



The Faith of Darwinism and the Science of Intelligent Design

By Arnold Slyper

Continuing the long-standing debate in the United States as to the appropriateness of evolutionary teaching in the public school system, eleven parents sued the Dover Area School District in Pennsylvania last year to remove intelligent design (ID) from the school curriculum. A brief statement was read to the ninth-grade biology class explaining that “intelligent design is an alternative explanation for the origin of life that differs from Darwin’s view,” and directing interested students to a reference book on the subject of ID in the school library. The case received considerable media attention. Ruling against the defendants, Judge John E. Jones III opined that ID is a religious viewpoint that advances a particular version of Christianity, that ID is not science and cannot uncouple itself from cre-

ationist and thus religious antecedents and that it is false that evolutionary theory is antithetical to a belief in the existence of a Supreme Being and to religion in general.

The controversy elicited little interest in the Jewish community. I would like to suggest, however, that our religious leaders may be mistaken in ignoring this issue. ID is one of the most important religious topics being discussed in America today. Furthermore, there is nothing Christian about ID. Judaism has been promoting the concept of ID, in the form of Shabbat, throughout history for thousands of years. Our observance of Shabbat is a sign to us and to the world at large that God created and completed a functional universe. The reenactments of Pesach also remind us that God has complete mastery over the physical world.

Moreover, although Judge Jones’s statements may have validity within the context of the Dover case, as general

statements regarding design in the universe they are manifestly incorrect. Belief in Darwinism and religious life are truly incompatible. By turning a blind eye to the debate, religious leaders are unwittingly giving credence to the type of arguments proposed by Judge Jones.

In his book *The Origin of Species*, published in 1859, Darwin proposed three key concepts regarding the natural world—the evolution of species and the mechanism for this process, random variation and natural selection, with organisms with advantageous heritable traits surviving and reproducing. Before Darwin, the largely Christian world had regarded nature as being fixed from the time of Creation and existing in a harmonious state of equilibrium. Darwin demonstrated, however, that nature is not fixed but in a constant state of flux, and that far from being in harmony, it is in continuous conflict. While the phrase “survival of the fittest” was not coined

Dr. Slyper is the director of Pediatric Endocrinology at Loyola University Medical Center in Maywood, Illinois.

by Darwin, but by the social Darwinian Herbert Spencer, it has become intimately linked to Darwin's theory. In a subsequent book *The Descent of Man* Darwin took the logical step in his argument by proposing that mankind, including the human intellect, also evolved from more primitive origins.

The science of creation, however, cannot be disconnected from its philosophical underpinnings. Darwinian evolutionary theory captured the popular imagination of the nineteenth century because of the social implications of natural selection as well as its biological implications. If man were no more than a higher functioning animal, argued social Darwinism, survival of the fittest would justify the powerful exploiting the economically and politically vulnerable, since this was the way the natural world functioned. By World War I, many of the implications of social Darwinism, such as colonialism and the extremes of capitalism, had largely become untenable from both a political and moral standpoint. Nevertheless, the Jewish people were to experience firsthand the horrors of this theory when it resurfaced, unbridled, in Nazi Germany.

The importance of random mutations focuses attention on the very concept of chance. The brilliance of Darwin was his demonstration that nature is subject to change. There is no avoiding the fact that Darwin was correct when he postulated that evolution occurs within nature. The question is whether this process proceeded randomly or by design. If one agrees with Darwin that evolution proceeded randomly, then it follows that God is no longer involved in His universe, either because He has no interest or because He lacks the power to do so. In either instance, the concept of a God who has an intimate and ongoing involvement with this world has been negated.

The notion that gods have power in this world was present in ancient religions well before the transmission of the Hebrew Bible. The originality of the Bible was its propositions 1. that God is involved in all manifestations of nature,

both favorable and adverse, and 2. that all Divine interventions occur on the basis of such attributes as justice (*mishpat*) and righteousness (*tzedakah*). Indeed, God is the standard by which all virtues are to be measured.

Later Jewish philosophers have debated the extent to which chance versus Divine providence customarily operates in this world, and one finds views across a spectrum. The great medieval

If one agrees with Darwin that evolution proceeded randomly, then it follows that God is no longer involved in His universe, either because He has no interest or because He lacks the power to do so.

halachist and philosopher Maimonides writes in *The Guide for the Perplexed* that personal Divine providence (*hashgachah pratit*) is directly related to one's intellectual appreciation of God. There is also a general providence over the biological world (*hashgachah klalit*).

