

How Did the Universe Come to Exist and Where Did We Come from? Two Versions: Who Has It Right, Science or Christianity?

Patrick Bickersteth

PB Psychological Services, St Albert, Canada
Email: peaceofmindforum@gmail.com

How to cite this paper: Bickersteth, P. (2022). How Did the Universe Come to Exist and Where Did We Come from? Two Versions: Who Has It Right, Science or Christianity? *Open Journal of Philosophy*, 12, 241-253.
<https://doi.org/10.4236/ojpp.2022.122016>

Received: March 22, 2022

Accepted: May 28, 2022

Published: May 31, 2022

Copyright © 2022 by author(s) and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution-NonCommercial International License (CC BY-NC 4.0).
<http://creativecommons.org/licenses/by-nc/4.0/>



Open Access

Abstract

Dissension persists between proponents of mainstream scientific thinking (Science) and those of Christianity (Theology), regarding their respective cosmologies. The objective of this paper is to propose a uniting principle, which will accommodate the tenets of both camps while removing controversy. The explanation of our cosmological and biological origins asserted by Science is anchored on observation and measurement. They maintain that our entire universe began from a primeval substance, which expanded to comprise its present-day form. On the other hand, centered on a faith-based adherence to the Christian bible, Theology affirms that God created everything in the cosmos. Because of its scientific complexity, however, a very large proportion of the masses cannot be expected to have a full understanding of Science's explanation. In addition, there is a lack of empirical justification for their claimed "proven theory". Theology, claiming the ultimate power of a loving spiritual Deity uses readily available scripture to substantiate its supernatural argument. With a basis in observable and countable reality on the one hand and on the other, in an organized godly belief system, Science and Theology can coexist as authentic and independent schools of thought with their respective portals open to qualified scholars and practitioners. In an amicable atmosphere instead of in one of rivalry and vituperation, each group can claim equality with and mutual respect from the other, enriching rather than demeaning two major areas of human endeavour.

Keywords

Unifying Concepts, the Botanical Society of America, The Problem of Certainty, Big Bang Theory with Modifications, Steady State Theory, Unproven Theories, Sphere of Scientific Inquiry, Charles Darwin, Schooling in Science versus in Theology

1. Introduction

1.1. What Do the Proponents of Mainstream Scientific Viewpoint (Science) Believe?

The following is stated on the US government NASA website (NASA, n.d.), Universe 101 Our Universe:

“The universe began with an unimaginably enormous density and temperature. This immense primordial energy was the cauldron from which all life arose. Elementary particles were created and destroyed by the ultimate particle accelerator in the first moments of the universe... With the sudden expansion of a pinhead size portion of the universe in a fraction of a second, random quantum fluctuations inflated rapidly from the tiny quantum world to a macroscopic landscape of astronomical proportions.”

The above information is reported to come from the Wilkinson Microwave Anisotropy Probe (WMAP), which is described as: “...a NASA Explorer mission that launched June 2001 to make fundamental measurements of cosmology—the study of the properties of our universe as a whole. WMAP has been stunningly successful, producing our new Standard Model of Cosmology.”

1.2. What Does Mainstream Christianity (Theology) Believe?

In the Christian Bible, Genesis chapter 1, verse 1 states, according to the New Living Translation of the bible (NLT):

“In the beginning God created the heavens and earth (NLT).”

Hebrews chapter 11, verse 3 explains it further:

“By faith we understand that the entire universe was formed at God’s command, that what we now see did not come from anything that can be seen (NLT).”

2. Method

Addressing Mainstream Cosmological Presentations of Science and Theology

The scientific explanation that we are all made up of atoms and molecules is believable because it is easy to understand. We can all understand magnification and how things can look different when magnified. So, when we are told that through a special high-powered microscope one can see the atoms that comprise an object because they are too small to be seen individually by the naked eye, it makes sense. Not so with the Big-Bang theory of the origin of this earth and the universe! Only certain people understand how it is true. In other words, going by the scientific principle that expects conclusions must be observable and measurable, the vast majority of us rely on the knowledge of a very few really smart people to tell us scientifically how the universe came into being. Only they can tell how it is observed and measured. The irony here is that such types of scientific information about how the universe came to be, for the vast majority of people, seems to depend on faith and trust in the accuracy of that informa-

tion. But one may ask: Why should we trust their information? Evidently, high- and lower-level intellectuals have faked information, intentionally or inadvertently and many well-meaning individuals have used their misleading information to build on. Take a relatively recent example: With respect to a modern cosmological theory, the steady-state model, an alternative to the Big Bang theory, Stephen Hawking (deceased), a highly-regarded cosmology authority has been widely quoted from his book “A Brief History of Time” (e.g. Libquotes) as stating that:

