they can find to publish in peer-reviewed scientific journals. The history of the publication of the Meyer article and its aftermath demonstrates that such publication would be a real possibility if it were not for the enforcement of doctrinal polices barring publication of articles supporting intelligent design, and the consequent professional and public intimidation of editors who might allow such publication. The Darwinist case for opposing public consideration of Intelligent Design amounts to saying that "You have to publish in the professional journals before taking the theory to the public, and we have a rule that doesn't allow you to publish in the professional literature." So there is no way critics of evolutionary naturalism can get started. If journal publication were allowed, there is reason to believe that scientists would be highly interested in pursuing the subject. Over 60 scientists from around the world requested copies of the Meyer article and an accompanying packet of reference materials. Because a gag order is in force, ID is not discussed in the scientific literature. This enforced silence tells us nothing about what would be happening if individual scientists and editors were free to act on their own judgment, without fear of punishment for addressing forbidden topics.

I'm convinced that, under conditions of intellectual freedom, scientists and philosophers would be fascinated by the possibility that intelligent causes had to be factor in the origin and development of life. And there would be vigorous discussion pro and con about this

subject in both the professional and popular periodical literature. Those who insist that science is by definition dedicated to seeking out and endorsing naturalistic explanations for all phenomena dismiss any questioning of their basic premise as "religiously" motivated and hence irrational--and even unconstitutional in the USA (where a majority of the population is nevertheless inclined to question the premise).

But religious questions may be reasonable and important questions. Here is an example: I've repeatedly posed the question, "Is God real, or imaginary?". Evolutionary naturalism classes god among the subjective products of the human brain, and thus among the products of evolution itself. If God is truly real, however, and really our creator, then to enforce a definition of knowledge based upon the assumption that ONLY nature is real, and that God exists only in the human imagination, would be to make a big mistake. Surely it is rational for people who believe that God is or may be the creator to challenge those who insist that we assume that a mindless nature did all the creating. It is rational to argue instead that we should evaluate the evidence impartially, with the goal of coming to the truth about whether it was necessary that there be a creator in order to accomplish the creating of all the marvels of the living world. If the Darwinian mechanism or some other combination of law and chance isn't able to create the necessary information, then we should acknowledge the inadequacy and move on to consider alternatives. What we should not do is to stick with an inadequate answer because we are afraid that recognizing the inadequacy will tend to lead us back in the direction of God.

The goal of the Intelligent Design Movement is to achieve an open philosophy of science that permits consideration of any explanations toward which the evidence may be pointing. This is different from the current restrictive philosophy that rules out of consideration the possibility that a creator may be responsible for our existence, even if the evidence is pointing in that general direction. Whether or not it is successful, the IDM has made a contribution to a better understanding of reality. It tries to raise the fundamental question of creation, by visibly making evolutionary naturalism the subject of critical investigation based on evidence, rather than allowing it to rule by default as the unquestioned philosophical position to which science must by definition adhere. For now the mandarins who speak for science have the support of the courts and the media in their campaign of excluding any challenge to their basic premise from public education and from scientific consideration.

Although naturalistic dogma has dominated public education for a half century, its mandarins have failed to convince the American public to embrace the dogma, and I see many signs that dissatisfaction with evolutionary naturalism is spreading throughout the world. One of these signs is the many languages into which some of my own books have been translated, including French, Spanish, Portuguese, Korean, Chinese, Czech, Finnish, and Macedonian. I receive regular inquiries even from some of the world's most thoroughly secularized nations that indicate skepticism toward evolutionary naturalism. Clearly, reports of the death of God have been greatly exaggerated. With the worldwide growth in theistic religion, especially in regions where the birth rate is growing rather than declining, it is only a matter of time before the case for an intelligent designer makes its way into scientific and academic discussions.

One early sign of the way the world is headed came in December 2004, when there was much comment in newspapers and internet discussion groups about famed atheist philosopher Anthony Flew. Flew had just announced that he had converted to philosophical theism (though not to Christianity or any other specific religion, at least as yet), on the basis of scientific discoveries and related reasoning, which had convinced him that there is an intelligent designer of the natural universe. Flew seems to have investigated the phenomenon of design in the natural world for reasons similar to my own. He wanted to decide for himself whether evidence and logic point in the direction of a creating intelligence, or whether God is nothing more than a subjective idea created by human imagination. Perhaps these questions about the reality of god are religious in nature, but they are important questions that deserve to be investigated dispassionately instead of being barred from consideration because powerful groups define "science" as committed *a priori* to naturalism.