Everything else proceeds by chance. Many Chassidic teachers, on the other hand, believed that even the most insignificant facet of nature, such as a leaf falling from a tree, is under Divine guidance. Whichever view one takes, the notion that it is possible for Divine intervention to occur in this world is crucial to a religious life. Without Divine providence, life is but an obstacle course around the vagaries of chance. In such a world, there is no personal God, and prayer is an exercise in futility.

In what other ways are Darwinian views antithetical to a religious life? The answer is surely that if life on this planet results from random accidents of fate, then we are living in a random, meaningless world. In a world that is random and meaningless, there can be no higher purpose to human life. The evolutionary process may have imprinted upon us

sensations of satisfaction when we practice compassion and charity, and this may in turn enhance the survivability of the human species, but in reality these are gestures that are devoid of any absolute worth.

Man by nature is a social animal, and in a meaningless world will impose on society laws and conventions to protect himself from self-destruction. In such a world, all virtues become relative. It was Socrates in ancient Greece, arguing against the relativism of the Sophists, who proposed that there are absolute virtues. His arguments were recorded by Plato, and these dialogues initiated the corpus of Western philosophy. Socrates and Plato had, of course, been preempted by the Hebrew Bible thousands of years earlier.

For many people, a life without meaning and with no absolute morality would be a prescription for despair. And yet these same individuals fail to appreciate the disconnect between the science being taught to their children and their most fundamental beliefs.

A major objection to ID, particularly to the scientific mind, is the notion that ID must involve supernatural forces that contravene the laws of nature. This seems like a return to the obscurantism of earlier centuries and a step backward in human progress.

This objection can be answered, but to do so requires a brief review of the physical sciences since the eighteenth century. Newtonian physics described a deterministic world. There could be no place for Divine intervention in such a world, since each force determined its reactive force. This was the view adopted by the Deists, who rejected the notion of an interventional God involved in nature, and pushed God back to the time of Creation. However, we now know that Newtonian physics is an oversimplification. Quantum mechanics tells us that uncertainty prevails at the subatomic level, with Heisenberg's Uncertainty Principle teaching that there is uncertainty in the classical position of any subatomic particle. It is now apparent

Koshering ☺ America's Kitchens One at a Time...™



Go-Kosher

KOSHERING SERVICES

Overwhelmed? No time? Moving? Going Kosher & keeping Kosher is easier than you might think. Our purpose is to help you consider, decide and take care of everything involved. Call us! Instructions and hands-on demonstrations available for group seminars and schools. We also offer full Toiveling service and accommodate commercial situations. **We do it all and make it a pleasure!!**

**We Speak English,
Russian, Hebrew,
and Yiddish**

Rabbi Sholtiel Lebovic, Director
1 - 888 - GO - KOSHER
Visit us at www.GoKosher.org

**NATIONWIDE SERVICE: New York Tri-State • Philadelphia • Florida
Chicago • California • New England • D.C. area • Toronto • Montreal**

that we live in a probabilistic rather than a deterministic world. Even to physicists this is a surreal world that is difficult to comprehend. Nevertheless, if God is to interact in His world it cannot be otherwise. God has created the laws of nature in such a manner that He is able to interact within nature in a manner that does not contravene it. Divine providence and the design of nature can take place within this subatomic uncertainty. Or put in another way, God is responsible for chance. To the religious mind this is not a return to supernaturalism and obscurantism but a further sophistication in our understanding of the natural world.

This is certainly science to those of faith, but probably not the type of science that can be taught in the science classroom of a public high school. But is it possible to approach ID from a scientific perspective, in which hypotheses are advanced and scientific methodology is used to either substantiate or refute them?

Ironically perhaps, it is random mutation, which is at the heart of Darwin's theory, which should be quite susceptible to scientific analysis using the new techniques of molecular biology as the twenty-first century proceeds. The complexity of the biological world has long excited the religious mind. Nevertheless, these impressions have been descriptive and lacking rigid scientific analysis. However, we are now at the beginnings of an era of explosion of information in the field of molecular biology, and the genetic codes of multiple animal and vegetable organisms are being revealed.

