

DO LIFE FORMS EXIST AMONG THE STARS?

Why Can't Religion and Science Agree?

Where did the human race come from? Did it arise from some one celled creature that evolved out of a primordial soup? Many, but not all, in the scientific realm think so. However, creationists have opposed this view saying that man's beginnings are as recorded in the book of Genesis - ascribing man's formation to the handiwork of God. Others have tried to bridge the gap by saying that God used evolution as a process in the creation of man. Both sides seem to agree that man's body contains the elements [or the dust] of the earth. But, did life arise randomly and spontaneously, or did the DNA blueprint for man come from somewhere else? Is that blueprint part of the "*precious seed*" described in the Bible? Even those scientists who stoutly defend evolution – when pressed – are reluctant to rule out that seeds of life could have been brought to earth from sources or even from civilizations in another part of the universe.

And then, there are more "*afar off*" theories that quote the Apostle Paul's writing that the heroes of the faith were given promises. These faithful having seen the promises "*afar off, and were persuaded of them, and embraced them, and confessed that they were strangers and pilgrims on the earth.*" But what are other civilizations and how does God fit into this puzzle? College students particularly struggle with these concepts as they compare their parent's beliefs with what is currently presented in the majority of the universities.

Many remember Carl Sagan as host on *Cosmos: A Personal Voyage* - the most widely watched PBS program in history reaching over 600 million people in 60 countries. He promoted and co-pioneered SETI – the Search for Extra-Terrestrial Intelligence. He was intensely curious about finding other civilizations *out there* and famous for his pronouncements about the *beelions upon beelions* of stars in the universe. He summarized his concept of God in this statement:

"The idea that God is an oversized white male with a flowing beard, who sits in the sky and tallies the fall of every sparrow is ludicrous. But if by 'God' one means the set of physical laws that govern the universe, then clearly there is such a God. This God is emotionally unsatisfying ... it does not make much sense to pray to the law of gravity."

Sagan and others worked on developing a classification system for civilizations that might be found in this solar system and beyond to the "billions upon billions" of stars in the universe. Given that the number of stars is large - possibly beyond comprehension - it is thought that a high probability exists of finding civilizations like earth [or perhaps civilizations millions of years more advanced] somewhere "*afar off*" in space.

However, Sagan's concept of the infinity of the stars and the Apostle Paul's writing were not all that much different. The Apostle Paul wrote about a seed that would multiply to be "*so many as the stars of the sky in multitude, and as the sand which is by the sea shore innumerable.*"

Sagan did not live to see his book *Contact* made into the movie that was released in 1997, but he did leave a legacy for those who would probe the universe. Part of that legacy is Michio Kaku who entered into the TV limelight as an interpreter of theoretical physics and has written numerous books on the subject. Kaku graduated summa cum laude from Harvard University with B.S. degree in 1968 and was first in his physics class. He attended the University of California, Berkeley, and received a Ph.D. in 1972. He discusses his upbringing in chapter one of his book *Parallel Worlds* [ISBN 0-385-50986-3] – a book that probes the possibility of a universe or universes parallel to our own.

"When I was a child, I had a personal conflict over my beliefs. My parents were raised in the Buddhist tradition. But I attended Sunday school every week, where I loved hearing the biblical stories about whales, arks, pillars of salt, ribs, and apples. I was fascinated by these Old Testament parables, which were my favorite part of Sunday school. It seemed to me that the parables about great floods, burning bushes, and parting waters were so much more exciting than Buddhist chanting and meditation. In fact, these ancient tales of heroism and tragedy vividly illustrated deep moral and ethical lessons which have stayed with me all my life. ...

Today, however, a resolution seems to be emerging from an entirely new direction—the world of science—as the result of a new generation of powerful scientific instruments soaring through outer space. Ancient mythology relied upon the wisdom of storytellers to expound on the origins of our world. Today, scientists are unleashing a battery of space satellites, lasers, gravity wave detectors, interferometers, high-speed supercomputers, and the Internet, in the process revolutionizing our understanding of the universe, and giving us the most compelling description yet of its creation."

In chapter 13 of Kaku's book *Hyperspace* [ISBN 0-385-47705-8], he discusses futurology and types of civilizations that might arise and also their mastery of the additional dimensions proposed in string theory.

"Futurology, or the prediction of the future from reasonable scientific judgments, is a risky science. Some would not even call it a science at all, but something that more resembles hocus pocus or witchcraft. Futurology has deservedly earned this unsavory reputation because every "scientific" poll conducted by futurologists about the next decade has proved to wildly off the mark. What makes futurology such a primitive science is that our brains think linearly, while knowledge progresses exponentially. ...

With all these important caveats, let us determine when a civilization (either our own or possibly one in outer space) may attain the ability to master the tenth dimension. Astronomer Nikolai Kardashev of the former Soviet Union once categorized future civilizations in the following way. ...

The basis of this classification is rather simple: Each level is categorized on the basis of the power source that energizes the civilization. Type I civilizations use the power of an entire planet. Type II civilizations use the power of an entire star. Type III civilizations use the power of an entire galaxy. This classification ignores any predictions concerning the detailed nature of future civilizations (which are bound to be wrong) and instead focuses on aspects that can reasonably be understood by the law of physics, such as energy supply.

Our civilization, by contrast, can be categorized as a Type 0 civilization, one that is just beginning to tap planetary resources, but does not have the technology and resources to control them. A Type 0 civilization like ours derives its energy from fossil fuels like oil and coal, and, in much of the Third World, from raw human labor. Our largest computers can not even predict the weather, let alone control it. Viewed from this larger perspective, we as a civilization are like a newborn infant."

