

# Scientific revolution and God: compatibility gap analysis from the non-religious perspective

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## Abstract

For some time now and at several levels, various debates have been taking place, on whether the God factor, is, or can be made compatible with the contemporary science. This study attempts to explore the nature of this debate, by delving in two critical concerns; origin and evolution of life and universe. In line with meticulous endeavor to comprehend the matter of the concern, the theories pertaining to subjects of the debates, such as, the theory of evolution, theory of relativity and quantum physics are explored and analyzed. The exclusivity of this study is the omission of the religion (or respective religious point of view) from the debate itself. The paper also attempts to define God and additionally offers numerous prominent scientists' views in relation to God. Moreover, the study also delves into the inside focus of the science camp and the burden of responsibility they have to the outside world. A number of significant points to the study, diverse in shape and composition, are put forward to elucidate the issues concerned. The paper, however, concludes that modern science, in relation to origin and evolution of life and universe, is unreliable, in disarray, filled, above all, with gaps, inconsistencies and paradoxes that scientists themselves admit. This challenging state has, ultimately, induced even modern prominent scientists to shift their belief and acknowledge that God, or, an

undetected, but a crafted universal intelligence, is responsible for the creation, origin and evolution of life and universe, and not chance or spontaneity.

**Key words:** Science; God; Evolution; Quantum Physics; Universe;

## 1. Introduction

Religion and science have often had confrontations, but recently, due to exponential scientific advancements, the gap among the scientists on the view pertaining to the existence of God has been reshaped. From the era of Copernicus, to Galileo, to Charles Darwin, to theory of relativity and quantum physics, the number of people who questioned the existence of God, appeared to be increasing. Unlike conventional rationale, the scientific revolution, instead of finding answers to human concerns and bring novelties and understandings, it had apparently the opposite effect, so much so, that now still “[e]very field of science has unanswered questions and gaps in our understanding” (Biologos, 2018)

The two critical issues that have shown great tendency to challenge God’s existence are based on scientific studies that relate to: (a) origin of life and evolution process and (b) origin of the creation and the functioning of the universe.

There are plenty of debates concerning these two subjects that divide the theists with (many) science oriented atheists. The paper, above all, intends to test the questions listed below:

1. Is Darwin’s theory of evolution scientifically (still) convincing to the biologists today?
2. Where do the physicists base their claim on the alleged spontaneous creation of our universe, and how credible is considered their assumption within the respective scientific community?
3. Are the scientific advancements having an impact on the evolution of contemporary biologists’ and physicists’ thinking on the spontaneity of human origin and universe creation?
4. Is scientific world moving towards acknowledging that God, or crafted intellectual authority, is (or may be) responsible for human origin and universe creation, or towards firmer consolidation of spontaneity hypothesis?

Numerous topics, however, will be delved exclusively by taking different viewpoints in consideration, yet, not digging into religious substance. Even though religion factor would only enrich the study, the aim of this study is narrower, specific and focuses exclusively on science, scientists and their respective perspective and belief on science and God.

## 2. Human evolution factor

Charles Darwin's publication, *On the Origin of Species*, and his respective ideas have largely influenced biology. Practically, the most of the world nations have embraced it as something astonishing, put in school education syllabus, even though many may have had doubts about it. Above all, the Darwin's theory, only up to a few decades ago, was largely considered to be an incontestable fact, for the substantial population of the universe, pertinent to the foundation of life on the planet earth. With the exponential knowledge and scientific advancements taking pace and shape, the testing of the validity of the Darwin's theory has been massively facilitated. The latter developments offer advanced knowledge and technology to the new generation of scientists, to test whether Darwin theory is still valid or not.

