BOOK REVIEWS


The author of this highly exciting book is an American professor of mathematical physics at Tulane University, Florida, U.S.A. He should know what he is talking about when he sets out to scientifically prove in this book that God exists and that man will be resurrected after death to live an everlasting life, just as the great world religions have asserted. It might be puzzling to many that he describes himself as an atheist and traces his line of thinking from scientific materialism, particularly of the Marxist John Bernal. However, a good book is a good book, whoever writes it. It is extremely well-researched, packed with information from wide-ranging sources, interspersed with keen insights, and written in a surprisingly objective and readable style in spite of its heavy and sensitive theme as well as its technical nature. Anyone to whom the problem of life's meaning is important must read this book.

To give readers an idea of its tremendous scope, I should tell them that it consists of thirteen chapters that include such breath-taking titles as "Determinism in Classical General Relativity and in Quantum Mechanics", "How Free Will Can Arise from Quantum Cosmological Mechanism", "The Physics of Resurrection of the Dead to Eternal Life", "What Happens After the Resurrection: Heaven, Hell and Purgatory", "Comparison of the Heaven Predicted by Modern Physics with the Afterlife Hoped for by the Great World Religions", "The Omega Point Theory and Christianity", and "Theology as a Branch of Physics". The notes and bibliographical list are very useful and there is also a long Appendix for scientists who require more technical details.

For many people and for far too long, religion and science have been kept apart. The two cannot be linked, much less equated, according to them. No less than the Council of the U.S. National Academy of Sciences decreed in a Resolution dated 25 August, 1981 as follows: "Religion and science are separate and mutually exclusive realms of human thought whose presentation in the same context leads to misunderstanding of both scientific theory and religious belief." On the religious dogmatic side, let me quote this rather representative view: "In
many respects and on many points, the presuppositions of modern science concerning man, the universe and reality can very well undermine the Islamic belief system. If one really understands the meaning of each of the six articles of faith and all their philosophical and scientific implications, then one cannot at the same time be a defender of the philosophy of modern science without falling into philosophical and logical contradictions or without sacrificing one’s intellectual honesty.\textsuperscript{2}

Of course, in all the great religions, there have been philosophers and theologians who argued for the congruence of religion and science: Maimonides in Judaism, Acquinas in Christianity, al-Kindi, al-Farābī, Ibn Sinā and Ibn Rushd in Islam and several modern Hindu, Buddhist and Confucian reformers. But modern European civilization after Issac Newton, Charles Darwin and other scientists and philosophers with a materialist bent seemed to have disposed of a just and good God from the universe and to have embarked on the road to everlasting atheism. However, this is not to be. The relativity theory of Einstein and the quantum physics of Max Born, Werner Heisenberg, Louis V. de Broglie, Erwin Schrodinger and others have displaced the mechanical block universe of earlier centuries with a less deterministic and more "spiritual" universe with a possible creator who has created it. The twentieth century, with its two terrible wars, completely upset the simplistic, progressivist world-view of the eighteenth century. Mankind is now less certain about the ability of science to lead it to uninterrupted progress, thus giving way to a renewed interest in religion in general. But that is only one side of the picture. The other is that modern quantum science is fast approaching the time when it might possibly be able to endorse the essential teachings of the great religions, i.e. the existence of God and of an infinite afterlife. This is precisely what Professor Tipler seems to have done in this book.

On this relation between religion and science, the author says:

The Omega Point Theory allows the key concepts of Judeo-Christian-Islamic tradition now to be modern physics concepts; theology is nothing but physical cosmology based on the assumption that life as a whole is immortal. A consequence of this assumption is the resurrection of everyone who has ever lived to eternal life. Physics has now absorbed theology; the difference between science and religion, between reason and emotion, is over.

I began this book with an assertion on the pointlessness of the universe by Steve Weinberg. He repeats this in his latest book, \textit{Dreams of a Final Theory}, and goes on to say ". . . I do not for a minute think that science will ever provide the consolations that have ever been offered by religion in facing death."
I disagree. Science can now offer precisely the consolations in facing death that religion once offered. Religion is now part of science (pp. 338-39).

