COSMOLOGICAL CONSIDERATIONS OF RELIGION AND SCIENCE (A COMPARATIVE ANALYSIS)

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Abstract

The intention of this article is to make a comparative analysis of how Religion and science conceive the universe. Both religion and science have made a lot of speculations and extrapolations concerning the nature, origin, evolution, structure, and eventual fate of the universe. In their arguments, there are a number of convergent and divergent views on this subject. Based on this, the research's findings are that proponents of religion argue that the universe came into existence out of nothing by a Supreme Being Who Himself is the uncaused or self-existent Being. In contrast, some Scientists contend that no Supreme Being is responsible for the coming into being of the universe. Their suggestion is that the world emerged through the mechanism of the Big Bang or Steady State theory model of the universe. The Greek theorize that matter is eternal and uncreated. If at all God created the universe, He created it not out of nothing but through the pre-existing matter. What is common between the two rivals is that both religious and some scientists believe that the universe has a finite beginning. Both also conclude that the universe would one day come to an end through Big Crunch for scientists but end time or eschatology for Christian religions. Interestingly, what Cosmologists and Astronomers call Black Hole is what Christian religion call Bottomless pit. The paper's submission is that the universe is caused and governed by God and He is responsible for the operations of all the natural laws. The paper employs analytic and hermeneutic methods.

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Introduction

In their attempt to describe the universe, many scientists try to remove the need of a creator, whereas many religious adherents insist that the beginning of the universe must be through some Supreme Spirit and Intelligent. The article proposes to expose extensively the controversy between religious and scientific arguments on the cause and origin of this observable universe. The scope of the research would be only on cosmological considerations of religion and science, the research would not delve into full or general arguments between religion and science which is vast and has long history. Also the research would make an attempt to answer the following questions: Is God the creator of the universe? Is the Big Bang the origin of the universe? Is the world eternal without origin or beginning? Does the universe have a beginning in time? If so, is it an argument for religion or science? Does the universe have any purpose? Is the emergence of life anything more than a cosmic accident? Was there any intelligent operative in the universe before the creation or appearance of humanity? Do our individual lives have any ultimate relevance or significance in the unfathomable depths of cosmic time and space among others? Some of these questions are raised by modern science and religion, and these questions have inspired many responses. But many of these responses have been reactionary repudiations of science itself. Still, many of them have been shallowly addressed intellectually. And still, many of these questions have been intellectually inaccessible to sincere and able inquirers.

The aim of this article is to address these questions. The article shall make an attempt to clear the air that our universe is not without purpose. This work will also make a concise presentation revealing and stating how some scientific approach to reality is not contradictory to a religious interpretation of the reality. Instead, there is much more in scientific discoveries, predictions, extrapolations, conclusions, and speculations that might be of great help to understand religion in a new and adventurous way.

A Brief Reflection on the Relationship between Religion and Science

One powerful way to distinguish science and religion is the claim that science concerns itself with the natural world, whereas religion concerns itself with the supernatural world and its relationship to the natural. Besides, scientific explanations do not appeal to supernatural entities such as gods or angels (fallen or not), or to non-natural forces (such as miracles, karma, or qi) (Stanford Encyclopedia of Philosophy). Science espouses naturalism, that is the view that all that exists are natural objects within the universe—the combination of the physical mass and energy that make up planets and stars, oceans and mountains, microbes and humans. However, naturalism usually implies the claim that real knowledge of these natural objects comes through, or is at least controlled by, the result of scientific inquiry. In the same trend, cognate terms are materialism and physicalism. The former has traditionally meant “all matter”; the latter technically means reducible to laws, particles, and forms of energy that physicists study. On the other hand, religion revolves round theism, that is the belief in the existence of God—

the ultimate reality that transcends the universe as a whole. Jews, Christians, Muslims, and Hindus are theists. Theism generally or broadly includes pantheists, panentheists (the world is in God), and Polytheists—hence most of the native African religions and the world's indigenous or tribal religions. For theists God is described as a personal Being, most often with the attributes of Omniscience (all-knowing), Omnipotence (all-powerful), Omnibenevolence (all-good). Theist sacred scriptures includes the Bible, the Qur'ran, the Upanishads, in it they ascribe other qualities and attributes of God, such as Consciousness, Love, Justice, and Righteousness. Theist in contrast to Scientist, believe that God created the world, providentially guides it, and reveals itself in it. This simply means that God does things in the world ('Divine Action'), carrying out actions that are either consistent with natural law or that involves setting natural regularities aside (miracles).

At first sight, Theism and Naturalism appear to be incompatible positions. Naturalists argue that all that exists is the universe (or multiverse) and the objects within it, whereas theists posit that something transcends the universe. Naturalists generally use science as their primary standard for what humans know, whereas theists defend other ways of knowing as well, such as intuition, or religious experience (Taylor & Francis).