Charles Darwin's asserted theory of evolution is a broadly held concept that all life in earth is genuinely connected and associated, origins of who stem from a common ancestor. The concept, furthermore, assumes the development of life derives from non-life and underlines utterly naturalistic descendants with mutation. Above all, it attempts to highlight the natural evolution of complex creatures over a period of time, from variations and causes of variability, inheritance, natural selection, to mutual affinities of organic beings. (Darwin, 1861)

The fundament of the Darwin concept is that fortuitous genetic modifications transpire within the genetic code of an organism, whereas the productive modifications are preserved as they are conducive to survival or existence, a process commonly known as "natural selection." On the latter process, Darwin (1861) noted that:

*"natural selection acts by either...adapting the varying parts of each being to its organic and inorganic conditions of life; or by having adapted them during long-past periods of time: the adaptations being aided in some cases by the use and disuse, being slightly affected by the direct action of the external conditions of life"* (p.184)

The first question that spurs in this regard is, *has Darwin offer outstanding proofs on his claims or he is based on probable hypothesis?* According to evolutionary biologists, Darwin notion is based on probable hypothesis, as his theory does not focus on a key factor to the origin of life. The popular *New York Times* columnist and science writer, specialized on area of evolution, Carl Zimmer, provides insightful analysis on the concerned field and notes that

*“Evolutionary biologists have long recognized that natural selection is a matter of probability, not destiny. Just because a mutated gene raises the odds that an individual will reproduce is not a guarantee that it will spread in a population.”* (Zimmer, 2006)

Philip S. Skell, a prominent scientist, offers insights on the Darwin’s evolution in light of the atomic model viewpoint when he says,

*Darwinian evolution – whatever it’s other virtues – does not provide a fruitful heuristic in experimental biology. This becomes especially clear when we compare it with a heuristic framework such as the atomic model, which opens up structural chemistry and leads to advances in the synthesis of a multitude of new molecules of practical benefit.* (Skell, 2005)

In addition, two prominent American biologists Marc W. Kirschner (Harvard academic), and John C. Gerhart, (University of California) in their famous book, *The Plausibility of Life*, challenge Darwin’s evolution by raising cunning questions when they say,

*“The brain, the eye, and the hand are all anatomical forms that exquisitely serve function. They seem to reveal design. How could they have arisen? The vast diversity of organisms, from bacteria to fungi, to plants and animals, all are of different design. How did they originate? Nothing in the inanimate world resembles them. All are novel. And yet novelty implies the creation of something from nothing – it has always defied explanation.”* (Kirschner and Gerhart 2005, p. ix)

Kirschner and Gerhart (2005) “conclusions bear on the issue of intelligent design” (ibid, p.266), due to the confirmed fact

*“that the complexity of living cells is beyond understanding. Yet today, understanding [at least] the nature of complexity is a major pursuit in science.”* (ibid, p.268)

The debates and disagreements on human evolution do not stop here. Today, moreover, more and more scientist have massively directed the focus to try and establish whether bacteria is key to life evolution, focusing on different points of views, including the bacteria content, shape and the ability to move. Patrick Forterre, an evolutionary biologist expressed concerns about how Dr. Jillian F. Banfield and her colleague built their evolutionary tree, by arguing that genomes<sup>1</sup> assembled from DNA fragments could in fact be chimeras<sup>2</sup>, composed of genes from different species. (Zimmer, 2016) In addition, Dr. Laura A. Hug, a biologist, also disagreed and was less convinced that scientists, in the area of evolutionary biology, were anywhere near the conclusive end with bacteria. (ibid)

Another important issue raised, pertinent to the bacteria factor, is the genesis and the rationale *why animal species are shaped the way they are?* A study by the University of Lincoln (2016) titled '*Reshaping our ideas of bacterial evolution*' actually addresses this concern. The Professor Stuart Humphries of this university plainly highlights this issue when he says,

*"Many evolutionary biologists have asked why animals are shaped the way they are, but until now the scientific community has relied on mathematical models to predict the relationship between shape and movement in bacteria. We expected swimming bacteria to be rod-shaped in order to reduce their energy costs, but experimental tests are rare and, surprisingly, analyses of this relationship in an evolutionary context are lacking entirely.* (University of Lincoln, 2016)

Darwin's human evolution notion, largely recognized as world evolution 'religion', is also based on concept of *Spontaneous Generation*, which in turn, implies a belief that living organisms could develop from nonliving matter and, moreover, such transformations were habitual and regular. However, the paradox of it is that Darwin himself did not believe in that. In a letter he wrote in 1866 he said:

*"as for myself I cannot believe in spontaneous generation, and though I expect that at some future time the principle of life will be rendered intelligible, at present it seems to me beyond the confines of science."* (Darwin at al, 1903, p.273)

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<sup>1</sup> Genetic substance of an organism.

