

## **SCIENCE AND RELIGION**

**By: Reda Fayek**

### **INTRODUCTION:**

New discoveries in science in general, and in physics, cosmology and biology in particular, make the universe more explainable, as well as more amazing. Does this undermine our religious faith -- or reinforce it? The works of modern science, taken one by one, seem enough to dampen a person's hope for higher meanings. However, stepping back and looking at the big picture, we can observe a pattern that suggests that there is more to this universe than meets the eye, something authentically divine about how it all fits together.

Science says that the human being is the result of a process called evolution, which took hundreds of thousands of years! It claims that the universe is the result of a "Big Bang" of matter/energy that occurred millions of years ago.... The Bible, the word of God, says that God created the world in seven days. How can we reconcile these two, seemingly, contradictory positions?

The above is just an example of the kind of questions that might face us as we probe exciting fields of study, such as biology or astrophysics. Also, we might be faced with questions of this nature when we talk to our peers or colleagues. Christianity teaches us to be "prepared" to defend our beliefs, to be "ready" to explain our convictions.

Some of the very relevant questions are:

1. Is the Bible a "scientific" book?
2. How can we explain the seemingly unscientific accounts in the Bible?
3. Should we refrain from pursuing research which conflicts with the Bible?
4. Does "creation" imply that "evolution" did not occur?
5. What is the significance of Adam being created in the "Image of God"?
6. Does science support or contradict religion?
7. Would a unified theory of physics help?

8. Does religion explain everything in this world? Does science explain everything?
9. Do science and religion have to compete?

We shall now proceed to examine each of these questions.

### **1. Is the Bible a "scientific" book?**

The Bible is the word of God spoken by His Holy Spirit to His servants. Not only that, but it is the truth, Jesus said, "Sanctify them through thy truth: thy word is truth." (John 17:17) Additionally, the word of God is revealed to all people, from all ages and until eternity. Jesus again says, "Heaven and earth shall pass away, but my words shall not pass away." (Matthew 24:35, Mark 13:31, Luke 21:33)

As such, although it is addressed to all people, it is inconceivable for it to be all the books. If it were a scientific book (as we currently understand those terms), it would be incomprehensible to the average people who by and large outnumber scientists. However, since it is true, it bears in its words the scientific accuracy which, when simplified for our understanding, may not lend itself to today's sciences.

When a scientist writes an article for publication in a scientific journal he/she has to use a scholarly language and terminology that would be simply incomprehensible for people outside his/her field. The same scientist, if asked to write about the same topic in a popular newspaper or magazine might use much simpler terms to explain the basic concepts. He/she might have to resort to the use of analogies and parallels from other domains of knowledge to make the concepts easier to understand, despite the fact that these might not be completely accurate or scientifically sound.

### **2. How can we explain the seemingly unscientific accounts in the Bible?**

Many of the accounts in the Bible, in particular concerning creation, can be thought of as simplifications of processes that are incomprehensible to humans -- or, to say the least to the non-scientist. When the Bible speaks about "one day" in Genesis 1, it is merely trying to simplify the notion of an "epoch" that might span millions of years! The proof of that is simple. The "day" we know is determined by the "sunrise" and "sunset", which result from the rotation of the earth around its axis, and around the sun. In Genesis, however, the word "day" was used even before the creation of the sun (in day 4).

There seems to be a persistent misconception among many that "because the Big Bang (for instance) was not mentioned in the Bible" then either the Bible is wrong or the Big Bang theory is wrong. The question that poses itself is simply: Why do some assume that it is either God or the Big Bang? Is not God capable of creating the universe "through" the Big Bang? The Bible tells us that God created heaven and earth. It does not tell us "how" God managed to create our universe -- after all, if it did we would have not understood it anyway!

Even if the Big Bang succeeds in explaining phenomena like "the expanding universe" and others, it still relies on the existence of a "seed matter or energy" and on the existence of "governing principles and laws". Who brought this seed matter or energy into being? Who established these governing principles and laws? These are but two questions that the Big Bang cannot even hope to explain. It is questions like these that underscore the necessity of a creation that brings about something (whether matter or axioms) from nothing.

Some people can even go to argue that it was indeed the Big Bang that God meant when He says: "Where wast thou when I laid the foundations of the earth? declare if thou hast understanding. Who hath laid the measures thereof, if thou knowest? or who hath stretched the line upon it? Whereupon are the foundations thereof fastened? or who laid the corner stone thereof; when the morning stars sang together, and all the sons of God shouted for joy." (Job 38:4-7) The echoes of the Big Bang that scientists have recently recorded may be but the echoes of that song of joy which all the angels chanted at the creation of the seed matter of the universe.