In another development Stephen Jay Gould identifies science's areas of expertise as empirical questions about the constitution of the universe, and religion's domain of expertise as ethical values and spiritual meaning. He goes on to assert that religious leaders should refrain from making factual claims like evolutionary theory, just as scientists should not claim insight on moral matters. However, if religion were barred from making any statement of fact, it would be difficult to justify its claims of value and ethics. For instance, one could not argue that one should love one's neighbor because it pleases the Creator. Moreover, religions do seem to make empirical claims, for instance, that Jesus appeared after His death or that the Israelites passed through the parted waters of the red sea (Stanford Encyclopedia of Philosophy).

Religious Cosmology

According to Wikipedia encyclopedia religious cosmology is the attempt to explain the origin, evolution, and eventual fate of the universe from a religious perspective or point of view. Religious cosmology may include beliefs in the origin of the universe in the form of a creation myth, subsequent evolution, current organizational form and nature, and its eventual fate or destiny. There are various religious mythologies stating and asserting why and how everything is the way it is and the significance of it all. Again, religious cosmologies describe the spatial-layout of the universe in terms of the world in which people typically dwell as well as other dimensions, such as the seven dimensions of religion, these includes; ritual, experiential and emotional, narrative and mythical, doctrinal, ethical, social and material. Religious mythologies may include description of an act or process of creation by a creator deity or a larger pantheon of deities, explanations of the transformation of chaos into order, or the assertion that existence is a matter of endless cyclical transformations.

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However, religious cosmology is quite different from strictly scientific cosmology, informed contemporary astronomy, physics, and similar fields, and may differ in conceptualizations of the world's physical structure and place in the universe, its creation, and forecasts or predictions on its future.

The confine or scope of religious cosmology is more inclusive than a strict scientific cosmology (physical cosmology and quantum cosmology) in the sense that it is not limited to experiential observation, testing of hypotheses, and proposals of theories; for instance, religious cosmology may explain why everything is the way it is or seems to be as it is and prescribing what humans should do in this regard. There are various variations in religious cosmology which include those such as from India, Buddhism, Hindu, and Jain; the religious belief in China, Chinese Buddhism, Taoism, and Confucianism; Japan's religious belief, Shintoisim. Abrahamic religious beliefs are Judaism, Christianity, and Islam. Religious cosmologies have often developed into the formal logics of metaphysical systems, such as Platonism, Neoplatonism, Gnosticism, Taoism, Kabbalah, Wuxing, or the great chain of being (Wikipedia).

Big Bang Cosmology

According to Britannica encyclopedia Big Bang model of the universe is the scientific theory of the evolution of the universe or the cosmological evolution of the universe. According to this theory, the universe emerged as a result of explosion of a singularity that contains all the substances of the universe; the universe expanded exponentially and rapidly from a highly compressed primordial state, which resulted in significance decrease in density and temperature. Soon afterwards, the dominance of matter over antimatter (as observed today) may have been established by processes that also predict proton decay. During this stage many types of elemental particles may have been present. Few seconds afterwards, the universe cooled enough to allow the formation of certain nuclei. The prediction of the theory is that definite amounts of hydrogen, helium, and lithium were produced. To this end, their abundances agree with what is observed today. About one million years later the universe was sufficiently cool for atoms to form. The radiation that also filled the universe was then free to travel through space. This remnant of the early universe is the microwave background radiation (three-degree background radiation) discovered in 1965 by Arno. A. Penzias and Robert W. Wilson.

Interestingly, in addition to accounting for the presence of ordinary matter and radiation, the Big Bang model predicts that the present universe should also be filled with neutrinos, fundamental particles with no mass or electric charge. The possibility exists that other relics from the early universe may eventually be discovered.

The model is based on two assumptions. The first is the Einstein's General Theory of Relativity that describes correctly the gravitational interaction of all matter. The second assumption is popularly known as the Cosmological Principle which states that an observer's view of the universe depends neither on the direction in which he looks nor on his location. But then, this

principle can only be applied to the large-scale properties of the universe, but it does imply that the universe has no edge, so that the big bang origin occurred not at a particular point in space but rather throughout space at the same time. However, these two assumptions make it possible to calculate the history of the cosmos after a certain era or epoch called the Planck Time (Singularity). But scientists are seriously busy making fervent and assiduous research in order to determine what actually prevailed before the Planck Time. This type of universe was proposed by Friedmann and Lemaitre in 1920s but the modern version was developed by George Gamow and his colleagues in 1940s (The New Encyclopedia Britannica).

Some big bang proponents argue that the big bang is the origin of the world and that the world arose according to the laws of physics, coming into being about 14 billion years ago.

