# Will Organized Religion Survive an Encounter with Extraterrestrials?

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#### Resumo

Será que as Religiões institucionalizadas poderão sobreviver aos encontros com Extraterrestres (ET)? Se começarmos por esta questão tipica dos jornalistas e divulgadores, será no minimo um choque de valores que nos ajudará a compreender até que ponto a nossa cultura é antropocêntrica. Um breve percurso para relembrar as capacidades produtivas de vida no vasto cosmos perspectiva o que pode ser comum para os ET e para nós quando apreciamos o trabalho artistico de Deus, quer seja relativamente ao universo físico ou à vida inteligente, parece ser parte da chave para qualquer "sobrevivência".

#### Introduction

They generally think that they have got you on a spot. I mean, it does seem the most awkward question one can ask a person representing a traditional religion. "They" are journalists and interviewers, and "the question", of course, is that of our title. Little surprise, then, that the Canadian-based Vision TV early in 2003 aired an episode of its series, *Test of Faith*, on the topic of "God meets ET". I hope its provocative title brought them good viewer ratings; it was certainly entertaining to take part in under the professionalism of Valerie Pringle's hosting.<sup>1</sup>

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### The question in popular and theological form

So, how do they think they have "got you"? In two main ways: one is from the superiority that the extraterrestrials' religion will be expected to have over our Earth's organized religions; the other, for Christianity at least, is from the uniqueness of the redemption event.

The first can be illustrated from popular culture such as the classic science-fiction novel by Arthur C. Clarke, *Childhood's End*. In this work, first published in 1954, the Overlords suddenly appeared hovering over every city on Earth and took control, politically and militarily. It was a benevolent dictatorship, ending the threat of nuclear holocaust, bringing unity among nations, eliminating poverty. The Overlords were totally superior, intellect-tually and technologically. One branch of that technology was to access the past. Once the true beginnings of the world's great faiths were laid bare, the messiahs lost their divinity and in turn "humanity had lost its ancient gods" (Clarke 1990, 67).

That might be enough illustration for our purposes, save that Clarke goes on to write that the Overlords are not the ultimate. Above them is the Overmind, who is using the Overlords to grow and extend its powers of awareness of the universe. Long ago the Overmind left the tyranny of matter behind. In turn it will transform each race, when the time is ripe, into a single mind, which it can absorb wholly into its being. The influence on Clarke's imagination of his Sri Lankan home is obvious.

Perhaps in turn there are influences of Clarke on Jill Tartar, the founding director of Project Phoenix, the SETI Institute's privately-funded continuation of a targeted search for extraterrestrial intelligence. Writing in a book edited by Steven Dick, Tartar (2000) notes that the society from which any extraterrestrials might come must be greatly advanced to our own, much like the Overlords. If they do have any religion (one senses this is a significant "if" for Tartar), it will have had the time to develop into a single religion, leaving aside the intolerance expressed by the multiple religions manifest on Earth. Furthermore, it will have found a mature compatibility with its own science and technology. For Tartar, the effect on old religions will be overwhelming. Humanity will find it hard to resist the informational appeal of this universal religion (Tartar 2000, 147). Tartar recognizes that initially the contact with an extraterrestrial civilization might be simply that, rather poor in information content; but eventually the content will be enriched, and the influence of the other felt to full extent.

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If that shattering of an Earth-centered perspective is not enough to dissolve traditional religions, the other, more theological way may be pressed by the one who poses our title's question. If God became human in Christ, then wouldn't the existence of extraterrestrials imply the need for multiple incarnations throughout the universe? The argument goes back to St. Thomas Aquinas, and even long before for those in the tradition of Plato and Aristotle. The problem arises from emphasizing the uniqueness of the incarnation. Other intelligent life would presumably also have to stand in need of redemption, a supposedly one-off event, and so are logically excluded.

This problem, as well as others, has been well outlined by Ernan McMullin (2000) in the same collection of essays as contained Tartar's. The history of this question is likewise well known through Steven Dick (1996) and Michael Crowe (1997). It has been used to beat Christians over the head with their own beliefs, notably by Thomas Paine in his *Age of Reason*, written as long ago as 1795, in which it forms part of a sarcastic critique of religion's absurdities.<sup>2</sup>

Can those who stand in a traditional religion give reasonable answers? If so, these will come from the more speculative branches of theology. That has to be the case since the question of ETI is still not proven (for most!), and theology starts from the data of historical revelation and actual religious experience and tradition. Dick, Crowe, and McMullin do all point to theological answers, and other considerations can be found in Peters (1994), Corbally (1999), Russell (2001), and Bonting (2003). I shall not rehearse these now, but just note that despite any impression that there has been little written on the topic by theologians, I agree with Crowe (1997) in finding on the contrary that the question, given its speculative and not main--stream theological nature, has been taken remarkably seriously for a long time.