<sup>2</sup> A single organism comprising of cells with diverse genetic constitution.

Furthermore, Darwin himself admitted that he cannot explain the human vision through the evolution processes, or more specifically, through the natural selection notion, by declaring that

*"[t]o suppose that the eye with all its inimitable contrivances for adjusting the focus to different distances, for admitting different amounts of light, and for the correction of spherical and chromatic aberration, could have been formed by natural selection, seems, I freely confess, absurd in the highest degree."* (Darwin, 1876, p.143)

Darwin's unconvincing and sometimes paradoxical claim on evolution did not remain unheeded. For David Stove, Darwin's reasoning is rather a fairytale, because "[i]f Darwin's theory of evolution is true, no species can ever escape from the process of natural selection. (Stove, 1995, p.2) Furthermore, Richard Milton, the author of book titled *Shattering the Myths of Darwinism*, also fundamentally reject Darwin's concept, and highlights that:

*"As growing numbers of scientists begin to drift away from neo Darwinist ideas, the revision of Darwinism at the public level is long overdue, and is a process that I believe has already started."* (Milton, 1997, p.277)

After all, Kirschner remarks that, biology to a large extent has developed autonomously from Darwin's theory, when he says

*"In fact, over the last 100 years, almost all of biology has proceeded independent of evolution, except evolutionary biology itself... Molecular biology, biochemistry, physiology, has not taken evolution into account at all."* (Dizikes, 2005)<sup>3</sup>

Darwin's theory, however, appears very much to be a result of his own imagination, not on unwavering proofs. Indeed, this is confirmed by Darwin himself, who

*"...went to his deathbed protesting that he'd been misinterpreted: there was no reason, he said, to assume that natural selection was the only imaginable mechanism of evolution."* (Burkeman, 2010)

Contemporary scientists' objections to Darwin theory, derives from exponential science knowledge that revealed novelties, and created larger

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<sup>3</sup> Marc W. Kirschner, was quoted by Peter Dizikes, in the "Missing Links" article of the *Boston Globe* dated October 23, 2005

gaps with the apparent evolution theory. These developments were not disregarded, indeed, considered critical, prompting certain countries' to reflect, rethink and act, in order to determine whether is rational to still teach evolution theory in their respective schools. As a result certain countries, Turkey (New Europe, 2017), and the EU member, Romania (Bird, 2008) have moved to remove the Darwin's theory of evolution from their respective school curriculum, while in India (Ray, 2018) and South Korea (Neal, 2012) there have been debates to remove it too. Even the population of the Western world appears to have been affected. A study conducted last decade, on the endorsement of the Darwin's theory, resulted that evolution process is less accepted in USA than in other Western countries (Owen 2006).

All in all, even contemporary exponential scientific knowledge, on account of, massive technological advancements, is proving insufficient to the scientists to come with credible and fully proofed theory on the origin of life and the respective evolution process. However, this does not mean that evolutionary theory, does not find productive use on other fields. The benefits of evolutionary theory are acknowledged to spread on a number of areas, among others, on understanding human health, medicine and agriculture. (Cracraft and Bybee, 2004) Above all, among the most common benefits are, in medicine- helping physicians to prescribe correct antibiotic therapy (dosage and usage) - and moreover assisting them to maintain bacteria developments under control.

### **3. Theory of relativity and Quantum physics**

The universe is fascinating topic that historically has drawn human attention, not only on the functioning of it, but also on the structure, shape, chemistry and physics of planets and other objects within space scope. Among the key pioneers Isaac Newton that studied the physics of nature in an attempt to understand laws of motion, concluded astonishingly that gravity affects the functioning of the universe. There were other physicists that left mark in the world of science, but among the most renowned is Albert Einstein with his theory of relativity. The theory of relativity generally integrates particles<sup>4</sup>, their respective interactions and the

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<sup>4</sup> Particles (protons and electrons) are basic units of atoms (known to be the tiniest pieces of matter).

gravitation law. The theory played critical role in transforming the understanding of both, physics and astronomy, during the last century.