The author also gives three very interesting reasons for the divorce of science and religion, namely: (1) the continuing influence of classical (Greco-Roman) metaphysics on contemporary (Western) theology and religion and its separation from modern science, modern science being nearer to the true understanding of reality than medieval or ancient science; (2) general religious opposition to the atheism of modern science (actually some modern scientists); and (3) the difficulties inherent in the transmitting and understanding by human beings of the Book or the Word of God.

Thus, according to Professor Tipler: "The only book which does not suffer from these limitations is the Book of Nature, the only book which God wrote with His/Her own hand, without human assistance. The Book of Nature is not limited by human understanding. The Book of Nature is the only reliable guide to the true nature of God" (p. 337). In other words, there are two books, the Written Book and the Unwritten Book, and the two must agree. In this sense, science, i.e. the study of nature, cannot but come to the same conclusions as the teachings of a true revealed religion.

Being a book of physics, Professor Tipler's contains much technical language. The Omega Point Theory, standing for reality, the ground of Being or simply God, is one such instance of the use of technical language. What actually is Omega Point Theory? Let me try to explain it briefly. Since, if God exists, He must be in or part of the universe, knowledge of the universe must include knowledge of Him. That is to say that God is immanent in the universe. Since God created the universe, God must be other than the universe, i.e. that He is transcendental. Science has discovered that the universe and all it contains are evolving towards a point where God's power is fully manifested, i.e. God's Kingdom where complete justice prevails and everything submits to His commands. This is the Omega Point. Before the Omega Point is reached, life would have engulfed the whole universe and universal as well as individual resurrection would have taken place through computer simulation. At that time, in the future, probably in the remote future, computer capacity will reach a stage when it would be capable of such a performance.

Although the author disavows belief in revelation, the fact that many a time in the book he takes his queue from the great world religions, sometimes even tribal religions of Africa and America, most certainly on points of God's omnipotence, omniscience, omnipotence, and everlasting afterlife shows that his scientific methodology is somewhat of a different character from that of a thoroughgoing materialist. No scientist can deny inspiration. Can inspiration be explained in terms of ordinary reason alone? I do not think so, because inspiration constitutes a leap in logical thinking. It shows the individual mind's connection to a higher energy source which, in theological language, is in the divine. As Professor P.A. Sorokin said, it is supra-rational and supra-sensory.
This supra-sensory knowledge, combined with knowledge obtained through the senses and through logical inference, constitutes what Sorokin calls an integral knowledge of truth. Thus, true knowledge comes from a combination of three, not two sources as in materialist epistemology. I would therefore regard Professor Tipler's summary rejection of knowledge through revelation or inspiration, and thus rejection of prophets, as misplaced, because charlatans posing as prophets or saints can easily be exposed through the use of empirical and rational evidence. The professor himself has rejected the story of the resurrection of Jesus, using this methodology. On the other hand, insights obtained through revelation or inspiration, buttressed by empirical and rational evidence, can give an enquirer a better understanding of reality and therefore enable him to succeed better in life. I suspect that Professor Tipler's quest in this book has had the help of religious teachings more than he cares to admit, or is even aware.

According to the author, the universe has existed for nearly 20 billion years and will continue for at least another 100 billion years. We know that human beings have been on earth for only one million years and civilization for about 5,000 years. Thus universal evolution takes such a tremendously long time to produce a human being, the rational and moral creature that God has characterised as His vicegerent. Since the average life of a human being on earth is not more than seventy years, his afterlife, judging from the natural age of the universe, is infinitely long. This fact alone should caution those who would rush to atheism for the evil existing in this transit world of ours.

How does science prove that there is an afterlife? According to Professor Tipler, life is like a computer, an information processing machine, and the human brain or soul a very complex computer programme. At present, our computer has no intelligence capability. But computing on the basis of human brain capability the author believes that in seven years, or at the most in 2030, we can make computers with the same human intelligence capability. With that type of capacity, we can colonize and live in space. In fact, he says, that life must do that for the sake of its continuing survival. It is in this way that we who have lived and died in the past will be resurrected to an everlasting afterlife.