Instead of direct theology, I should like to take the approach that comes through our contemplation of the cosmos. Given that ET and we gaze on the same universe, will ET's understanding of God be so fundamentally different from ours as to threaten traditional religions?

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#### A tour of the universe

I should delight in reviewing with you all that we currently know from astronomy, but this is not the place. However, the successful launch of the Space InfraRed Telescope Facility (SIRTF) in August 2003 focuses on what we need to consider: the dusty universe. There was virtually no dust immediately after the Big Bang, when the fireball that began our universe cooled enough for matter to separate from radiation. After some 100,000 years, hydrogen gas dominated, and the remaining 10 percent in number was taken up by helium, with just a trace of the light element, lithium, as the only dust component.

It is strange to expect any order after an explosion, but that was what did eventually came about in the universe. After perhaps 100 million years the first star formed from a clump of swirling gas which had managed to gather itself together through its mutual gravitational attraction. That first star "burnt" in its core through a fusing together of the primordial hydrogen nuclei into helium, then the helium nuclei into carbon, then nitrogen, then oxygen, and so on. Eventually through this process, all the chemical elements were synthesized, the heaviest in the final, explosive moments of the star's life when it went supernova. Now, the amount of "dust" made in this and its fellow first stars was minimal, but through further generations of massive stars the amounts of the elements heavier than hydrogen and helium were built up to present day levels such as we find in our Sun.

Stars are not isolated but are born in groups. The collections of 100s of billions of stars are the large galaxies that we see in the universe. But stars are not the only component of galaxies. Those galaxies which are still forming stars clearly must contain the material for such formation, the remains of the Big Bang-generated hydrogen and helium, plus a growing amount of the synthesized dust. This material is found in the giant molecular clouds, as they are called. A classic example, visible from both the northern and southern hemisphere, is in the constellation of Orion, hanging from the hunter's belt. This is where the newly launched SIRTF can help greatly. It is sensitive to the infrared radiation which both can penetrate dust more easily than visible light and shows features rich in the signatures of molecules. Rather as one can uniquely sign oneself with one's thumbprint, so each molecule has a characteristic "print" or pattern of absorbing radiation in the infrared spectrum. Through such spectroscopy we can see the wide variety

of atoms and molecules floating around in the molecular clouds or nebulae. We live in a truly diverse universe.

Now, while SIRTF will extend our grasp of what is happening in molecular clouds, we already know much from intense, earlier studies. For instance, Hubble Space Telescope has shown us within the Orion nebula cocoons of gas and dust, in which new stars are being formed. These tend to be the size of our solar system, and so we conclude that the formation of planets is literally a spin-off from the formation of stars. In these planetary systems, the seemingly disordered fireball that began the universe has come to achieve a harmony and unity from diverse elements. That is even more true when we think of the biological order, though this is beyond my own area of expertise and scope here; and of course it is the most true of intelligent life.

The interactions of radiation and matter, leading to the complexities we find today, is a fascinating story. It is a story that poetry can help us grasp, and so I gladly quote how a philosopher and friend, Loyal Rue (2000, xii) summarized the *Epic of Evolution*:

In these epic events matter was distilled out of radiant energy segregated into galaxies collapsed into stars fused into atoms swirled into planets spliced into molecules captured into cells mutated into species compromised into ecosystems provoked into thought, and cajoled into culture.

## A common appreciation of god

Now this is not just humanity's *Epic of Evolution*. It is a story that will be understood by extraterrestrials also, via their own science. It is a story which evokes a certain awe, and so I expect it to impact the understanding of God for both our species.

The components of that understanding, through the epic's metaphysics, are several (see the list of Polkinghorne, 2003), but let us pick out three for now.

**Rationality** The story of the universe makes sense. There is complexity in it, chaos certainly, but an overarching order has come about, despite all the randomness associated with evolution, especially biological evolution. The indifferent mutations have shown a fruitfulness which blind Fortuna could not achieve. In all these aspects, the universe shines with a beauty which is breathtaking.