Steady-state Theory cosmology

This model or scientific theory of the universe holds the view that universe is always expanding but maintaining a constant average density, matter being continuously created to form new stars and galaxies at the same rate that old ones become unobservable as a consequence of their increasing distance and velocity recession. This model of the universe has no beginning or end in time; and from any point within it the view on the grand scale that the average density and arrangement of galaxies is just the same. To that end, galaxies of all possible ages are being intermingled (The New Encyclopedia Britannica).

Furthermore, it is suggested and speculated that the Steady-state universe is spatially flat and therefore infinite and it was eternal both in the past and in the future. There was no entropic heat death in it. Moreover, since the mass density remained constant despite the universe being in a state of expansion, then, matter had to be created continually throughout the universe.

In any case, the Steady-state model of the universe was widely considered to be highly controversial in the sense that its element of spontaneous creation of matter seems to violate the fundamental law of energy conservation. This element of steady state model is highly dissatisfactory to many philosophers and even scientists, and it is also of relevance from a religious perspective. From the latter perspective, the crucial question arises: does the steady-state theory really make God unnecessary? Theologians assert that such infinitely old universe is no way incompatible with Christian belief. The reason is that the continual matter creation according to steady-state theory might be interpreted as support of the Christian notion of an ever-active God Who is transcendent as well as immanent. Several later theologians concurred with this point, namely that the old idea of *creatio continua* fits very well with the classical steady-state theory of Hoyle and his allies. Also Bernard Lovell's God is a constantly intervening universal Being whose existence is in perfect and complete harmony with continual creation of matter. Bernard Lovell is a radio astronomer who is a devoted Christian.

Finally, the rival cosmologies and their claimed religious associations becomes an issue in the ideological battlefield of the Cold War. For instance, in Communist Russia finite-age

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cosmological models, and especially closed models of the Big-Bang type, were seen as political suspect and contrary to the atheistic world view of Marxism-Leninism according to which the universe is infinite in time, space, and content of matter. Lemaitre and Gamow defended this theory but they were accused of being apologies for Divine creation, which made them unwelcome and politically incorrect. In the same vein, the infinite and eternal steady-state universe was also unwelcomed. The major reason that made the steady-state theory model of the universe unpalatable to orthodox Marxists is its element of steady or continual matter creation (Kragh, 2020).

Creationism

Creationism is the religious belief that everything in the universe originated with supernatural acts of the Divine action. In other words, the universe, the Earth, life, and humans were all brought into being by God. Some creationists reject scientific explanation of the origin of the world such as evolutionary theory that describes the origin and development of natural phenomena. Some creationists insist that the only true explanations and interpretations of the origin of the world is the creation myth found in the Bible's Genesis creation narrative.

However, some creationists such as Catholic Church and mainline Protestants attempt to reconcile modern science with their faith in creation through forms of theistic evolution according to which God purposefully created through the laws of nature. In the same vein, some creationist groups call their belief evolutionary creationism. We have also Islamic and Hindu faiths that are creationists.

Creationism: Divine action and creation

Ever since scientists developed their ideas and views on cosmology and the origins of the world, Western cultures already had a doctrine of creation on the basis of Biblical texts which could be seen in the first chapters of the Genesis and the Book of Revelation, including the writings of the church fathers such as St. Augustine.

Consequently, this doctrine of creation has the following interrelated features, namely: first, God created the world *creation ex nihilo*, i.e., creation out of nothing. Differently put or in other words God did not need any pre-existing materials to make the world, unlike the Demiurge (from Greek philosophy), who created the world from chaos, pre-existing matter. Second, God is distinct from the world; the world is not equal to or part of God (contra pantheism or panentheism) or a (necessary) emanation of God's being (contra Neoplatonism). Rather God created freely. The world is a contingent being which depends upon God's creative act and is also sustained by God. God also has no need of the world as He is self-existent and self-sufficient God. Third, the doctrine of creation holds the view that creation is essentially good, in Genesis chapter one the goodness of God's creation is being repeatedly affirmed. Although, the world does contain evil, God does not directly cause this evil to exist. Moreover, God does

not merely passively sustain His creation, but rather plays an active role in it, using special divine actions such as miracles and revelations to care for His creatures. Fourth, God made provisions for the end of the world, and will later on create a new Heaven and Earth, in this way eradicating evil (Stanford Encyclopedia of Philosophy).

Religious and Scientific Conception of the World (A Comparative Analysis)

Religion argues that God created the universe as well as the laws governing it. But the concept of cosmic creation as it appears in Big Bang cosmology denies the role of God as the cause of the universe. In order to reconcile Christianity with Aristotle's natural philosophy, the theologians were faced with the thorny problem of the age of the world. This is simply because the fundamental dogma of God's creation of the world seemed irreconcilable with Aristotle's insistency that the world at large was uncreated as well as indestructible. Aquinas on his own part suggests that the claim of a divinely created universe does not rule out the possibility of an eternal universe where God is continuously creative (*creatio continua*).