Where is God, then, when all these tremendous happenings are taking place seemingly by themselves? The answer lies, according to the author, in our custom of looking at God in a traditional way. The Omega Point Theory requires us to look at Him in a non-traditional way. I shall let the professor speak: "The universe is defined to be the totality of all that exists, the totality of reality. Thus, by definition, if God exists, He/She is either the universe or part of it. The goal of physics is understanding the ultimate nature of reality. If God is real, physicists will eventually find Him/Her. I shall argue in this book that physics may have in fact found Him/Her: He/She is actually everywhere; we have not seen Him/Her only because we have not looked at the universe on a sufficiently large scale – and have not looked for the Person in the machine" (p. 3).
The Person in the machine! God is immanent in the universe, but being its Creator and Ruler, He is also transcendental. He is the power within and without the universe, just as a human being is propelled by a power inside and outside him. I must confess that the professor's profound insight makes clear to me the meanings of the following verses of the Qur'an on the nature and power of God:

Everyone on earth perishes. Only the Presence of your Lord lasts. He is the Possessor of Majesty and Honour (55: 26–27).

He is the First and the Last, the Manifest and the Hidden (57:3).

God – there is no god but He, the Ever-living, the Self-subsisting by Whom all subsist. Not a moment of unawareness or slumber overtakes Him. To Him belongs everything in the heavens and on earth. Who can intercede with Him, except in accordance with His will? He knows their past and their future. They shall not compass aught of His knowledge, except as He wills. His dominion encompasses the heavens and the earth, and ruling them never burdens Him. He is the Most High, the Great (2:255).

Convincing as the author's case seems to be, he characteristically says:

To emphasize the scientific nature of the Omega Point Theory, let me state here that I am at present forced to consider myself an atheist... I do not yet believe in the Omega Point. The Omega Point Theory is a viable scientific theory of the future of the physical universe, but the only evidence in its favour at the moment is theoretical beauty, for there is as yet no confirming experimental evidence for it. Thus scientifically one is not compelled to accept it at the time of my writing these words. So I do not... But... I also think the Omega Point Theory has a very good chance of being right, otherwise I would never have troubled to write this book. If the Omega Point Theory is confirmed, I shall then consider myself a theist (p. 305).

Although Professor Tipler says that no single religion can be singled out as most consistent with the Omega Point Theory, he states that it is consistent with the core beliefs of all the great world religions, that is, belief in a Supreme Personal God and belief in resurrection after death. However, he points to "the universal Muslim belief on the absolute oneness of God" as agreeing with the Omega Point Theory. "... the Omega Point is a point, which is to say a single entity. God's absolute oneness is a mathematical theorem in the Omega Point Theory" (p. 304). He also shows that the theory refutes the resurrection of Jesus and the Christian trinity (pp. 309–21).
He faults Islam, however, on the question of the everlastingness of Hell, arguing that since God is merciful, the punishment in Hell must be corrective and must end at some point. He cites the case of the Sudanese theologian who tried to solve this problem by introducing the theory of the two messages of Islam, the universal and eternally valid one of the early Meccan period and the historically-conditioned one of the late Medina period, but was unfortunately hanged for heresy in 1985. For this reason, he says that Islam will not easily solve this contradiction. He is unaware that there exist three Qur'anic verses and several authentic ahadith which speak of the non-eternity of Hell.* I give one of each here:

Then as for those who transgress, they will be in Hell, sighing and wailing, abiding therein for as long as the heavens and the earth endure, except as your Lord pleases. Your Lord is Doer of what He intends (11:106-07).

Then God will say, "The angels and the prophets and the faithful have all in their turn interceded for the sinners, and now there remains none to intercede for them except the most merciful of all the merciful ones. So He will take out a handful from the Fire and bring out a people who never worked any good." (Bukhari, Sahih, Kitab al-Tawhid).

Although I disagree with and feel doubtful about several matters in this book, I find a number of excellent points, besides the absolutely fascinating Omega Point Theory. I shall choose four to comment on. The first is the vexed and long-standing problem of Evil which has been a major cause for atheism. I must say that I feel greatly impressed by his handling of the problem. He begins by quoting the remarks attributed to the Greek atheist philosopher, Epicurus, who lived between 341 and 270 BC.: 

God either wishes to take away evils, and is unable; or He is able, and is unwilling; or He is neither willing nor able, or He is both willing and able. If He is willing and unable, He is feeble, which is not in accordance with the character of God; if He is able and unwilling, He is envious, which is equally at variance with God; if He is neither willing nor able, He is both envious and feeble, and therefore not God; if He is both willing and able, which alone is suitable to God, from what source then are evils? Or why does He not remove them? (p. 260).