Although as yet Flew does not adhere to Christianity or any other creedal faith, he has taken a giant step in that direction. In an article in the London *Independent* for December 27, 2004, an Oxford University theologian wrote: "What kind of God could it [i.e. Flew's designer] refer to? One who created the universe–elementary particles, strong and weak forces, atoms and molecules, yet, for example, has no relation to the emergence of a clever humanity? Or could it be a God who was intelligent enough to create galaxies, and amazingly intricate systems like DNA, yet not intelligent enough to communicate with humankind? Although Flew does not believe in revelation, and may not feel that the Book of Genesis provides a useful account of creation, he does not seem to have quite this kind of minimalist God in mind either. In fact when pressed as to whether his 'First Cause' embraced omniscience, Flew admits that a First Cause, if there is one, has clearly produced everything that is going on, and this implies creation 'in the beginning.'"

I agree with this point, and my personal view is that I identify the designer of life with the God of the Bible, although intelligent design theory as such does not entail that. Scientific materialists fiercely resist consideration of the existence of a designer of what we see in nature, in part because they fear that even the most minimalist version of a deity will tend to become understood as something like the God of the Bible, who communicates with humans and cares about how we behave. Perhaps that fear is justified, but so what? That the cosmos is ruled by a God who cares about us is a possibility we ought to be considering, rather than a forbidden idea from which we ought to flee.

That Darwinist authorities find public scrutiny of their theory so threatening indicates to me that there is a hidden insecurity in their intellectual position which will eventually become so visible it can no longer be concealed. Nowadays I rarely see any attempt to prove that the Darwinian mechanism actually has the power to create major new biological innovations. Instead, the museums and magazines prefer just to tell the story of common descent, assuming that random variation with natural selection (differential reproduction) must have been adequate to perform whatever designing had to be done. At the same time, mainstream science, although guided by Darwinian assumptions, keeps providing more and more evidence of the enormous information content of living

structures. Even the core assumption that genetic similarities are necessarily inherited from common ancestors is contradicted almost daily by invocations of something called "lateral gene transfer" to explain genetic similarities between organisms which are not believed to share a recent common ancestor. Today authoritarian rules ban the hypothesis of intelligent design from scientific discussion and fiercely suppress it by lawsuits. A genuinely confident scientific culture that was making continual progress in confirming its theories and solving problems would not need or want to rely on intimidation to silence dissent. It may require many long years of struggle before the hypothesis of real design in biology will be able to receive a fair hearing, but the day of that fair hearing will arrive, and eventually people may wonder how a materialist theory as shaky as Darwinism was able to captivate so many minds for so long.

Amid all this controversy, what future is there for the concept of intelligent design in science? The IDM's challenge to evolutionary naturalism is at least being noticed everywhere, and it seems to have the Darwinist establishment leaders so worried that they find it necessary to take visibly heavy-handed action to maintain their control of the public and professional discussion. Poll data gathered over several decades and publicized in connection with the 2004 election have convinced almost everyone that most Americans are skeptical about evolutionary naturalism. This remains true despite a half century of determined efforts by science educators to persuade them to accept the current version of Darwin's theory, with its assumption that the creative process that produced human beings and all other forms of life involved only unintelligent causes like chance and physical law, with no guiding or designing intelligence. That theory seems to many Americans very much like a religion itself. Increasingly, Darwinism is protected by intimidation and legal restrictions much like those that would be employed to protect the fundamental tenets of an established church. Of course Darwinists sincerely believe that their theory is correct. That is what the defenders of an established creed always believe.

The world is moving in some surprising directions, however, and perhaps the significant thing about Darwinism and its accompanying philosophy of evolutionary naturalism is not the position of cultural dominance it occupies, but the very large number of people, including highly educated people, who still see the Darwinian explanation of life as leaving out something of fundamental importance, namely, the intelligence that makes life as we know it possible. In the end, the only important question is not how numerous or powerful are the people who hold a certain position now, but who is right about what is true and what isn't. If evolutionary naturalists are right that unintelligent causes produced all the complex and diverse forms of life we know without the assistance of intelligence, then surely our very determined and intelligent scientists will find a more convincing demonstration of the process and mechanism than cyclical variation in the beaks of a finch species. On the other hand, if further investigation tends to confirm that life requires prodigious amounts of complex specified genetic information, then eventually the unsolved problem of where all that information comes from will take its place in the forefront of scientific and philosophical discussion.

I am still convinced that the possible role of intelligent causes in the history or life will eventually become a subject that leading scientists will want to address in a fair-minded manner. For now, the influential scientific organizations are passionately committed to explanations that consider only material causes, so they reject out of hand any suggestion that intelligent cause may also have played some role. It seems that supporting materialism, rather than following the evidence to whatever conclusion it leads is their prime commitment.



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