A good parallel that would help clarify this point can be borrowed from computers -- a technology that has been continually changing the face of the world for the last few decades. Computers operate through programs (software) that give detailed instructions to the computer circuits (hardware). By following these detailed instructions, computers can do wonders! But who should really get the credit for these wonders? Is it the hardware and software? or is it the "creative mind" that invented both the computer hardware and software program? It is definitely the latter. Any other conclusion would be completely unfair to the "intelligent being" who created the machine and invented the program, which when executed solved the problem. In this analogy, one can think of the "seed matter" as the computer hardware and the "governing principles and physical laws" as the computer software.

Discoveries in evolutionary biology or astrophysical theories should never diminish our belief that God created the universe because all these discoveries and theories (if true) represent nothing but an infinitesimal droplet of knowledge about the superb plan of the Pantocrator -- the architect of the universe. Rather than diminishing our belief that God created the universe, such theories and discoveries should bring us closer to God as we admire the beauty of His plan (or "program" if you want to stick to the computer analogy) for creation.

### **3. Should we refrain from pursuing research which conflicts with the Bible?**

If God created in us the brain and intelligence to think and make discoveries and theories about the universe where we live, then it should not be wrong to think "scientifically". However, in doing so, one should be careful not to violate the spirit of Christianity (e.g., misuse of genetic engineering for abusive manipulation of hormones, misuse of nuclear energy for destructive purposes, misuse of astronomy for astrology, etc.)

There is nothing wrong with studying evolutionary biology or conducting research in astrophysics as long as we are not doing so to prove (say) that God does not exist. On the contrary, when we approach such marvelous subjects, we should praise the Lord for the beauty of His creation and for the intelligence He created in us.

God gifted us with our mind and science, and expects us to use our God-given faculties without

spiritual laziness, so that we might arrive at the true comprehension of His word. It is written in the Holy Scripture that God "hath given men science that He might be glorified in His marvelous works" (Wisdom of Sirach 38:6). God, the Creator of the universe, can never be against learning the laws of what he has created.

#### **4. Does "creation" imply that "evolution" did not occur?**

The fact of evolution is one thing; theories explaining how evolution took place are quite another. Often people confuse the two and speak of both as if they were one. Life on earth climbed by steps from inferior creatures to superior ones. This is evolution, and this is fact. This Moses presents in Chapter 1 of Genesis. However, Genesis is neither a manual on Astronomy nor a textbook on Zoology.

Genesis teaches us that God gave to creation a development, in time, from the simple to the complex, from the inferior to the superior, that He did not create the world instantaneously but in six consecutive eras of perfecting, the most perfect being those he created the last day.

The six "days" were not needed by God but were needed by creation itself. Time was a part of creation -- its fourth dimension. Creation cannot be conceived without time and time needs movement and development. However, we have examples of God's instantaneous creation (eyes for the man born blind, John 9:1-41) and instantaneous destruction (withered fig tree, Matthew 21:18-22).

Therefore, we should be open to the possibility that evolution is the process God the Creator may have used to bring life and mind into being. If one were asked to make an abridgment of all contemporary scientific knowledge concerning the history of creation, in one page only, could anything better the first page of Holy Scripture?

#### **5. What is the significance of Adam being created in the "Image of God"?**

St. Seraphim of Sarov (a Russian saint) said, 150 years ago, about Adam:

"Many explain that when it says in the Bible, 'God breathed the breath of life into the face of Adam the first created, who was created by Him from the dust of the earth,' it must mean that until then there was neither human soul nor spirit in Adam, but only the flesh created from the dust of the earth.... Adam was not created dead, but as an active being like all the other creatures of God living on earth [including other homo sapiens]. The point is that if the Lord God had not breathed afterwards into his face this breath of life (the grace of our Lord the Holy Spirit), Adam would have remained without having within him the Holy Spirit Who raised him to Godlike dignity... he would have been just like all the other creatures... but "Adam became a living soul" (Genesis 2:7), that is, completely and in every way like God, and like Him, forever immortal." Adam was not created as a clay statue without life, or as a body without a soul. The breath of

God has no biological meaning, but is an uncreated immortal energy given to him to seal his connection with God.

## **6. Does science support or contradict religion?**

We should not reduce science to religion, nor vice versa. They are not interchangeable; they both complement our admiration of God the Creator. Relying on our incomplete scientific knowledge and using it to interpret religious beliefs may lead to unjustified contradictions. Therefore, we should distinguish between the belief in the Bible and its interpretation. Since the Bible is not a scientific book (and more importantly, the Bible never claims to be a scientific book!), it is important to make this distinction.