Is this a compelling vision of the Creator also? Historical and current debates about intelligent design imply it is not. ET could at least appreciate the argument, if not share the faith in a purposeful Creator. That faith is, in the end, not something that relies on scientific insight, though it is nuanced and supported by it (Ayala 2003).

**Diversity and Unity** I have sketched some of the diversity found in the physical universe. There are all sorts of atoms and molecules in a whole variety of associations and energetic states. The Hubble Space Telescope has continued to dazzle us; no two of its pictures are the same.

Then there is Earth's biosphere, with conservatively between 5 and 15 million species. From the 1.7 million of those that have been described and named (Basset et al. 2000, 28) two characteristics stand out: astonishing diversity and wondrous interconnectedness. For people such as Belden Lane (2001) these characteristics are no accident but reflect the Creator as being a Trinitarian God. Within God there is both diversity, expressed as the separate integrity of the Three Persons of the Trinity, and interconnecting unity, expressed as the mutual relationship of love within the One God.

Everyone, ET included, who is struck by the exuberant diversity of plants and animals and cosmic structures, and yet marvels at their organization and interdependence, is in touch with the creative expression in matter of a Trinitarian God. Again, this is no proof, but a religious sensitivity.

**Relatedness** This component has just been introduced, but it is worth dwelling upon in itself. Even the physical universe is characterized by relatedness. The physical evolution of the components of the Big Bang, hydrogen and helium, into the cosmic swirl that we see today has only come about from the interactions of matter with itself and with radiation. Of themselves they are sterile. Together they are so fruitful as even to exhibit life. Once given that biological life, one cannot escape seeing the relatedness of creatures. One might dwell on the predator/prey characteristics of nature, but I find far more relevant the aspect that Ashbrook and Albright give us in *The Humanizing Brain* when they discuss the development of our brains. As any sensitive parent knows, their child's brain "can reach its potential only through loving interactions" (Ashbrook and Albright 1997, 142). Initially there are numerous random neuronal connections present in a new born baby's brain. What interpersonal interactions bring about is a selection of those connections that are most relevant to the developing human life. It is a "use it or lose it" situation (Ashbrook and Albright 1997, 82). So in humans, and presumably in ETs, the interactions are vital for proper growth and full life.

When self-conscious beings engage in such nurturing, self-transcending relatedness, we call it love, though that is not a scientific term. It is, however, a term which can be used to characterize a sense of how the universe was started initially and accompanied in its changes. None of the "epic of evolution" is necessary, especially its beginning. Through this gift quality I sense a Divine love behind the universe's epic, and I would invite ET to do likewise.

## The survival of religions

We have noted what seem the main challenges to organized religion from an encounter with ET, namely their superior knowledge and social organization, and the uniqueness of Christ's incarnation. As an alternative, we have built a scientific understanding of the cosmos that is presumably common both to ourselves and to ET. This understanding provides components of the cosmos at the metaphysical level: for example, rationality, diversity/unity, and relatedness.

Since these components give insights into the nature of God and are shared by ET, I do not expect our fundamental ideas about God to change in an encounter with ET. Consequently, neither do I expect organized religions to be threatened fundamentally by such an encounter. After all, they survived the seventeenth century's Age of Enlightenment.<sup>3</sup>

On the other hand, I would hope that the "superior knowledge" of ET will help purify religions from outdated baggage, sociological or theological,

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just as Pope John Paul II expects progressive scientific knowledge to "purify religion from error and superstition" (1988, M13). Given that prospect I would say, *pace* Clarke's Overlords, that being smarter does not necessarily mean being better, and so I look forward to some lively dialogue with ET and friends about the universe, the meaning of everything, and God.<sup>4</sup>

#### Notes and References:

I. Pringle after 4 intensive days of taping could still, even if just, remember how to pronounce my name when the final thank you's came due.

2. The incarnation problem is obviously peculiar to Christianity, and not relevant to the other "Adamist religions" of Judaism and Islam, or to the Eastern religions. Thus these seem to have a more relaxed approach to the possibility of ETI (Ashkenazi 1992).

3. However, fundamentalist religions might feel threatened, e.g., by the implication from ET's time taken to travel that the universe is more than 6,000 years old.

4. Those impatient to start the dialogue, as it were, could well read the novel by Robert Sawyer, Calculating God (2000), which approaches the question from the viewpoints of a theistic alien and an atheistic paleontologist.

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