Philosophical speaking, during the time of scientific revolution, it was taken for granted that God had created the universe, but how He had done it and what He had created was a matter of fierce dispute. According to Rene Descartes, a Catholic yet a Copernican, he tells us that God had originally created the material world as a chaos of particle in motion, and at the same time installed the mechanical laws that would turn the chaos into a cosmos. Alas, Descartes boldly and somewhat heretically suggests that whatever the initial conditions the laws would necessarily lead to the world we observe. Therefore, he argues, after the original creation there was no need for God to intervene in the further construction of the world. The laws would take care of it he says. A non-theistic version of Descartes' deterministic claim has reappeared in modern cosmology under the name "indifference principle".

Sir Isaac Newton refuses to agree with Descartes' indifference principle. Instead, with his new mechanical theory and its fundamental law of gravity he proposes a cosmology consisting of an immense number of stars held in mechanical equilibrium. Newton insists that it was irrational to believe what Descartes says that only the laws of nature were responsible for how the cosmos arose out of the primordial chaos. Newton goes on to argue that even an infinite sidereal system would need a divine power to keep it gravitationally stable. But the difficulty is that Newton was unable to provide a physical explanation of the stability of the universe, instead he appealed to God's continual intervention. In fact, this was the first appearance of the so-called gravitation paradox that continues to haunt Newtonian Cosmology over the next two hundred years. But a German Astronomer Hugo von Seeliger, proposes to solve the problem by modifying Newton's law of gravitation at very large distances. Alas, to Seeliger and his contemporaries, God was no longer at disposal. Also in Kant's treatise titled "Universal History and Theory of the Heavens" God did not play any significant role in the grand cosmological scenario. Even though Kant piously presented his theory as theistic, but in reality it was naturalistic or deistic in nature. Kant in agreement with Descartes claims that the mechanical

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laws were sufficient to explain the evolution of the universe, which according to him included not only phases of continual creation but also phases of degradation. Kant's infinite universe was evolving in endless cycles with enormously long periods separating constructive and destructive phases. As for the size of the universe, Kant claims that only an infinite universe would accord with God's omnipotence. While in Kant's philosophical theory of the universe which is known as the 'Divine Creation' somehow maintains the place of God in he cosmic scheme, in Pierre-Simon Laplace's cosmology God had disappeared. Laplace's nebular theory is simply about the origin of the solar system, not about the universe as a whole. Laplace's theory and Kant' s cosmology were merged in nineteenth century into the popular but also theological controversial Kant-Laplace's nebular hypothesis or world view.

Furthermore, William Thomson and Rudolf Clausius with the second law thermodynamics argue that the degree of order and organization in any closed system would inevitably decrease as the world irreversibly evolves towards a state of death. In Clausius's formation based on the concept of entropy, the world would tend towards a maximum state of entropy corresponding to a 'heat death' from which it will never return. Thomson and Clausius reveal that the second law of thermodynamics definitely contradicted the materialistic and atheistic idea of a recurrent cyclical universe or world.

For over a half century or more than that the issue of heat death scenario was hotly debated among philosophers, theologians, and social critics than astronomers and physicists. Some of the scientific prophecies were welcomed by some Christian writers, whereas it was resisted by writers of a materialist, positivist or atheist inclination. Moreover, the apparent agreement of the second law with Christian dogmas was strengthened by the so-called "entropic creation argument" implying a beginning of the world.

Some theologians argue that the universe cannot have existed in an eternity, if so they argue the universe would be in a state of maximum entropy, which it is not. A critical look or reference to the beginning of the universe, should amount to a conclusion that it must have been created by a supernatural power or supreme being namely; God. This argument might be taken to scientific proof of God's existence which was initiated by German philosopher Franz Brentano, and over ten decades it was much discussed by scientists as well as nonscientists. Nevertheless, the heat death and the entropic creation argument hinged on the assumption that the second law of thermodynamics might be applicable to the universe as a whole and not just to only isolated parts of the cosmos. Critics in the camp of materialist completely rejected the second law of thermodynamics as a general law of nature.

In another development, cosmology's old and central questions, namely whether the universe is finite or infinite has been an age long controversial argument. Materialists and atheists insist that the universe is infinite and that it was far from obvious that the second law applied to the universe as a whole. In the same vein most atheists were equally convinced that the universe is finite in the sense that it contains only a finite number of celestial bodies. In any case, there was no one-to-one correspondence, and Christian scientists Thomson among them support the fact that the universe is a finite, divinely created cosmos.

Interestingly, with the discovery of radioactivity in 1896 a few scientists realized that the new phenomenon might be used as a cosmic clock, an alternative to the problematic entropy. Arthur E. Haas the Austrian physicist might be the first to suggest that the existence of radioactivity elements such as uranium indicates that the universe has a finite age. After all, how could there still be radioactive elements if the universe had existed for all eternity. Arthur Haas was a catholic and hostile to materialism, he teaches that the argument from radioactivity would play an important role in Georges Lemaitre's formation of the first big- bang model theory of the universe (Hans & Kragh).