In history, church leaders (especially from the Roman Catholic Church) interpreted the Bible as a scientific book. This led to several (now confirmed) mistakes in interpretation. Galileo Galilei was accused in 1616 by the Vatican, and put under house arrest in 1633, because he supported the idea that the earth revolves around the sun (and that it is not the centre of the universe). He contended that the Scriptures cannot err, but are often misunderstood. More than a millennium before Galileo, St. Augustine had taught that if the Bible seems to conflict with "clear and certain reasoning", then the Scriptures obviously need re-interpretation. We cannot, using our narrow understanding and limited knowledge, explain the fullness of God's ways to bring the Creation into being.

## **7. Would a unified theory of physics help?**

An intriguing observation that has bubbled up from physics is that the universe seems calibrated for life's existence. If the force of gravity were pushed upward a bit, stars would burn out faster, leaving little time for life to evolve on the planets circling them. If the relative masses of protons and neutrons were changed by a hair, stars might never be born, since the hydrogen they eat would not exist. If, at the Big Bang, some basic numbers had been jiggled, matter and energy would never have coagulated into galaxies, stars, planets or any other platforms stable enough for life as we know it. And so on. Scientists (especially physicists) suspect that there is indeed a law that if known would make life's origin less baffling. Atheists would go as far as to say that such a law would play the role formerly assigned to the Creator. However, even such a law would be evidence of God the Creator and architect of this universe. Certainly, a universe predisposed to produce life seems a more likely product of divine design than a universe in which life was a fluke.

Pure science can provide us with a physics theory which gives a strictly material account of life's origin (through its self-organization), and another biological theory which gives a strictly material account of life's evolution. Each of these theories, taken separately, are used by atheists to contradict creation. But now place these two accounts alongside modern physics, and look at the big picture: A universe all but destined to create platforms for life; a still unknown but increasingly suspected physical law that all but destined some of these platforms to be populated

by little living specks; an evolutionary process that was almost destined, given enough time, to turn those specks into thinking, wondering, self-aware beings. Suddenly, the universe seems almost destined to have not only intelligent life, but intelligent meaningful life with beings like us. With little effort we can see the hand of God in all that. The impression of design is overwhelming.

Stephen W. Hawking, in *A Brief History of Time*, says:

"However, if we discover a complete theory, it should in time be understandable in broad principle by everyone, not only just a few scientists. Then we shall all, philosophers, scientists, and just ordinary people, be able to take part in the discussion of the question of why it is that we and the universe exist. If we find the answer to that, it would be the ultimate triumph of human reason -- for then we would know the mind of God."

## **8. Does religion explain everything in this world? Does science explain everything?**

Some scientists believe in a clock-maker God; he had built the universe, set its laws, wound it up, and let it run. Assuming that with the advances in science, more of these laws become comprehensible to us, they say that we could sense God through reason just by inspecting his handiwork -- the universe and its laws. This approach is in many ways well suited, as religion goes, to an era as scientific as this one.

However, this universe does not seem to work as predictably as a clock, a universe whose innermost workings may not be fathomable. The deeper our insight, the more baffling things become (e.g., uncertainty principle). The great physicist Richard Feynman addressed his audience saying, "Do not keep saying to yourself, if you can possibly avoid it, 'But how can it be like that?' ... Nobody knows how it can be like that." Sir Isaac Newton, said, "In science we resemble children collecting a few pebbles at the beach of knowledge, while the ocean of the unknown unfolds itself in front of us."

"For my thoughts are not your thoughts, neither are your ways my ways, declares the Lord. As the heavens are higher than the earth, so are my ways higher than your ways and my thoughts than your thoughts." (Isaiah 55:8,9)

Furthermore, feelings and subjective experiences have no strictly scientific explanations, scientists admit, but could still have a "metaphysical" one. The idea that there might be any laws beyond the perceivable world, anything opaque to scientific inquiry is a sign that science's brash youth, when no mystery seemed beyond experimental conquest, is ending. The doctrine of scientific determinism suggested by the Marquis de Laplace (that there exists a set of scientific laws that would allow us to predict everything that would happen in the universe, if we knew the complete state of the universe at one time) (beginning of the 19th century) started to be abandoned with Max Plank's quantum theory (1900) and Werner Heisenberg's uncertainty principle (1926). With respect for metaphysics comes respect for an idea central to religion: the unknowable, "for we know in part" (I Corinthians 13:9). Now, how can atheists, those who confidently deny God, admit that they cannot peer behind the curtain, but still affirm that there is

nothing there?