---

* It would be pertinent to point out that the preponderant majority of Muslims believe that both Heaven and Hell are everlasting. The opinion that Hell will be transient is held, if at all, by a tiny minority. The textual material in the Islamic tradition that bears on the subject, such as the one mentioned by the author, is interpreted by most scholars quite differently. Ed.
Professor Tipler criticizes all traditional theodicies, including the Christian, as attempts to justify God's ways to humankind. He claims that Omega Point theodicy "is the first theodicy to successfully absolve God of moral responsibility for evil. All previous theodicies have overestimated what omnipotence can do, because they have underestimated what omnipotence has done." His reasoning is based on what is known as logical impossibility or logical contradiction. A logical impossibility is a nonsensical statement, like the famous schoolboy fallacy, which goes thus: "If God is omnipotent, then He can make a stone so heavy that even He cannot lift it. But if He cannot lift it, then He is not omnipotent!" The fallacy lies in the fact that no such stone can actually exist. The statement is utter nonsense. As the professor rightly says: "God's omnipotence is not limited by humankind's ability to utter nonsense. God's omnipotence just means that He can do anything which is not logically impossible." This means that the existence of evil in the world is logically necessary following from God's attributes of justice, goodness and mercy.

I might add that this problem was hotly debated among early Muslim theologians and philosophers, and the Mu'tazilites took exactly the position taken by Professor Tipler. Unfortunately, they were beaten by the Ash'arite school which formulated Muslim theodicy in the Muslim Middle Ages, elevating God's omnipotence to a logical impossibility.

The second point I wish to comment on is the rise of American Deism at the time of the American Revolution and its rapid collapse. I am surprised to find its closeness to the monotheism of Islam. The author identifies two essential points in the writings of the American Revolutionary Deists, namely: (1) the existence of a personal God who created the universe, and (2) the existence of an afterlife. He names five principal leaders: Thomas Paine, author of the revolutionary pamphlet Common Sense; Benjamin Franklin, physicist and printer; Ethan Allen, commander of the forces that achieved the first American military victory, the capture of Fort Ticonderoga; Thomas Jefferson, author of the Declaration of Independence and third president of the United States; and George Washington, first president and commander-in-chief of the American Revolutionary Army. On the first page of his book, The Age of Reason, Paine stated: "I believe in God, and no more; and I hope for happiness beyond this life." He concluded it with:

... the creation we behold is the real and ever-existing word of God, in which we cannot be deceived. It proclaims His power, it demonstrates His wisdom, it manifests His goodness and beneficence.

I trouble not myself about the manner of future existence. I content myself with believing, even to positive conviction, that the power that gave me existence is able to continue it, in any form and manner He pleases, either with or without this body; and it appears more probable to me that I shall continue to exist hereafter, than that I should have had existence, as I now have, before that existence began.
I doubt if even many Christians know that Thomas Jefferson wrote a little never-published book called *The Philosophy of Jesus*, and he contended that the religious doctrines of Jesus, (which he also regarded as the essential doctrines of the Deism he himself accepted), were just three, namely: (1) that there is one All-Perfect God, (2) that there is a future state of rewards and punishments; and (3) that to love God with all your heart and your neighbour as yourself, is the sum of religion. I am reminded of a Qur'ānic verse giving the same import: "Surely, those who believe — the Jews, the Christians and the Ṣābi‘ūn — those who believe in God and the Last Day and lead a righteous life will receive recompence from their Lord. They have nothing to fear, nor grieve" (2:62).

However, it is unfortunate that such a beautiful conception of religion, brought into America on the crest of a great anti-colonial revolution, should have died so quickly. I am not sure that the author is right in explaining the event as due to Deism being "too impersonal" (p. 326). One cannot say that being rational is being impersonal. Is physics not rational? Is the author also not seeking a rational religion? The reason for Deism's disappearance from America then must be other than this.