Albert Einstein, Scientists, and the Religious on a Closed Universe

German astrophysicist Karl Friedrich Zollner suggests that the cosmic space might be slightly positively curved and as a result closed. Although with no boundary, the universe would be finite both with respect to space and the number of stars in it. But then, it was only with Einstein's General Theory of Relativity that introduced the concept of curved space which in turn attracted the interest of physics and astronomy. According to Einstein's field equation the model of the universe was static, homogenously filled with matter, and spatially closed. Alas, Einstein erroneously thought that this was the only model allowed by the General Theory of Relativity. But then, Einstein's closed universe attracted much interest, not only scientifically but also because of what was thought to be its philosophical and religious implications. But neither Einstein nor other contributors to the new cosmological theory associated it with a religious world view. Nevertheless, the theory entered into serious discussion in the interwar period concerning materialism, idealism, and religion. Kristian Schelderup the Norwegian theologian examined in details the relationship between Einstein's theory and the Christian dogmas, suggesting that the closed and static universe made it necessary to revise the fundamental dogma of a divinely created world. In the same vein, other contributors argue that the finite universe contradicted materialism whereas it was consonant with idealistic and Christian thought. Besides, Arthur Eddington (a Quaker) supported the Einstein universe for scientific reasons but also because of its finitude and static nature agreed with his religious sentiments. For Eddington God had not created the universe a finite time ago. His view was in broad agreement with the one of Ernest William Barnes, a mathematician and theologian who in 1924 was appointed Bishop of Birmingham. Barnes in his book entitled "Scientific Theory and Religion" he analyzed relativistic cosmology and its theological implications. Barnes was generally happy with Einstein's closed model of the universe, not only because it was spatially finite but also because it made it difficult to see God as a transcendent Maker of the universe. Barnes also addressed the old question of pluralism, reasoning that the existence of multiple habited worlds was not a problem for Christian faith.

Concerning Einstein's field equation, the American physicist Robert Millikan, a Nobel laureate in 1923, defended the idea of an eternal and regenerating classical universe. He discovers an irreversible universe governed by the entropy law to be unacceptable and unchristian, and instead he postulated an ever-evolving universe with continual creation of matter. But as a

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Christian he believes that the world was created by God, but that creation took place continually rather than being limited to the beginning. William Ralph Inge in his book titled "God and the Astronomers" supported Millikan's idea of an eternal balance between creative and destructive processes in the universe. But then, his preference for a kind of cyclic universe was unusual for a Christian thinker (Hans & Kragh).

Scientifically, it was realized that Einstein's field equations describe dynamical cosmological model and also models with a zero or negative space curvature (flat or hyperbolic geometries). Lemaitre's expanding universe evolved asymptotically from a closed Einstein's universe and so did not have a definite origin in time. Eddington adopted and further developed it and considered it to be a conceptual advantage that the "Eddington-Lemaitre model" did not include a sudden origin of the universe. Lemaitre also proposes what Eddington found repugnant, namely a universe with a beginning in an explosive event million years ago, the first example of a Big-Bang theory model of the universe. Lemaitre the Belgian cosmologist pictures the origin of the universe as a violent radioactive explosion of a 'primeval atom' containing all matter squeezed together in a huge atomic nucleus. Obviously and significantly, Lemaitre's primeval atom was quite different from nothingness; the original explosion or firework marked the beginning of the universe, not its creation.

However, it may be tempting to suspect that the explosive universe was motivated by Lemaitre's desire to reconcile Cosmology and Genesis given that he was a Catholic priest, and the creation of the universe is a dogma in Christian thought. This was what his critics claimed. Lemaitre just like Eddington was careful to distinguish between science and religion. He severally made it clear that the concept of cosmic creation belongs to theology and metaphysics, and not to the domain of science. Lemaitre in 1958 Solvay conference says that the primeval atomic theory was perfectly neutral with respect to religion. That it was not inconsistent with theism, but nor was it inconsistent with atheism.

Besides, while Lemaitre's big-bang theory was positively received in the popular press, astronomers and physicists ignored the theory or even rejected it as a wishful speculation. An American philosopher of religion John E. Boodin complained that Lemaitre's theory presupposed a material proto-universe and for this reason failed to explain the creation of the universe in scientific terms. But then, Boodin did not realize that this was not what Lemaitre had in mind, and his theory was not about creation but about beginning and evolution. Edmund T. Whittaker, the British Mathematician and a convert to Catholicism accepted the entropic creation argument and claimed that modern cosmology provided further support for Christian faith. In his book entitled 'Matter and Spirit' Whittaker argues that the finite age of the universe was strong evidence for a universe created by an omnipotent God. In agreement with Lemaitre he cautiously says that creation itself was outside the scope and grasp of science.