It becomes clear now that the ultimate questions remain unanswered, that science may be unable to answer them, and yet that science does help us mull them over, by illuminating the epic trajectory of cosmic and biological evolution on whose end we sit. The focus of the question then shifts from "creation versus evolution" to "purpose versus accident". But purpose, like origin, is a point where the wisdom of empirical science ends and the quest for religious faith begins.

## **9. Do science and religion have to compete?**

Let us take a look at Fernand Crombette and his work, as an example of a Christian attitude and behavior. To synthesize the global work of Fernand Crombette is an almost impossible task, considering the extent of the subjects he tackled. His entire work is composed of 43 volumes, consisting of about 16,000 pages and 2 atlas maps. All his work was realized in 25 to 30 years, between 1936 and 1966.

Fernand Crombette was pensioned off in 1937 at the age of 57. It was a providential circumstance that allowed him to realize this huge task: his daughter, a student in fine arts, was asked to sketch out a picture representing The Saint Women at the Grave. Fernand Crombette advised her to make it a recreation of history for which he would gather documentation. While doing so, he was struck by this verse: "For God is my King of old, working salvation in the midst of the earth." (Psalm 74:12) If the Bible is right, he reasoned, Jerusalem, and more specifically Calvary, should be in the centre of the earth.

Fernand Crombette is tempted by this thesis and he gets down to work. He tries to obtain a joining of the continents, because a centre cannot be conceived without one single primitive continent (in which ancient civilizations believed). He goes to institutes and universities, consults books, studies the sea-bed and discovers in it the original place of continents, and he dates back their dislocation to the time of the Flood. Before him, Wegner had tackled the question of the continental drift, but while the latter believed it happened slowly, Fernand Crombette thinks it happened in 90 days.

To reconstitute the original face of the earth, Fernand Crombette had to go down to the 2000 metre mark below ground, where the joining would be real. It should be mentioned that Fernand Crombette had recourse to the thesis of the philosopher Kant who proposed that the earth, at its origins, was surrounded by a beautiful aqueous ring that maintained the same temperature on the surface of the whole globe. The Bible gives credence to this when it says, "And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament; and it was so." (Genesis 1:7)

The universal Flood, which is believed to be caused by the fall of this mass of water, reduced the dry land to 29% of the total surface of the globe, and that is how the average depth of the seas reached 4000 metres. The ring contained half of the water of the seas that now surround the dry land. He thus, was able to find the location of the famous Atlantis, so rapidly engulfed, and

the dimensions of which correspond to the ones given by Plato. These joining allowed him also to locate the ancient Scythic Ocean and the famous île de Pâques. When his work was done, he discovered, in the work of an ancient author, the declaration that the dry land occupied, primitively, about 5/7 of the inhabited hemisphere. Immediately, he verifies if his information corresponds to the author's and he finds they are almost identical.

He had, previously come across a book of Father Placet, who wrote in 1668: "Where it is proved that, before the Flood, there were no islands and that America was not separated from the rest of the world." Thus Fernand Crombette received, by this double account, the confirmation of his own thesis, which scientists and specialists can verify by themselves.

Actually, in the sea-bed are engraved the routes that the present different continents took from their initial sites. Wegner's thesis of a very slow drift is not supported any more. The only thing that is accepted is the idea of an initial single continent. Fernand Crombette believes the drift happened in 90 days, during the Flood.

Let us have a look at an extract of his book *Essay of a Divine geography*, and in particular the chapter "Joining between America and Africa",

"For the terminal part of South America to imprint its form in the oceanic sea-bed, the block must have been detached of its place in a relatively rapid movement, more rapid than the ascent of the magma. This way, the magma was solidified by the water before completing its upward movement. Therefore, there is no question of the drift being as slow as 1 mm per day. We are dealing here with an abrupt movement that happened, not during 3,000,000 years as Wegner imagines, but within 90 days as the Bible says and as a result of a huge catastrophe. Reverend Father Placet told us what it was: The universal Flood."

When Fernand Crombette had finished his work on the continents' joining, Jerusalem was found to be exactly in the centre of the primitive single continent, which would have had the shape of an eight petal flower. In fact, the name of the earth in the Coptic language is "Hérès" which means "like a lovely blossomed flower."

*Editor's note:*

Our *Agpeya*, the Coptic book of prayers, written centuries before Fernand Crombette's research, re-iterates the fact that Calvary is situated in the centre of the earth. In the "verses of sext", read following the Gospel of the Sixth hour, we read, "Thou hast wrought salvation *in the midst of the earth*, O Christ our God, when Thou didst stretch forth Thine holy hands upon the Cross." Reda Fayek is currently completing the requirements of a Ph.D. in *Systems design* at the University of Waterloo. He is serving as one of the youth counselors at our church. The above was presented to our youth group on one of the youth group's weekly meetings.