Thirdly, the book's conception of life is one literally of eternal progress. This is a refreshing outlook in the face of the present so-called post-modern, post-industrial and anti-science ideology of environmentalism and limited growth. It is doubly refreshing because of its affirmation by physics. The author says: "Even on the most materialistic level, the future existence of the Omega Point would assure our civilization of ever growing total wealth, continually increasing knowledge, and . . . eternal progress. This perpetual meliorism is built into the definition of 'life existing forever' . . ." (p. 217). It is part of cosmic evolution. In this vast canvas of cosmic change, there will come a time when our species, *homo sapiens*, will become extinct and be replaced by another higher species. He says:

> Our species is an intermediate step in the infinitely long temporal Chain of Being that comprises the whole of life in spacetime. An essential step, but still only a step. In fact, it is a logically necessary consequence of eternal progress that our species become extinct. For we are finite beings, we have definite limits. Our brains can code only so much information, we can understand only simple arguments. If the ascent of life into the Omega Point is to occur, one day the most advanced minds must be non-*Homo sapiens*. The heirs of our civilization must be another species, and their heirs yet another, *ad infinitum* into the Omega Point . . . (p. 218).

What strikes me is that the point made here is congruent with the view that this universe is basically good for having been created by a good and merciful God. In spite of some anti-evolutionary views expressed by some
modern Muslim writers, the Qurʾān clearly teaches an evolutionary view of
God's universe. Let me quote some relevant verses:

What is the matter with you that you do not hope for greatness from
God? Indeed, He has created you by various stages . . . And God has
caused you to grow out of the earth as a growth. Then He returns you
to it. Then He brings you out into another creation (68:13-18).

We have ordained death among you and We are not to be overcome.
That We may change your state and make you grow into something you
do not know (56: 60-61).

That you will ascent to one state after another (84: 19).

Surely, We have created them into another creation (56:35).

In his famous book *The Reconstruction of Religious Thought in Islam*
Muhammad Iqbal refers to the early development of the evolutionary ideas with
Jāḥiz (d. 868-9), and more particularly with Ibn Miskawayh (d. 1030).5 Modern
Qurʾānic commentators like Mawlana Muhammad Ali and Muhammad Asad,
have also pointed to this evolutionary perspective from such Qurʾānic verses.

Fourthly, the author's statement that morality cannot be divorced from
facts is extremely important. This is to establish the truth that the universe,
while existing as a fact, is a basically moral universe. This is the case because
having been created by a good and moral God, it cannot be otherwise. Professor
Tipler criticizes the view that morality is the central concern of religion:
"Throughout human history, the central concern of religion has been human self-
interest" (p. 330). He proves this by simply saying that a declarative sentence
like "Thou shall not kill" is also an imperative sentence ("You ought not to
kill.")., because killing, except in the course of justice, is a self-negating action
and against human self-interest. Again, the statement is important because much
of the world's scientific community today labours under the impression that
morality is divorced from fact.

The central fact remains: knowledge is inextricably entwined with
ethics, and it has always been so. The radical distinction between 'is'
and 'ought' sentences . . . is misleading. Science as a human activity
contains within it ethical maxims, which is to say it contains not only
'is' sentences but also 'ought sentences . . . if religion is permanently
separated from science, then it is permanently separated from humanity
and all of humanity's concerns. Thus separated, it will disappear
(p. 332).
It is stated in the Qur'ān that in the end everyone, including sinners, will be saved, i.e. after having been cleansed of evil. Yet throughout history all religions have shown a consistent tendency to develop theologies of exclusivity — "no salvation outside the church". Although the author correctly notes that the Qur'ān gives overwhelming importance to God's attribute of mercy, he states that "I do not expect to see in my life time the whole of Islam resolve the contradiction between its (correct) belief in God's compassion and its (incorrect) belief in eternal torment" (p. 304). In other words, the author expects to see the emergence of a true universal religion whose teachings are validated by his Omega Point physics, the religion of truth, God's own religion. The publication of his book is historic in the sense that it heralds the coming of such an age, the age of the congruence of science and religion. As he says, "... 'eternal life as physics' is an idea whose time has come." It is a book to open the exciting twenty first century, bringing in the true Age of Reason.

4See Qur'ān 2: 30-34.
6"If your Lord had pleased, He would have made mankind into one single community, but they do not cease to differ, except those on whom your Lord has mercy, and it is for this that He created them" (11: 118).
7"He it is Who has sent His messenger with the guidance and the religion of truth that He may make it prevail over all religions" (48: 28).
8"When God's help and victory come, you will see the people embracing God's religion in throngs. Celebrate the praise of your Lord and ask His forgiveness. He is the Redeemer" (110: 1-3).

Kassim Ahmad

*Whatever be the correct doctrinal position, the verse cited by the author can hardly justify the position taken by him. Ed.*