After World War II it was often claimed that Lemaitre's primeval atom theory or the big-bang theory was an attempt to reconcile scientific cosmology with the Christian creation dogma. In 1951 in a controversial address to the Pontifical Academy, pope Pius XII states that modern physics and astronomy provided incontrovertible evidence for the existence of a transcendent

creator. The pope asserts that there was no essential difference between the Genesis creation story and modern cosmology, because the modern cosmology just only confirmed what Christians had known for ages. It appears that the pope takes the big-bang cosmology as a scientific proof of God. The pope had Lemaitre's cosmology in mind by having said this although he did not mention his name. But Lemaitre did not share the pope's apologetic interpretation of the physical cosmology, which he thought was fundamentally mistaken. At the time of the pope's address, Lemaitre's fireworks theory had been substantially transformed into a much improved version primarily by the Russian-American nuclear physicist George Gamow.

In 1930 Edward Arthur Milne a British astrophysicist and cosmologist, a professor of mathematics at the University of Oxford proposed a kind of big-bang theory completely different from that of Lemaitre's. Professor Milne without taking into consideration General Theory of Relativity or curved space develops a world system according to which the universe was expanding, infinite in extent, and had originated in a space-point rather than in an extended object. Professor Milne was convinced that the universe was created by a transcendent and omnipotent God, who therefore had to be part of scientific cosmology. Milne argues that although God is omnipotent, God is also a rational being who could not have created impossible or irrational things. For instance, God could not have created a law of gravitation different from the Newton's law of gravitation. Also God could not have created a finite universe originating in a condensed material body as Lemaitre would have us to believe in his theory. Professor Milne passionately believes that only his theory or world system was consistent with God's will and power. Milne develops his cosmological considerations or ideas most fully in the posthumously published 'Modern Cosmology and the Christian idea of God' an idiosyncratic work which was not appreciated by both theologians and scientists. Just like Barnes in 1933, Professor Milne offers his view of pluralism and how the souls of extraterrestrials might be saved. He suggests that the problem of interplanetary redemption might be fixed by means of radio astronomy (Hans & Kragh).

The Big Bang Controversy between Religion and Science

Religion argues that God said let there be big bang and it banged. But Science says that the big bang has nothing to do with God, instead, the big bang banged as a result of natural laws. But what is common with Science and Religion is that both concurred that the world has a finite age and that the big bang is the origin and the development of the universe. For instance, the very first verse of the Genesis of the Christian Bible implies that the universe itself has a beginning and it says "In the beginning God created the Heavens and the Earth." The implication of this Biblical assertion is that all matter that can be seen, observed, or even inferred to exist in this universe were brought into existence at one moment by a Creator Who exists outside the limits and laws of the universe itself. Interestingly and accordingly, the Big Bang theory of cosmology also points to a beginning to all of space-time and matter, as well as

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the scientific laws governing them. Both the Christian Bible and science reveal to us that there must be a cause that lies outside of the universe itself.

The fact of the matter is that the Bible does not tell us that God instantly formed our universe and the Earth exactly as we see it today. The process of the creation lasted for a whole of six days. The process takes place in which the chaos is transformed into a well-ordered habitation fit for life and consciousness.

Consequently, the Big Bang theory of cosmology has a lot of packages to say about the process of the beginning of the universe. For example, the Big Bang reveals to us that a planet suitable for life such as the Earth does not become possible in the universe quite until a few precise developments that take place. These include the universal expansion of the universe and the receding of the galaxies, the cosmic ripples which eventually results into galaxy and star formations, the production of heavy elements in the large stars, the supernovae spreading them throughout the galaxy, the formation of solar systems, the formation of proton, neutron, electron, atoms, molecules, the nucleosynthesis among many other contributing factors. The truth of the matter is that the universe went through quite a lengthy period of preparation before the formation of the planet Earth. It is crystal clear that in many ways the early universe can be seen as a formless and void of the ordered conditions necessary to support life, in total and complete agreement with the Genesis creation stories of the Christian Bible.

Moreover, this does not necessarily imply that the universe became more ordered in time, which would be a clear violation of the second law of thermodynamics. Instead, the planet Earth went through a miraculous sequence of events, preparing it for life. The Big Bang on its part does not give specific predictions about what takes place on planet Earth, but it is important for us to realize the amazing and perhaps unique sequence of events on Earth, revealed to us by modern science. For example, the Earth received just the right amount of radiation from its star, namely; our Sun, to warm temperatures to the range of liquid water. It then joined with the Moon of sufficient size to stabilize the spin-axis of the Earth against chaotic motion. It also develops a thin, transparent atmosphere, which nonetheless serves as a shield against harmful ultraviolet radiation and provides sufficient greenhouse warming. Also the oxygen level of the atmosphere was boosted to a level capable of supporting land life following a vast period dominated by photosynthesis marine algae.

