Religion and Science: The Emerging Relationship Part III



Many of us are familiar with the Star Trek movie series released some time ago. In one of the films, Mr. Spock is dying of exposure to a lethal does of radiation. After his death Spock's father asks Capt. James T. Kirk if Spock had *mind melded* with Kirk to transfer his *katra* or spirit. Such scenes remind us that religion and science often overlap with each other in popular culture, reminding us that most people cannot accept the reductionist view that we are only a mass of cells and our identity is only the result of the firing of brain neurons. It just seems that we are so much more than that, that indeed, we are spiritual creatures. As we will see later in this series of articles, indeed, there is more in recent discoveries to suggest that we are certainly more than a mass of cells whose identity is only a result of neurons firing in the brain.

There are theologians and scientists who maintain that some sort of combination of religious belief and scientific discovery will give us a better picture of just who we are and the nature of reality as a whole. This brings us to the fourth model of the relationship between religion and science proffered by Ian Barbour-- the *Integration* model.



(Paul Davies)

The discipline of Natural Theology makes the claim that the existence of God can be inferred, not proved, from the evidence that evolution in the universe is both *top down* (Intelligent organizing reality) and *bottom up* (process in material reality that has led to greater variety and complexity) in nature—of which some scientists note that much of recent scientific data points in such a direction, known as *emergence*. Astrophysicists, Paul Davies and Freeman Dyson raise the possibility that the universe has a coherency to it that points to a *Mind* that brought all into creation. Freeman Dyson puts it this way:

I conclude from the existence of these accidents of physics and astronomy that the universe is an unexpectedly hospitable place for living creatures to make their home in.

Being a scientist, trained in the habits of thought and language of the twentieth century rather than the eighteenth, I do not claim that the architecture of the universe proves the existence of God. I claim only that the architecture of the universe is consistent with the hypothesis that mind plays an essential role in its functioning. 1



(Bernard Haisch)

These sentiments are echoed in a different way by Dr. Bernard Haisch, deputy director of the Center for Extreme Ultraviolet Astrophysics at U.C. Berkeley, by asserting that other explanations about the origins of the Universe that would exclude the possibility of an intelligence behind the creation of the Universe do not have to be the case. He argues against the notion that to be a scientist one has to be an atheist. In fact almost 50% of all prominent scientists accept some idea of God. So belief in God as a scientist does not mean rejecting science. Dr. Haisch states:

To reject the explanation of an intelligence behind the origin of our Universe simply because one believes that there cannot conceivably be such an intelligence is really no different from faith in the equivalent of a holy book. In this case the faith is in reductionist materialism. Positing the existence of perhaps infinite other universes as a possible explanation is legitimate. But to argue that that 'must' be true because the alternative of an intelligence just 'cannot' be true is simply to worship at the altar of reductionist materialism. That is how the practice of science can morph into the faith of scientism. 2



(Brian Greene)

Physicist, Brian Greene of Columbia University states:

This is not a question borne of idle philosophizing about why certain details happen to be one way instead of another; the universe would be a vastly different place if the properties of the matter and force particles were even modestly changed. For example, the existence of the stable nuclei forming the hundred or so elements of the periodic table hinges delicately on the ratio between the strengths of the strong and electromagnetic forces.3



Today, many cosmologists speak of the *anthropic cosmological principle* when they suggest that there is a built in possibility (not to be confused with the fundamentalist Intelligent Design movement which will be discussed in a future article) to the universe that planned for self-reflective creatures like human beings to evolve. There are two versions of this principle. The first version holds that the foundations of the universe are such that we are programmed into creation—that the universe knew we where coming; that the universe was designed with human beings in mind. This is known as the *strong anthropic principle*. The second version of this principle states that universe was designed with the possibility that a self-reflective creature could emerge. This is known as the *weak anthropic principle*. Both versions maintain that the universe was created for the emergence of consciousness and self-conscious creatures!



(Roger Penrose)

The mathematician, Roger Penrose writes:

One discovery that has moved some scientists from being atheists to theists is the carbon atom.

Owen Gingerich shows that the precise resonance of the carbon atom necessary for its multiple bonding properties happens to coincide with the resonance of beryllium,

helium, and oxygen. If this extremely remote coincidence had not occurred, then carbon would be extremely rare, and carbon-based life forms would not have emerged. **5**

Owen Gingrich notes:

I am told that Fred Hoyle, who together with William Fowler first noticed the remarkable arrangement of carbon and oxygen nuclear resonances, has said that nothing has shaken his atheism as much as this discovery. 6

There are other extraordinary aspects of the Universe that *suggest* that an extraordinary intelligence was at work in the creating the possibilities for life to emerge in the Universe.