In order for an infant to be birthed, it must go through a constriction from the womb into a new world of light and knowledge. The recently released book, *The Dove Code* [ISBN 978-158-169-2990], by Chatan N. Kallah discusses such a constriction where both scientists and creationists are being forced into a birth canal that may have the light of a new millennium at the end of the tunnel. The setting is a university pre-law school courtroom drama where two students, Sarah and Kim are debating future lawyers Floyd and Harry about whether the Bible's representation of God making the sun on the fourth day is scientifically plausible. Floyd's major witness, the internationally known astrophysicist, Dr. Bertrand Eisenhoff, has just completed laying out a presentation of how the sun was first formed and the planets began their orbits. We

pick up the book's narrative on page 187 where Kim begins her questioning of Dr. Eisenhoff, a science advisor to world leaders, who has made time in his busy schedule for this university prelaw courtroom debate.

"Dr. Eisenhoff, thank you for showing us such a beautiful and well done presentation on the stars and the formation of the planets."

"You're welcome," brightened Dr. Eisenhoff. "It was my pleasure."

"I have a few questions for you," said Kim. "The first is that after watching the supreme beauty of galaxies and the universe as shown in your videos, how can you not believe there is a God?"

Harry Jamieson, the court protocol advisor, gave Floyd a sharp nudge in the ribs.

"Objection, Your Honor! The witness' belief or lack of belief in God is not on trial here," protested Floyd.

"Objection granted," said the judge.

"Dr. Eisenhoff, what are your views about the Bible?" asked Kim.

"Objection! Your Honor, " cried Floyd. "Dr. Eisenhoff is here as a scientific witness and not here to give his personal views about the Bible."

Dr. Eisenhoff looked at Floyd and then the judge and said, "Your Honor, I would be happy to answer the question and give my views about the Bible."

The Judge looked at Floyd who nodded OK. "I'll allow it. You may proceed to give your answer, Dr. Eisenhoff."

Dr. Eisenhoff began, "I would treat the Bible just like any other history book. History books have errors in them and so does the Bible. In my opinion, some of the stories in the Bible are clearly myths that were made up in the imaginations of the writers. Some of the so-called miracles are not scientifically plausible."

Dr. Eisenhoff continued, "Yes, the teachings of Moses and Jesus are good moral standards to live by, but you find most of these same moral standards in other religions. I respect the Bible as a source of history, literature, and moral values, but I do not believe it to be sacred. And I certainly believe that passages in the Bible should not be used to inhibit the advancement of scientific knowledge."

"Thank you for graciously answering the question, Dr. Eisenhoff. I think it was important for the jury to understand your personal viewpoint of the Bible and the effect, if any, your viewpoint might have on your scientific conclusions," said Kim.

"You're welcome," smiled Dr. Eisenhoff, thinking that it was fortuitous that he was allowed to say the things he knew should be said about the Bible.

"I have several other questions for you," continued Kim. "Given the billions and billions of stars in the universe, do you think there might be other planets where life forms comparable to earth exist?"

"Yes, when you do mathematical probability analyses, given the tremendous number of stars in the universe, it does appear life forms may exist elsewhere because they exist here on earth."

"Are you familiar with the classes of civilizations some of your colleagues have proposed that may exist at various places in the universe?" asked Kim.

"I certainly am," responded Dr. Eisenhoff. "I participated in setting up these models."

Sarah noticed that Harry Jamieson was conferring in a nervous whisper with Floyd. She hoped Kim would be able to continue her dialog just a little longer before the line of questioning received an objection from the plaintiff. However, Dr. Eisenhoff seemed to be enjoying showing off his vast knowledge.

"Would you tell us what these classes of civilization are?" asked Kim.

"They are numbered one through four, with four being the highest level of civilization. The earth is approaching a level one civilization, and when we can control weather and develop certain other technologies, we will have reached level one."

"What about level four?" asked Kim, "What are its characteristics?"

"Oh, level four is the very highest technology," replied Dr. Eisenhoff. "Travel through the universe will be routine. Problems with food, weather, and environment will completely be problems of the past. It will be a utopia for mankind."

Kim asked, "Dr. Eisenhoff, have you ever considered the possibility the level four civilization might be God and His holy angels?"

A stunned look spread over Dr. Eisenhoff's face. "Uh, no, I never really gave that any thought."

There was a ripple through out the courtroom. Floyd jumped to his feet and roared, "Your Honor, Your Honor, I move the last question and the answer given be stricken from the court record! The counselor is leading the witness!"

"Motion granted," ordered Judge Emerson. "The last question and its answer are to be stricken from the court record. The jury is instructed to disregard the question and its answer. The counselor is instructed to refrain from leading the witness."

So the debate between the scientists and creationists rages on. But where did man come from? If it were not so serious, it would be almost comical. Scientists willingly acknowledge the probability of more advanced civilizations – but many strain mightily to avoid using the ‘God’ word. On the other hand religion often strains mightily to avoid ideas challenging their traditions – some of which are clearly man based rather than God based. Do life forms exist among the stars? Scientists and religionists do - kind of – sort of – maybe - could possibly - agree that they do exist.

The Bible says *"And the LORD God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul."* But where did the dust of the earth come from and was there an overall blueprint for man's design that was used by a Creator? Perhaps, we need the wisdom of Solomon when he quoted Wisdom in the book of Proverbs as saying: *"The LORD possessed me in the beginning of his way, before his works of old. I was set up from everlasting, from the beginning, or ever the earth was. When there were no depths, I was brought forth; when there were no fountains abounding with water. Before the mountains were settled, before the hills was I brought forth: **While as yet he had not made the earth, nor the fields, nor the highest part of the dust of the world.**"*