“The Steady State theory, was what Karl Popper would call, a good scientific theory: it made definite predictions, which could be tested by observation, and possibly falsified. Unfortunately for the theory, they were falsified (Hawking, 1996)...”

A second huge problem arises from the question: How is it possible to fully observe and completely describe an event of which the observer is a part and cannot be external to it? As a model to explain how physical and biological activities occur in the world, Science does provide relatively factual and progressive knowledge. By studying how the world works and thereby making possible numerous successful inventions, Science has advanced human civilization tremendously. These discoveries are the outcomes of scientific theory, which is based on careful examination or observation of facts and progressed through experimentation to arrive at other facts. Over time, however, Science seems to have come to believe that this model used to decipher and know how the existent world of physical and biological objects and events work can also be used to decipher and know how this existing world came into being in the first place. Not existing before or not being outside the existing universe, however, it does not seem possible to observe the facts about its coming into existence.

On the other hand, resting on faith in a pre-existing, eternal and loving Creator, who, among other attributes is all-powerful and omniscient, Theology’s cosmological explanation focuses on God’s revelation of what we need to know, for example, as recorded in Psalm 33: verses 6 to 9, in the Old Testament, as follows:

“The LORD merely spoke, and the heavens were created. He breathed the word, and all the stars were born. He assigned the sea its boundaries and locked the oceans in vast reservoirs. Let the whole world fear the LORD, and let everyone stand in awe of him. For when he spoke, the world began! It appeared at his command (NLT).”

Faith, being the operating principle in Christianity, needs to be genuine, even if not perfect, in order to be acknowledged. Counterfeit faith can be divinely rejected, for example, a historical detail in the New Testament recounts, in connection with the ministry of St Paul, recorded in the Acts of the Apostles, chapter 19, verses 13 to 16, as follows:

“A group of Jews was traveling from town to town casting out evil spirits. They tried to use the name of the Lord Jesus in their incantation, saying, ‘I command you in the name of Jesus, whom Paul preaches, to come out!’ Seven

sons of Sceva, a leading priest, were doing this. But one time when they tried it, the evil spirit replied, ‘I know Jesus, and I know Paul, but who are you?’ Then the man with the evil spirit leaped on them, overpowered them, and attacked them with such violence that they fled from the house, naked and battered (NLT).”

Divine power and man’s faith are the bases for understanding theological cosmology; human scrutiny is excluded from this realm of knowledge.

In earlier times Science accepted the opaque divide between the pre-existing world and its existent state. As such, many scientists of that day believed in a world created supernaturally, that is, in a manner outside of the natural order of living and non-living objects to which Science applies. At a certain point, the view that the sphere of scientific operation is within the temporal environment of this world shifted to believing that Science can inquire into and discover anything or everything about the universe, and this world, in particular. It appears that starting from the work of Galileo, Science realized in hindsight that it was possible to probe and unveil occurrences that previously were seen as supernatural and therefore beyond human understanding.

Charles Darwin’s book: “On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life” introduced Science to yet another area of its claimed omniscience, namely evolution—that is, how different kinds of living organisms started and developed, including human beings. Science walked boldly through this door into a realm previously believed to be the exclusive bastion of a divine creator and therefore considered closed to mankind’s knowledge. Probably Science realized it could enter and tread where only angels trod through these two gateways (theoretical physics and biology) to “the beyond”; and since nothing stopped this push, the notion that this was God’s domain was jettisoned. In time, the agnostic view of the origin of the world was dispensed with, as many new discoveries empowered Science to feel omniscient. Soon, all put together, the range and scope of scientific enquiry and knowledge led to the conclusion there is no Creator-God, no doubt due to the strong belief that Science now has access to knowing everything about the universe. Hence, the quest for “the Theory of Everything”, proposed by Steven Hawking, in which, paradoxically, he accepted God as the ultimate Creator! While the formulation of this all-encompassing theory has continued to appear illusory Science, however, went on to substitute the “theory” about the origin of the universe and mankind for the actual knowledge itself.