What is more, these and many other specific characteristics of the planet Earth appears to be fine-tuned to make our existence possible. Without doubt it appears that modern science is confirming the creation account of the Christian Bible, a careful process of preparation resulting into a created order described several and oftentimes by God Himself with the words “and behold it was good” (Steve, 2003).

Science and Religion on the Infinity of the Universe

Scientifically and theologically it is believed that the universe has a finite age, but it might also be spatially and materially infinite. But then, if the space is infinite and the cosmological principle is assumed to be correct or valid, then, the universe would most likely contain an infinite number of galaxies, stars, atoms, and everything else. Nevertheless, such infinities of the universe would not only cause philosophical and logical problems, it would also cause theological problems without equivocation.

However, at the time of the scientific revolution it was commonly assumed that the physical space cannot be truly infinite, but only indefinitely large. Infinity was seen as one of the divine attributes which should not be attributed to anything at all, to claim that creature or nature is infinite amounts to endow it with divinity, which is a heretical view characteristic of pantheism. The theists insist that the notion that the universe is infinite is purely philosophical absurd and theological heretical, but there was no consensus on the issue. But then, several Christian scientists, starting from Descartes in the seventeenth century to Edward Milne in the twentieth, have argued that an infinite universe is in better agreement with God's will and omnipotent finite universe. The connection and relationship between finitism and theism, infinitism and atheism, should be seen as historical contingent rather than justified by either scientific or theological arguments or reasons.

Furthermore, during the early period of modern cosmology, relativistic models with zero or negative curvature were sometimes associated with materialism and atheism on the grounds that they entail or imply a universe of infinite size. In contrast or conversely, Einstein's close and finite universe was highly welcomed and approved by theists. In the mind of the mathematically trained bishop of Birmingham, Bishop Ernest W. Barnes, infinite space was "a scandal to human thought". Philosophically, his argument was epistemic as well as theological. One of his arguments is that, only if God's universe is finite can we hope to understand the full range of His activity. Georges Lemaitre the Catholic priest and pioneer cosmologist his contemporary, reasons likewise that the universe had to be finite in order to be comprehensible. In agreement with his later warning against the "nightmare of infinite space" both of his two innovative of cosmological models, the expanding model of 1927, and the Big Bang model of 1931, were spatially closed. The rejection of the Steady-state model of the 1950s among Christians was because of its lack of cosmic creation, but also it implies a homogenous universe of infinite extent. According to a Benedictine priest and historian of science Stanley Jaki, the infinite universe is a scientific cover-up for atheism.

Currently, the consensus of a geometrically flat accelerating universe is usually taken to imply an infinite cosmos. Cosmologists have ignored the troublesome philosophical problems and speak of the infinite universe as just an indefinitely large one. They avoid or rarely reflect on the weird epistemic consequences of an actual infinity and even more rarely on the theological consequences. George Ellis the African cosmologist and his colleagues reject this rule and have forcefully argued against an infinite universe, suggesting that the flat space of the consensus model is probably an abstraction that does not hold physically. If the universe is really infinite

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and uniform, he argues, then it can be (and has been) further argued that there would be an infinity of identical copies of all human beings and indeed of everything. Such a situation or consequence as articulated by George Ellis, Max Tegmark, Alan Guth, and many others, obviously is theological disturbing. Ellis argues that it is even more disturbing because is it that God may then not be able to keep track of and give attention to the infinite number of beings in the universe. Besides, if there is a multitude of cosmic regions, each of which is inhabited with intelligent beings, one may need to contemplate a multitude of Christ-figures, incarnations and crucifixions. Clearly, George Ellis refuses not only to consider such a scenario, he also reasons that it strengthened the case for a finite universe. Ellis says thus: "Surely an infinite number of Christ-figures must be too much, no matter how one envisages God" Hans & Kragh (as cited in Ellis, 1993:394).

Science and Religion on the End of the World (Physical Eschatology)

According Kraph, Modern cosmology is not only about the past of the universe, but it also offers scenarios about its far future, including speculations about the fate of intelligent life. In the same vein, the Bible's revelation passages speak about the end of the world and a possible new creation. Besides, the cosmic future may seem to offer another point of contact between cosmology and theistic religion.

However, scientifically based speculations about the state of the cosmos in the far future and the possibility of endless life were first discussed in the late nineteenth century in connection with the controversy over the heat death predicted by the second law of thermodynamics. In the explanation of the eschatology aspects of cosmology, a certain German scientist argues that life might persist even in the very high-entropic environment of the far future. Accordingly, while the heat death scenario was welcome by Christian authors, it was vehemently opposed by materialists and atheists who argue that for an eternal universe with eternal life.

