

Copyright protected: not for duplication or distribution.

Temple Israel 2009 – Rabbi David J. Fine

Intelligent Design

YK Day, Temple Israel 2009

Shanah Tovah! There are various greetings that we give on Yom Kippur. “Have an easy fast,”—or its Hebrew version *tzom kal*—is a common one, but I always think whether it is right to say, for what if the other person is not fasting? *Gamar hatimah tovah*, or *gamar hasimah tovah*, or its shortened form *gamar tov*, is a wish to be sealed well in the Book of Life. A nice thing to say, but rather loaded with theological implications. *Hag Sameah* or *gut yuntiff*, is technically appropriate, but knowing that we are not heading home soon to a grand Rosh HaShanah meal make the *yuntiffness* of the day feel a bit diminished. *Shanah Tovah* is probably then the safest thing to say.

So then, Shanah Tovah! Happy New Year! Happy 5770! That’s five thousand seven hundred and seventy years since the creation of the world! Or is it?

Does anyone here believe that the world is only five thousand seven hundred and seventy years old? Anyone who does is in large company, because a Gallup poll conducted last year found that more than 40 percent of Americans believe that all life was created within the last 10,000 years. But astronomers estimate the universe to be between 9 and 16 billion years old. What if we just talk about the Earth? Geologists estimate the Earth to be 4.54 billion years old. What about life on Earth? While scientists believe that life on Earth may have begun 4 billion years ago when the first solid crust formed, the earliest evidence for bacteria-like organisms dates back *only* 3.5 billion years. To say, then, that all life is less than 10,000 years old is, according to the popular scientist Richard Dawkins, the equivalent of believing that the width of North America is less than

Copyright protected: not for duplication or distribution.

ten yards. That to give us a sense of scale. But tradition only says that the sixth day of creation, when Adam and Eve were created was the day from which the calendar began, according to many, Rosh Hashanah, Year One. So let's put aside for a moment that nothing was supposed to have been around five days earlier. Let's just talk about Day Six. The first Friday, if you will. On that day, God said, "Let the Earth bring forth every kind of living creature: cattle, creeping things, and wild beasts of every kind. And it was so." Well, "creeping things" probably means reptiles, and according to the fossil record, paleontologists date the first appearance of reptiles 310 million years ago. And we all know about dinosaurs. 40 percent of Americans believe that human beings walked with dinosaurs. But the Bible itself does not seem to know anything about dinosaurs. Okay, let's just focus on mammals. Paleontologists date them as first appearing only 200 million years ago. Okay, let's restrict ourselves to humans, since the chief concern of religious tradition of creation is Adam and Eve. Fossil remains of the species *Australopithecus* date back about 4 million years. *Australopithecus* is an extinct ape that is classified within the human family, and from which anthropologists claim modern humans to be descended. But let's leave the other apes aside for a moment and talk about real humans! When did Neanderthal man first appear? According to both the fossil record and molecular analysis and DNA testing from skeletal remains, Neanderthal man first appeared somewhat less than a half million years ago. So when did "modern" homo sapiens, that is, people like you and me, first start to walk the earth? According to molecular and genetic data, scientists date us to about 100,000 to 150,000 years ago, somewhere in Africa, where we evolved from more archaic humans. Even 100,000 years is not five thousand seven hundred and seventy!

Copyright protected: not for duplication or distribution.

The traditional chronology is based on a careful reading of the years of biblical characters and events as recorded throughout the Bible, but chronology is the least of our problems. Recent polls have found that between 40 and 55 percent Americans believe that God created humans *in their present form*. Most Americans do not accept the basic findings of science that I have just outlined concerning the development of the universe and life on Earth. Despite the fact that scientific opinion is united and the evidence is overwhelming, school districts throughout the country continue to try to incorporate “intelligent design” in their science curricula as an alternative to evolution. Intelligent design is a remodeled form of what is called “creationism,” but whereas creationism posits that God created the world and all the life it contains, intelligent design argues that life is too complex to have been the product of a mere natural selection, but does not mention God specifically as the intelligence behind the design. Many argue that our children ought to be exposed to different ideas. Give them the science version and the religious version. It depends of course on the context. My own children, who attend Kindergarten and First Grade at a Jewish day school, have already been taught that God created the world in seven days; they’ve drawn pictures about it in class projects. But I am sure that no Solomon Schechter school would teach Genesis in a science class!