Science has not definitively answered how everything came into being but seems to have retrospectively “predicted” how all life must have originated. Prediction however is not the same as knowledge, whether of the past or the future. Knowledge is factual and brings certainty; prediction is possibility and in the realm of theory. It is interesting to note that the style of shifting from what’s in the cross hairs of scientific enquiry to asserting its materialization seems typical. Sooner or later the field of scientific work appears to label a wish as a done deal.

For a period of time Science proposed the theory of evolution, which it later seemed to have declared to be a fact and similarly the so-called Big Bang theory after some time was pronounced no longer to be theory but fact.

In the case of the evolutionary theory, Science has never produced proof of the presumed, alleged “missing links” that would fill in the gap between two species that have been discovered, which would show the continuous evolutionary line that makes the theory factual. In his article: “Darwin’s Many Doubts”, Neil Thomas (Evolution News & Science Today, November 8, 2021 (Thomas, 2021)) stated that Darwin himself provided doubts about the legitimacy of his own theory in posing the following question: “...by this theory innumerable transitional forms must have existed, why do we not find them embedded in countless numbers in the crust of the Earth?” With respect to the Big Bang theory, Science, to this day, has not been able to explain how the previously non-existent primordial material (a tiny dense “microscopic dot of concentrated matter and energy”) came into being, which erupted and caused the universe to unfold. Despite acknowledging these essential elements, which, in the respective theories remain unproven, Science still claims it has completely explained the origin of mankind and the universe.

In view of such flaws at the core of the Big Bang and evolution theories, Science’s dogged insistence, nevertheless, that the theories are proven would seem conspicuously fallacious. As such, the claim of certainty is bogus, because Science itself acknowledges unproven assumptions in each of these two theories. Without any tangible or observable piece of evidence or human experience of it, how can we scientifically know something existed? Intuitively and based on faith perhaps; but this is the same way Theology’s God can be explained!

A statement on the National Center for Science Education (NCSE) website, apparently made by the Botanical Society of America, reads as follows in the second paragraph:

“Scientific theories are used in two ways: to explain what we know, and to pursue new knowledge. Evolution explains observations of shared characteristics (the result of common ancestry and descent with modification) and adaptations (the result of natural selection acting to maximize reproductive success), as well as explaining pollen: ovule ratios, weeds, deceptive pollination strategies, differences in sexual expression, dioecy, and a myriad of other biological phenomena.”

From this quoted statement, one may conclude that Science is at the explanation (or theory) stage and accordingly has yet to produce the expected “new knowledge”, with respect to the theory of evolution. Otherwise, it is unclear in the quotation what is theory, as opposed to new knowledge, that is, the verifiable fact. More confusing in the quotation, however, are the words: “with modification”. Nonetheless, the BSA article goes on to state:

“Far from being merely a speculative notion... the core concepts of evolution are well documented and well confirmed. Natural selection has been repeatedly

demonstrated in both field and laboratory, and descent *with modification* is so well documented that scientists are justified in saying that evolution is true.”

What is “true”? Is it the explanation (which is theory) that’s usually presented or new knowledge, the verifiable fact—for example, conclusive evidence of unbroken continuity in all the evolutionary links, that is yet to be provided? Based on the above quotation of the BSA, we cannot know through Science, what is actually and finally true of the evolution process if there will be “modification”; and if “gaps” remain at various points in the evolutionary “tree”. Doubting any conclusion as “final truth” (or proven theory) seems unavoidable because acceptance of new and rejection of previously accepted hypotheses is the basic process of Science. As such, there is no guarantee that current ways of perceiving and explaining the world and its “contents” will be permanent. The BSA article agrees with this view in their statement: “The history of science is littered with discarded explanations.”