Quantum physics<sup>5</sup>, (sometimes called quantum mechanics or quantum theory) on the other hand, is central theory in physics which explains physical phenomenon of nature, above all, the dynamics and behavior of particles, and endeavors to elucidate challenges and paradoxes encountered. Quantum theory delves deep in very small details by describing phenomena at the tiniest particles.

Theory of relativity and Quantum physics are generally considered the fundamental theories describing the various phenomena of the universe. They deal with painstaking sensitive matters in colossal universe in order to come up significant answers. Yet, just like evolution theory, they are based on probable hypothesis too, and additionally scientists often encounter critical dilemmas when they attempt to explain certain phenomena. The *New York Times* journalist and historian of science, James Gleick, acknowledges that there is pure (evident) uncertainty when regards quantum theory. He highlights that,

*“Most of quantum mechanics deals with probabilities rather than certainties...When scientists search for meaning in quantum physics, they may be straying into a no-man’s-land between philosophy and religion. But they can’t help themselves. They’re only human.”* (Gleick, 2018)

Aharonov and Rohrlich (2005) also argue that Quantum theory is filled with paradoxes that stem from, among others, errors, gaps, contradictions or even uncertainty relations (pp.1-15). Scherrer (2006) notes that “[t]he general scattering problem in quantum mechanics is the calculation for a particle incident...” (p. 257) In addition, *McEvoy* (2004), highlights his doubts on Quantum theory too when he says:

*“Quantum theory cannot be explained. Physicists and mathematicians from Niels Bohr to Roger Penrose have admitted that it doesn't make sense. What one can do is discover how the ideas developed and how the ideas developed and how theory is applied”* (p. 174)

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<sup>5</sup> Quantum Physics is a broad term encompassing Quantum Mechanics, which in turn is a specialized sub-field of physics focusing on dynamics or motion of tiniest units of particles. Quantum Theory endeavors to elucidate challenges and paradoxes encountered in the universe.



In addition, Edward Frenkel a prominent academic also asserts similar claims that quantum theory comprises of contradictions and mysteries, elaborating it as follows:

*“we are not just hearing different “stories” about the electron, one of which may be true. Rather, there is one true story, but it has many facets, seemingly in contradiction,...There is really no escape from the mysterious – some might say, mystical – nature of the quantum world.”* (Frenkel, 2015)

Strikingly, there are incompatibilities, even among the two uttered theories; theory of relativity and quantum mechanics. Indeed, discordance is serious as they appear to be fundamentally irreconcilable. Corey S Powell, an academic scientist, explains:

*“[it] is not just a matter of scientific terminology; it is a clash of genuinely incompatible descriptions of reality...Relativity gives nonsensical answers when you try to scale it down to quantum size, eventually descending to infinite values in its description of gravity. Likewise, quantum mechanics runs into serious trouble when you blow it up to cosmic dimensions”.* (Powell, 2015)

While exponential knowledge advancements science appears to move ‘uncontrollably’, unwaveringly gaining access to previously inconceivable horizons of the universe, yet still, disappointingly with no clear or conclusive results. Thus, as we near the beginning of the third decade of the twenty-first century, scientists’ knowledge on astronomy<sup>6</sup> still remains in the realm of confusions, gaps, paradoxes and probable hypothesis.

However, while quantum physics proved incapable to provide genuine answers to the origin and the evolution of the universe, yet, conversely, it revolutionized the technology in many areas. Indeed, quantum physics is responsible for development of transistors, lasers, powerful computers, and advanced microscopes, among others, affecting the everyday lives of most us, in one way or another.