The problem with the ongoing debate over intelligent design in this country is the continuing claim, despite court rulings to the contrary, that it might, or ought to, be taught in science classes. And we hear these opinions from all circles. Without getting into the politics of how I might or might not feel about the current President in relation to his predecessor, I will just say that the one thing that President Bush said that bothered me more than anything else was a comment he made on August 1, 2005, that American

Copyright protected: not for duplication or distribution.

children ought to be exposed to different ideas, and that the idea that science is wrong and that life on Earth did not evolve but rather was designed by a supernatural intelligence ought to be taught in biology classes in American schools.

I believe that science classes need to teach science. I am troubled that most Americans fail to see what is so obvious to scientists who are trained in analysis of evidence. This is an educational, and ultimately a cultural failure. And it is not only Americans, and not only Christians. Ultra-Orthodox Jews throughout the world have banned Barney from their preschoolers lest they start to develop crazy ideas about dinosaurs. Need I say that the evidence for evolution is overwhelming? From what astronomers see through their telescopes to what geologists learn from the rocks of the Earth; from the way paleontologists have learned to read the history of the Earth as recorded in the layers of rocks and the fossil record of living things from the distant past that the Earth itself has preserved; from what comparative anatomists learn from skeletal structures of different animals to what biologists have learned about the distribution of different species in different geographic locales; from what embryologists learn about the genes that form early development to what molecular biologists have learned about the structures of complex proteins and how they vary from species to species—all of this establishes evolution as a fact based on universally accepted scientific findings. Each of these separate areas of scientific inquiry has tested the theory of evolution against its own evidence, and the results do not fail to correlate. Evolution is a proven fact to the extent that any fact can be proven. Why then, is it still a question?

This year—that is, the year 2009, not 5770--is being celebrated as a “Darwin year.” It is the bicentennial of Darwin’s birth, and the 150th anniversary of the

Copyright protected: not for duplication or distribution.

publication of Darwin's *On the Origin of Species*. And after all this time, it is still a hot topic! Two weeks ago, for example, I started teaching our seventh grade class here at our Temple Israel religious school. In addition to the curriculum that we have laid out, I asked the students if there were questions or issues or topic that they wanted me to discuss at some point in the year. One of the students raised her hands and asked if we could talk about how science does not seem to agree with the Torah. I got some not-so-appropriate suggestions, but this one was a good one.

The nineteenth century saw two major intellectual discoveries that have both been accepted beyond reasonable doubt in their respective disciplines, where mountains upon mountains of supporting evidence continue to be uncovered, and yet are both ideas that are passionately opposed by religious fundamentalism. And the religious fundamentalists seem to be winning the battle over public opinion. The first of these was the theory of evolution of the species, what we have been talking about. The second was the theory of the composite nature of the Pentateuch, that is, that the Five Books of Moses, what we call the Torah, were written over a significant period of time by various authors and only later collected and fused into the current text we now have. That is, the Five Books of Moses are not necessarily directly *of* Moses, dictated to him by God at Mount Sinai. Why do I bring this up—besides to raise some eyebrows? Because the two go together. The essential difficulty that so many have with science's version of the beginnings of life is that it varies from that which the Bible teaches. Adam and Eve. The flood. Detailed geneologies. Yes, even five thousand seven hundred and seventy years.

The key to accepting evolution is to let go of a literalist reading of the Bible. It is not enough to just say that a day to God is not a day to us. Let's not be afraid to say what

Copyright protected: not for duplication or distribution.

scholars of religion have been saying for over a hundred years, and what Conservative Judaism accepts: the Bible is a human document and a product of the time in which it was written. What does not mean that it is not a holy book. That does not mean that we do not hear God's commanding voice ringing from its pages. It means that the Bible was written by those who heard God's voice many centuries ago. We hear God's voice a little differently today.