MA'AYANOT

...our students define us

please join us for our
OPEN HOUSE
Sunday, November 12, 2006
21 Heshvan 5767
1:30 PM

MA'AYANOT
מעינות

Yeshiva High School for Girls 1650 Palisade Avenue
Teaneck, NJ 07666 201-833-4307
www.mayaanot.org

Eventually, this will permit comparisons of the blueprints of a variety of living organisms of increasing biological complexity. With these blueprints we should be able to determine the probability that an increase in organizational complexity occurred by chance.

As an example, consider that we have available the blueprint for the manufacture of a standard model of a car made by a multinational company. This blueprint contains not only details of the components of the car and how they fit together, but also instructions for the total organization of the factory. Consider also more complex models from different countries that have been designed specifically for the road conditions and driving customs of those countries. On superficial examination, it is unclear whether these new vehicles are made by the multinational company or by local manufacturers using a mixture of imported and locally manufactured parts. However, blueprints are available. By looking at the organization of the factory blueprints, for example, how management is organized, how decisions are communicated to the shop floor and how work at the shop-floor level is allocated, it should be possible to tell whether the foreign models were manufactured by the same or by different manufacturers. If they were made by the former, it may even be possible to tell whether management planned ahead for more complex manufacturing processes. By comparing the blueprints using statistical methodologies these questions should be answerable.

We already know that there is a high degree of gene conservation between evolutionary relatives. We have yet to discover the extent to which established genes are “borrowed” for new tasks in evolutionary development, the extent to which relatively minor gene alterations lead to greater evolutionary complexity and, in particular, whether evolution is already pre-programmed into simple organisms. These ideas are speculative, but are certainly open to scientific analysis.

In this respect, the presence of

“junk DNA” is of considerable interest. As much as 98 percent of the DNA of many organisms is “junk DNA,” so-called because this DNA does not encode for any functioning protein and thus appears to be extraneous. But the very notion of “junk DNA” is a Darwinian concept, conjuring up the image of irrelevant litter from billions of years of evolutionary changes. In actuality, the notion of junk is somewhat of an inconsistency even to Darwinian evolutionists, since it is difficult to com-

For many people, a life without meaning and with no absolute morality would be a prescription for despair. And yet these same individuals fail to appreciate the disconnect between the science being taught to their children and their most fundamental beliefs.

prehend why natural selection would have conserved so much useless DNA over the epochs. It may also be a problem for those who believe in ID, since it is difficult to conceive why the intelligent design of species would incorporate so much purposeless DNA. An alternative viewpoint is that much “junk DNA” will eventually be found to have function, particularly with regard to cellular organization. A number of human diseases due to abnormalities in junk DNA have already been discovered, and many more are no doubt waiting to be found. A quote in a recent article in *Scientific American* on this topic suggested that “junk ... may in fact, turn out to be the very basis of human complexity.”

How should Judaism enter itself into this debate? Firstly, it is vital that all Jewish high school students, Orthodox or otherwise, and whether in a public or a Jewish school, be fully aware of the religious implications of classic

Darwinism. It is also important that we refute the misconception that ID is a Christian idea. It is Jewish to the core and one of our fundamental beliefs.

A more sensitive issue is whether we should become involved in the debate as to how the complexity of biological life should be taught in public school science classes. In one respect, we have a common cause with conservative Christians in that we do not wish our children to be taught ideas that contradict our religious beliefs. On the other hand, we have to recognize that to fundamentalist Christians, maintaining a very literal understanding of the Biblical Creation story is of overriding importance, and this is often accompanied by a belief in creationism and less emphasis on maintaining a connection between theology and conventional science. There is no one Jewish position on evolution. This is probably as it should be, since much that has been written on this topic involves a high degree of speculation, including the writings of neo-Darwinians. There are many Orthodox Jews, particularly those with a scientific background, who favor the development of biological complexity in terms of natural processes, with a minimum of creationism and miraculous seeding of new stretches of DNA. With this type of theistic evolutionary approach, there is no contradiction between religion and science. They are integrated, and each complements the other. Such views though would probably line up poorly with those of the conservative Christians who are at the forefront of the public school debate.

Finally, and most important, Jewish scientists involved in molecular biology should be aware that their work is at the fulcrum of the debate between religion and science. The Big Bang origin of the universe gives witness to the presence of God within the physical sciences. So too, will molecular biology in the years ahead provide credence to the guiding hand of the Divine within the biological world. **IA**