Nonetheless, for certain matters Science seems to stop at the theory stage, accepting it as final, and calling it the knowledge stage, as observed in the above quoted texts from the BSA article. It is extraordinary that otherwise honest and intelligent individuals continue to believe these theories are facts. Such intellectual blindness becomes relatable however, in view of Steinhardt’s confessional comment: “The idea is so compelling that cosmologists, including me, routinely describe it [cosmic inflation] to students, journalists and the public as an established fact... (Steinhardt, 2011: p. 38)” This statement seems tantamount to an admission of unwitting malfeasance, namely, that he propagated the questionable narrative about inflation theory, as if it was a proven fact. Consequentially, Science continues to have an authenticity problem, ominously portrayed in the title of Steinhardt’s article, namely: “Is the theory at the heart of modern cosmology deeply flawed?” The claim that their cosmology or explanation of the existence of the universe is no longer theory but now a fact, still awaits verification. Ekeberg (2019), a philosopher of science, attributed the present-day predicament of Science to their being bogged down by an “unknowable big bang” fact, mainly because: “...inflation theory relies on ad hoc contrivances to accommodate almost any data, and because its proposed physical field is not based on anything with empirical justification (Ekeberg, 2019).” Science’s response may be said to comprise or include the description of a “cosmic microwave background”, which “is believed to be a ghostly remnant of the fierce light of the primeval fireball reduced by cosmic expansion to a shadow of its former splendour but still pervading every corner of the known universe.” (Shu, 2021) It is noted that this claimed evidence for the occurrence of the Big Bang, is based on a belief, and as such bolsters Ekeberg (2019)’s point, above, with respect to a failure by proponents of mainstream scientific cosmology to present empirical justification.

Furthermore, in review, from another perspective, the first quote in the Introduction of the current article stated: “The universe began with an unimagina-

bly enormous density and temperature. This immense primordial energy was the cauldron from which all life arose.” But how was the “enormous density and temperature” measured? Unless the laws governing the activity of physical objects before, are presumed to have been different from the way the physical world operated after the beginning of the universe till today, the primordial density as well as the temperature must have been measured to be able to describe and affirm its existence. Might this core of Science’s cosmology have been based on belief? The other NASA quote reported: “With the sudden expansion of a pinhead size portion of the universe in a fraction of a second, random quantum fluctuations inflated rapidly from the tiny quantum world to a macroscopic landscape of astronomical proportions. Why do we believe this? Because...” The NASA article goes on to explain the reasons for this belief. Notably, this assertion is about belief not about facts. As such, it appears that here also the information about the activities of the Big Bang is based on faith!

So then, in view of this additional argument regarding Science’s cosmology, what would be the answer to the question: On what specific evidence and facts about the beginning of universe do scientists rest their authority? Science would probably have to answer: None! Science itself confirms (under the sub heading, Big Bang Concepts, of the NASA article), that: “It is beyond the realm of the Big Bang Model to say what gave rise to the Big Bang. There are a number of speculative theories about this topic, but none of them make realistically testable predictions as of yet.” Science’s cosmology runs into more problems, captured in the following quotation: “For much of this decade, the two most precise gauges of the Universe’s rate of expansion have been in glaring disagreement. Now, a highly anticipated independent technique that cosmologists hoped would solve the conundrum is instead adding to the confusion (Castelvecchi, 2019).” These are the opening words of Castelvecchi’s article. He lays out supporting information in the rest of the paper.

Undeservingly, there appears to be widespread belief among the public that Science always provides legitimate knowledge of facts whereas theology does not. Based on, at least, the foregone discussion, it is agreed that Science does not always (or perhaps never) produces unchangeable propositions or facts. This truth raises issues about the basis on which Science is granted free access in certain areas of community life, for example in the education of grade-school students. Science needs to give a logical response to the question, as framed in the BSA article, itself, namely: “Why, in all fairness, don’t we teach both explanations and let students decide?” In reality, students cannot be left to decide on what to learn, otherwise, very likely, the majority of them would not choose Science, especially mathematics, chemistry and physics (<https://www.thetoptens.com/hardest-school-subjects/>). Putting aside Science’s response, to be discussed later, it is necessary to comfortably accept the teaching of both Science and Theology so as to remain reasonable and fair and to provide comprehensive educational content to all students. For this goal to be realized