#### **4. GOD factor and scientists’ line of thinking about God**

Due to acknowledged scientific unreliability, both, on the origins of life and evolution process, as well as on the creation of universe, the academic

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<sup>6</sup> Astronomy is the study of space, space objects (like sun, moon, planets, stars...) and related phenomena.

scientific disputes on both issues are getting more interesting to listen at, yet, not among scientists and religion figures, but among the scientists themselves. This study deliberately omits the religion perspective within the research context, in attempt to genuinely find out, *where does, the scientific knowledge, on human and universe origin, and respective evolution, stands*. Solving these two ancient enigmas, however, is critical to both, religious and non-religious world. So far, despite massive endeavors, scientists admit that they are still in infancy, within the domain of probability, with apparent gaps, contradictions and uncertainty, thus, unable to create conclusive links. Yet, still, idiosyncratically, there seem, to a large extent, public unwavering persistence on spontaneity, of both, human origin and universe creation.

Scientists, however, admit that universe is filled with miracles, and that there are no scientific answers to it. Indeed, it is astonishing how such a sophisticated universe functions so perfectly, and that in tiniest details because, as Philip Goff, "*The Guardian's*" science writer, explains,

*"If gravity had been slightly weaker, stars would not have exploded into supernovae, a crucial source of many of the heavier elements involved in life. Conversely, if gravity had been slightly stronger, stars would have lived for thousands rather than billions of years, not leaving enough time for biological evolution to take place. This is just one example – there are many others – of the "fine-tuning" of the laws of physics for life."* (Goff 2018)

The inability of science to come to a conclusive proof revives, even among the contemporary scientists, the God factor, as the only remaining rational alternative thought, responsible for origin, design, and functionality of life in planet earth, and fine-tuning of the entire universe. Yet in moving in this direction, scientists demand proofs. Therefore, an unavoidable question that invokes human thought in this regards is, *can science prove that God exists?*

Philosophically, however, our inability to conceive or visually see something does not imply its nonexistence. We know that science works inductively<sup>7</sup>, and should scientists consistently observe identical results (after repeated tests), they tend to conclude and declare that a specific 'concern', is now a 'fact', that is scientifically proven. Scientific methods

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<sup>7</sup> Inductive method is characterized by rational thinking based on observable instances with the ultimate aim of finding, strong conclusions about how particular phenomena work.

and tools on scientific experiments are purely based on detectable, observable and verifiable phenomena (or subjects) under examination. This is common sense, because we do examine phenomena that interest us, using methods and tools available, providing that they are within our detection scope.

As this study explored above, there are fierce scientific disagreements on the evolution and quantum theories. Therefore, examining the phenomena, even, within our detection scope, often yields unreliable outcomes, thus, *how we can expect science to provide us answers, to something, or a wonder, that it cannot detect nor observe*. Scientists, therefore, cannot offer a conclusion on something that; based on scientific observation, it cannot be determined it exists, simply, because it is not within the capacity of science detection.

The universe, is extremely complex, moreover, is comprised of number of distinctive but critical dimensions, the exact number of which still remain unknown by scientists. Einstein, however, was convinced of four dimensions (Calaprice, 2000 p. 208), while, today, scientists believe that universe has ten dimensions, or more. (Williams, 2016). Anything beyond the verified dimensions can be considered outside scientific detection zone. All in all, science is limited, because is able to detect, observe and verify only phenomena within the universal scope.

God, on the other hand, according to *Collins Shorter English Dictionary* is defined "the sole Supreme Being, eternal...and transcendent, who is the Creator and ruler of all and is infinite in all attributes" (McLeod and Makins, 1995, p.479). According to this description, God is the Creator of all the dimensions, (that scientists still are uncertain on exact number of dimensions), and above all, of; time, space and energy and matter. Another question, within this context, worth heeding is, *how can we, then, detect, observe, evaluate or imagine God?* Einstein, however, within his capacities, offered an interesting view pertinent to this issue when he said,

*"I see a pattern, but my imagination cannot picture the maker of that pattern. I see a clock, but I cannot envision the clockmaker. The human mind is unable to conceive of the four dimensions, so how can it conceive of a God, before whom a thousand years and a thousand dimensions are as one?"* (Calaprice 2000 p. 208)

It is, thus, idiosyncratic, morally irresponsible, and scientifically unprofessional to offer conclusions on something that is not within the science reach. One must bear in mind, however, that, the universal laws,

within the domain of quantum physics and general relativity, are not developed by scientists but (only) discovered by them. Thus, by seeing themselves simply as observers in the colossal universe, many scientists have begun to reflect on their respected view of science and or God.