Furthermore, since 1970s physical cosmology has emerged as a new subfield of astrophysics and cosmology, pioneered by Freeman Dyson, Jamal Islam and many others. The field concerns itself with the state of the universe in the remote future on the basis of extrapolations of cosmological models and the assumption that the presently known laws of physics will remain indefinitely valid. The favored scenario is the open ever-expanding universe where extrapolations typically result in an ultimate future (at about 10^{100} years from now) in which the universe consists of nothing but exceedingly thin electron-positron plasma immersed in a cold radiation of neutrinos and photons. In the same vein, other studies presume a closed universe collapsing in a Big Crunch and others investigate the nearer future of the humankind about a few million years from now. The fact of the matter is that whereas many of these studies are not concerned with the final state of life, some are, and it is this later group that constitutes physical eschatology proper.

Alas, physical eschatologists usually ignore the religious associations of their studies or deny that they exist. But Tipler is a controversial exception in the sense that not only does he argue

that some kind of life can continue forever in a closed universe, he also claims that it is the very collapse of the universe that permits eternal life. When the final eternity he argues has been reached at what he calls the "omega point," life becomes omniscient and the temporal becomes atemporal. According to him, the final singularity is God and "theology is nothing but physical cosmology based on the assumption that life as a whole is immortal. Undoubtedly, his arguments are extreme one to the extent that it has caused much discussion among theologians.

Interestingly, the term physical eschatology indicates a connection to Biblical eschatology, but it is far from clear that the two are related in any meaningful sense. But then, the Bible message is not so much about the end of the physical universe as it is also about the imminent return of Christ, the transformation of humans from flesh to spirit, and the final kingdom of God. The Bible is also about the ultimate destiny and goal of humans, not of self-robots. Tippler also argues that the scenario of a closed universe may appear to be more compatible with the Biblical view than the case of the ever-expanding universe, but even in the former case it is hard to establish a meaningful connection. Again, while the end of the world does not conflict with the Bible, the claims of immortality of intelligent life forms (not necessarily humans) do conflict. For instance, the Bible asserts that God alone is immortal and that all His created beings are doomed to extinction unless God decides to keep them to eternity.

In another development, many theologians have expressed passionate concern concerning the cosmologists' scenarios of the end of the world and stressed that there is a universe of difference between these scenarios and proper eschatology. Wolhart Pannenberg argues that Christian affirmation of an imminent end of the world is scarcely reconcilable with the cosmological extrapolations of the state of the universe zillions of years in the distant future ahead. Karl Peters in his own version of the story according to Schwarz, 2000, p. 180 cited by Hans and Kragh argues thus:

If the expanding universe is indeed open, expanding forever, then how can one speak of God recreating the universe? If the universe is closed, then it is likely to end in a 'Big Crunch' of mammoth black-hole proportions. Again, it is difficult to see how a new creation can take place (Hans & Kragh)

Arguably, whereas Pannenberg, Peters, Arthur Peacocke and many others tend to reason that physical and Christian eschatology are either contradictory or incommensurable. Craig on his part takes a more reconcilable view in which he says that the cosmologists' versions of secular eschatology furnish ground for taking seriously the hypothesis of a transcendent creative and omnipotent agent. But it appears that this agent in question might not be the classical God, but more likely to be God in panentheistic version or mind-set (Hans & Kragh).

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Summary

Science and Religion concurred that the universe has a finite age. Some Scientists arguing that the universe started through the Big Bang but God is not the cause of the Big Bang. In contrast, Religion concluded that God created the universe out of nothing through the mechanism of the Big Bang. The Steady-state theory proponents argued that the universe is eternal. Religion applies the Steady-state theory and argues that the steady-state theory of the cosmos is the powerful manifestation of perpetual Divine Creation.

Conclusion

To solve the mysteries of the universe is not an easy task. The mystery behind the universe is one of the most coveted knowledge of mankind down through the ancient epoch. To solve the problem of the origin of the universe, almost every culture has its own theory of creation. The origin of the universe remains a concept of great controversial issues between science and religion and so does the eschatological question of the end of everything, and the meaning of the apparent fine-tuning of the universe.

However, cosmological considerations of science and religion are compatible but where it appears that they are different is in their interpretations and explanations. For instance, science explains things in terms of natural causes that before were supposedly explain by divine intervention. Religion insists that God made or created the natural causes which science studies. Science is just discovering what God has already created and set in motion to be controlled by natural laws. The main concern or business of religion is about relationship with God and the meaning of life whereas the goal of science is about specific explanation of the natural world scientifically.

Unfortunately, science could not answer the question “What came before the Big Bang and what triggered the Big Bang? Also science does not provide sufficient and adequate explanation about the origin and consequence fate of the universe. But the Bible does explain at length how God created the world and its eventual end time.

The paper’s submission is that creation should be ascribed to an Intelligent and Primordial Being Who Himself is outside space and time. His spirit controls all the forces and natural laws of the universe both visible and invisible or observable and unobservable universes.

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