Every fundamental particle of matter has an equal and opposite twin of antimatter. The positron is a positively charged electron. An anti-proton is a negatively charged proton made up of anti-quarks....When the Universe was created in the Big Bang, there should have been an equal amount of matter and anti-matter created. The problem is that matter and antimatter immediately and completely destroy each other on contact, resulting in a brief burst of energy. For that reason we would not have a lifefriendly universe, or any universe at all, if matter and antimatter has been created in equal amounts. We would have a universe of all energy and no matter....It is possible to infer from our knowledge of the Big Bang that for every 30,000,000 particles made of antimatter, there must have been 30,000,001 particles of matter. On the average the 30,000,000 matter-antimatter pairs completely annihilated each other, leaving on average one particle of ordinary matter. It is this left over one out of 30,000,000 out of which our Universe is made. Why this amazing almost but not complete cancellation? No one knows. 7



(Pim von Lommel)

On another note, in the science of brain studies and studies of human consciousness it is increasingly being asserted that brain and mind are not identical with one another. Some researchers suggest that the brain acts as a receiver for the mind. They go on to suggest that the mind is *non-local*, which means that it does not just exist in the brain but transcends the body in a realm not in time and space! Researchers such as world renowned cardiologist, Dr. Pim von Lommel are advancing such an understanding of human consciousness.

....I strongly believe that consciousness cannot be located in a particular time and place. This is known as nonlocality. Complete and endless consciousness is everywhere in a dimension that is not tied to time and place, where past, present and future all exist and are accessible at the same time. This endless consciousness is always in and around us. 8



(Fr. Hans Kung)

As a result of the new paradigm that is emerging in many areas of science, scientists are beginning to turn to the theologians and the theologians to the scientists to try to integrate the truths of both approaches to life; clearly an exciting, intriguing and welcome development for many. However, Roman Catholic theologian, Hans Kung, notes that we must be careful in rushing to an *integration* model for the relationship between religion and science. He noted that when religion has tied its wagon to a certain scientific worldview it could result in problems analogous to the *Galileo Affair*. He cautions against science and religion simply sweeping away their different perspectives for the sake of a false peace. Instead he suggests that a productive and civil dialogue continue between the two approaches to understanding reality.

- *No model of confrontation* between science and religion: neither a model of fundamentalist pre-modern origin that ignores or suppresses the results of science or historical-critical exegesis of the Bible, nor a model with a rationalistic modern coloring that evades the fundamental philosophical and theological questions and declares religion a priori to be irrelevant;
- *No model of integration* with a harmonistic stamp, whether this is advocated by theologians who assimilate the results of science to their dogmas or by scientists who exploit religion for their theses;
- But rather a model of complementarity involving the critical and constructive interaction between science and religion in which the distinctive spheres are preserved, all illegitimate transitions are avoided and all absolutizings are rejected, but in which in mutual questioning and enrichment people attempt to do justice to reality as a whole in all its dimensions.9

Notes

1 Freemon Dyson, Disturbing the Universe (New York: Harper and Row, 1979), p. 250.

2 Bernard Haisch, *The Purpose-Guided Universe: Believing in Einstein, Darwin and God*, (New Jersey; New Page Books, 2010), p.43.

3 Brain Greene, *The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory,* (New York: Vintage Press, 2003), p. 12-13.

4 Robert J. Spitzer, S.J., *New Proofs for the Existence of God: Contributions of Contemporary Physics and Philosophy* (Grand Rapids, Michigan/ Cambridge, UK, 2010), p. 59.

5 ibid., p.64

6. idid., p. 64

7 Bernard Haisch, *The Purpose-Guided Universe; Believing in Einstein, Darwin and God*, (New Jersey, New Page Books, 2010), p. 82.

8 Pim van Lommel, M.D., *Consciousness Beyond Life: The Science of the Near-Death Experience* (New York: Harper Collins Publishing, 2010) p. xvii.

9 Hans Kung, *The Beginning of All Things: Science and Religion* (Grand Rapids, Michigan/Cambridge, UK, Eerdmanns, 2007), p. 41

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