There is great tendency, however, that the scientists' initial strong faith in science, may gradually recede, as they mature and progress in science, before finally they begin to, directly or indirectly admit, that there may be somebody responsible for this fine-tuning of the universe. This does not (necessarily) imply that they embrace (or focus on) a particular religion, but their brain-heart disharmonic 'discourse', along with scientific inability to provide scientific facts, induces scientist to change the course, open the mind and consider that an unobservable and undetected force may have fine-tuned this universe.

Even, Stephen Hawking, renown scientist, and an alleged atheist, late in life begun to re-shift his belief on the creation of universe, and move towards God acknowledgement, by saying "I believe the universe is governed by the laws of science...The laws may have been decreed by God..." (Johnson, 2018) Furthermore, an additional analysis on Hawking work, by Goff (2018), furthermore reaffirms this conviction when he says that,

*"[i]n his [Hawking's] final paper on the multiverse hypothesis, the world's best-known atheist made a supernatural creator more plausible." (ibid)*

Michio Kaku, another famous American Japanese physician, also experienced a change in course, from the apparent belief that everything is created by chance and spontaneity. He highlighted his point of view when he said,

*"I have concluded that we are in a world made by rules created by intelligence...Believe me, everything that we call chance today won't make sense anymore. To me it is clear that we exist in a plan which is governed by rules that were created, shaped by a universal intelligence and not by chance." (James, 2016)*

Scientists' belief in God is not a contemporary development. Nicolaus Copernicus expressed his belief in the world Creator, as "the Best and Most Orderly Workmen of all" (Kupelian, 2010, p.150), while Isaac Newton asserted that solar system did not occur by chance (ibid). Galileo Galilei, too, conceived God as a creator, as he viewed "nature as a book whose

author is God.” (Reuters 2008) Louis Pasteur a renowned French biologist said “[t]he more I study nature the more I stand amazed at the work of the Creator.” (Kupelian, 2010, p.150) Likewise, Albert Einstein in his famous quote says “[t]he more I study science, the more I believe in God.” (Holt, 1997).

After all, since human capacity, both physical and intellectual, is proving insufficient to decipher the origin, path, method and the power of the creation of the universe, this does not, in any way, imply that the supreme crafty designer of it does not exist. Decrypting origin of life and the universe, by scientists (and purely through science), has, indeed, proven a hard nut to crack. Their expectations are high, yet their mission may be bound to fail. A slight analogy would be, to expect a computer to decipher his own origin, and moreover, additionally, to independently detect and observe his human ‘creator’. Obviously, it is not possible, because a creation cannot conceive the creator, due to the fact that they differ, above all, in capacity, matter and dimension, thus, beyond the scope of understanding, detection or observability. The ability of the creation is, therefore, limited, and subject to assigned limits by its true creator.

## **5. Inside the science camp and the outside reflection**

There is great predisposition, among the non-scientists, to believe that science acknowledges motive, empiricism, and facts. Yet, as the study above indicates, science, after all, is not exclusively about absolute truth, because its laws are not ‘eternal’. Scientists have, in the past, themselves, changed views on laws once novel ‘facts’ are provided, (thus) modifying the existing ‘truths’. What’s more important, scientists have the propensity not to generalize laws without incorporating exceptions. They look for reasons, experimentations and facts, however, should they not obtain satisfactory outcomes, they descent to probability, likelihood, or chance. This, largely resembles self-fulfilling prophecy, which in turn is not productive, not only for passionate minds about world of science, but neither for the broad general public.