Every Shabbat I stand before the open ark and say: "Your Torah is truth." I don't usually have the time then to qualify what I mean. So I am taking that time now. The Torah is true in a religious sense. The Torah teaches me that there is a meaning to life. The Torah teaches me that the way to live as a Jew. The Torah teaches me that God is the sovereign of the universe, and knowing that ought to humble me, to teach me to avoid selfishness and illusions of grandeur. The Torah uses metaphor, poetry, fable, symbols, picture-language and overstatement to teach me its lessons. The Torah tells me a story of miracles to explain how my people came to be. The Torah tells me a story of dramatic covenant carved at an ancient desert assembly to explain how Jewish law and traditions began. The Torah tells me a story of six days of creation to explain how God is the master of all.

The Bible does an extraordinary job at teaching the important things, and that is why it is still the number one bestseller, although closing in at second are the Harry Potter books. The reason why I love being a Conservative Jew is that I can live the tradition, I can be in the community, and yet not be asked to close my mind to the progress of science and ideas around us. The fundamental element that differentiates us from the Orthodox is that the Orthodox see all knowledge and wisdom as being

Copyright protected: not for duplication or distribution.

encapsulated in the Torah as revealed to Moses at Sinai, and that the whole intellectual effort of the centuries is all but the effort to tap that content. We do not see things that way. We continue to learn from everything around us. We, in fact, believe in evolution. That is, we do not merely say that evolution is *compatible* with Judaism. Our Conservative Judaism is all about evolution.

The Torah permits Jews to own slaves. We have evolved since then. The Torah talks about worshipping God through animal sacrifices. Indeed, this morning's reading described how the ancient Yom Kippur ritual involved pushing a goat over a cliff. We have evolved since then. The Torah prohibits same-sex relations as a capital offense. We have evolved since then. Traditional Jewish law never imagined women taking an equal part with men in synagogue worship. We have evolved since then. The very philosophy of Conservative Judaism is that while we base ourselves on the Torah and the teachings of the ancient and medieval rabbis, Judaism continues to evolve in every generation as it responds to new stimuli in new environments. From one generation or locale to another, Judaism is transmitted and transmuted. Ours is a "descent with modification." Those are Charles Darwin's words in explaining the origin of the species, exactly 150 years ago. Just as we recognize the power of evolution when bacteria mutate so that they "learn" how to be immune to our antibiotics, so does Conservative Judaism recognize Judaism's ability to adapt and survive in different countries in different centuries.

The Torah tells us a story of how God created the world in six days. Our understanding has evolved since then.

Copyright protected: not for duplication or distribution.

There are a number of new books on Darwin and evolution that have been published this year in celebration of the bicentennial of his birth and 150th anniversary of his major work. As a rabbi, I find it necessary to explain that our world is that world, that evolution is an essential means by which we understand the world. Evolution must be taught in science classes, public or private. Conservative Judaism has always been premised on the total embrace of critical inquiry and science. More than being *compatible* with Conservative Judaism, I believe that it is no less than a mitzvah to learn about the world and the way it works, since that is to marvel with awe at God's handiwork. To not do so is sinful.

But here is where the real question lies. Did God create the world, or not? *Is it God's handiwork?* Many of those who accept evolution, even many scientists, believe in what is called "theistic evolution," that is, that behind the billions of years of cosmic and biological evolution, there is room for belief in a creator—God—who set everything in motion, and who stands outside the universe as the cause and reason for life. The difference between that and "intelligent design" is subtle yet significant. Believing scientists claim that belief in God is not incompatible with studying evolution since science looks only for the natural explanations for phenomena. The proponents of intelligent design, on the other hand, deny the ability to explain life on Earth through solely natural explanations. The difference, while subtle, is determinative.

Some may believe in this "theistic evolution," but others do not. Another option is to choose to focus on God's immediate role in our lives, on the strengths that we find within ourselves when we call upon God, rather than deeds that God performed either thousands or billions of years ago. We should be able to agree, though, that science does

Copyright protected: not for duplication or distribution.

not make the world seem boring. It makes it all the more amazing. It only nourishes our sense of wonder and awe. And those are the key ingredients for the religious soul. The appreciation that after billions of years of evolution, here I am with an ability to discern the difference between right and wrong, to appreciate beauty, to feel compassion, to want to learn, these are the things that make me want to praise God on this holiest day of the year.

A young Hebrew school child once wrote: “In the beginning there was nothing. And God said, ‘Let there be light.’ There was still nothing, but now you could see it.” Let’s think about that. It is only when we let go of the insistence of the literal truth of the Bible that the deeper truth, and God’s real presence in the world, becomes visible.