It is, thus, peculiar, but critical, to stress that scientists’ lack of work confidence is discouraging. Consequently this is also reflecting the respective academic cohesion, exposure of which may be common even during professional scientific discussions. Holt (1997) offers an insight within the science camp, by saying that:

*“Scientists are hard to work with on a committee...because they often change their minds when they see new evidence.” (ibid)*

All in all, one must admit that world's dependability on science is huge, and probably even beyond imagination, to a degree that some may even consider science as a 'religion'. This is so much so as, that many of us may show tendency to blindly believe in science and scientists, even if they have had no tangible proof of specific phenomena or respective results. For example, perhaps most of us have never seen an atom, molecule or electron, yet, many (if not most) tend to show inclinations to believe that they exist, and moreover, even put trust to the different scientific laws or theories that derive from those matters. However, when scientists are 'compelled' to modify scientific laws, they may consciously or unconsciously 'modify' or impact many peoples' subconscious, long-standing matured inner belief, the view of life and or the future. This after all, may not pass unaffected, and additionally, may not be healthy either.

## **6. Conclusion**

This paper addresses the disputatious but significant topic on exponential scientific knowledge and the God factor, but from exclusive non-religious viewpoint. The idea behind is to explore the contemporaneous scientific point of view in relation to the controversial issues such as origins of life and the creation of universe. In order to, examine the subjects concerned, the study delves into renowned theories, more specifically on the evolution theory, theory of relativity, and quantum physics. In addition, the study also addresses the issue of science cohesion and respective scientific viewpoints vis-à-vis the issues raised.

Along this study it is confirmed that despite exponential scientific knowledge, the conclusions on the issues of the origin of life and the creation of the universe, are not reliable, and the overall process remain still in infancy. In addition, the study also offers numerous viewpoints by the scientists themselves, on the topics concerned, fundamentally disputing the past scientific findings. What's more, the scientists still regard these concerns as still open research matters, yet at present, they offer only probability, likelihood, spontaneity or chance, as answers.

Some scientists, however, maintain that if science is unable to explain the pending questions on life and universe, then God factor explanation

remains the sole rational answer available. Indeed, from Copernicus to Newton, from Galileo to Pasteur and Einstein, all the scientists believed in God as Creator of Universe, or at least 'reluctantly' but affirmatively came to conclusion that, an undetected and unobservable, but crafted universal intellectual power is responsible for the creation of life and universe alike.

Even in modern times the issue of scientists' belief in God as the Creator of universe, is not uncommon. What is striking in the contemporary times is the fact that, even staunch atheists, such as the renowned scientists Hawking and Kaku (discussed above), late in life begun to soften the tone on spontaneous creation of the universe of and moved towards the path of theism. Holt (1997) highlighted this in magnificent manner when he said:

*"...if the scientific findings of the 19th century eroded belief in God, those of the 20th century have had just the opposite evidential force, although few intellectuals outside science have come to terms with this. Traditional arguments for the existence of God, which seemed outmoded a century ago, have had new life breathed into them."* (Holt, 1997)

By and large, however, the scientific and technological advancements appear to be in close correlation with the transformation of scientists' conviction on the origin of life and universe. Perhaps a saying by Werner Heisenberg, (a renowned, German scientist, the author of uncertainty principle) holds, and could best describe scientists' academic life and eventual transformation, that, "[t]he first sips from the glass of science makes you an atheist, but when you arrive at the bottom of the glass you find or confirm God", (Otremba, 1979, p.205)

Finally, based on the research question put forward in the introduction section, the study draws final conclusions. First, Darwin's concept of evolution is no longer convincing to the biologists today, though some of his work is still heeded in other fields such as medicine. Second, physicists' alleged spontaneous-creation-of-the-universe claim, (based on quantum theories) is gradually waning and not considered plausible not even within the respective scientific community circles. Third, the scientific advancements appear to have had a mind-shifting effect on the contemporary scientists' thinking pertinent to the spontaneity of human origin and universe creation. Fourth, the scientific world seems slowly (though somewhat reluctantly) moving towards acknowledging that God or a crafted intellectual power, is, or may be responsible for human origin and universe creation.

After all, since the study established that science is in genuine disarray and unable to generate answers to the origin and evolution of life and universe, and moreover, since “everything that we call chance today won't make sense anymore” (James, 2016), it is only human instinct to subdue, at the final last of the ultimate end, and opt spontaneously for a belief in supernatural deity, God.

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