we need a process that: "...promotes and defends accurate and effective ... education because everyone deserves to engage with the evidence (to use the *raison d'être* of the NCSE, according to their website)." In view of this quote, by opposing co-existence and blocking access to teaching and learning theology-based cosmology, Science leaves the impression, at best, of being self-contradictory. Ironically, they may be seen, from a moral perspective, as being intolerant and hypocritical, two accusations, sometimes deservingly made against Christians. From the above arguments and descriptions, it is evident that Science cannot substantiate its claim to infallible knowledge regarding the origin of the physical and biological world on the basis of observation and measurement. Therefore, ostracizing Theology, on the basis of their faith, from school classrooms is unjustified and unreasonable. As such, in order to allow everyone an equal chance to engage with the evidence presented by both Theology and Science, harmonious relations need to be established along neutral lines.

3. Discussion

Can All Agree the Theological and Scientific Versions of Cosmology Are Independent and Equal?

To answer this question, let's examine the argument further, why Science needs to demonstrate the facts that explain the paths of evolution as it now stands. It is important that they describe the factual characteristics of the currently "missing pieces" in the theory of evolution and not simply present a hypothesis about what's missing. In the absence of those facts, an unexplained gap could in fact indicate the end of that line and perhaps a surprising mixed-featured creature as in the case of Archaeopteryx may not at all connect the claimed continuous evolutionary line! The Abstract of a study on this topic by Xu and colleagues, states: "Despite only tentative statistical support, this result challenges the centrality of Archaeopteryx in the transition to birds. If this new phylogenetic hypothesis can be confirmed by further investigation, current assumptions regarding the avialan ancestral condition will need to be re-evaluated (Xu et al., 2011)." In commenting on this research supporting the rejection of the transitional role of Archaeopteryx, the article by Kaplan (2011) in *Nature* states:

"The first Archaeopteryx specimen was discovered in 1861, just a few years after the publication of Charles Darwin's *On the Origin of Species*. Its combination of lizard-like and avian features made it the ideal 'missing link' with which to demonstrate evolution from non-avian dinosaurs to birds. But the latest rearrangement knocks it from its position as the earliest bird (2011: p. 443)."

As the theory of evolution now stands there is no guarantee there are no more changes or modifications to be made to it. As such, the truth from Science about how human beings came to be has to remain tentative, as it always will be because with the scientific method there is no final or absolute truth. As things are always changing on our planet Science plays an authentic role of reflecting that reality, in the role of a universally recognized authority on explaining or teaching

observable aspects of the physical and biological world. In the same way Theology and Philosophy, including Metaphysics champion different approaches of arriving at the truth.

The BSA makes the following “argument” in the same article (NCSE, 2008) that unfairly promotes allowing the teaching of evolution but not Theology’s creationism:

“...So why do we support and teach evolution and not creationism/‘intelligent design’ if both explain the same phenomena? ...The fairness argument implies that creationism is a scientifically valid alternative to evolution, and that is not true.”

This statement is acceptable only within the context of a claim that Christianity (Theology) is to be considered scientific endeavour. Christianity (Theology) is not Science. The issue is really about accepting Christian Theology on an equal footing of authority and validity as secular Science is, regardless of how different one system is from the other. It is not reasonable to say that because it does not operate like Science we cannot allow creationism in the classrooms. If Theology operates like Science would it qualify as based on religious faith? Using that same argument, the teaching of philosophy should be disallowed.

A fundamental problem with the BSA’s viewpoint in their article seems to be the assumption that all education must be based on known or knowable occurrences, which are observable and measurable, in order to qualify as legitimate. If this is true then, for example, much of the learning that children have acquired from parental upbringing anywhere in the world through the ages is not education. This fallacious reasoning assumes wrongly that all teaching and learning needs to conform to scientific principles. Such a false and misleading argument is probably responsible for the invalid conclusion that Christianity does not belong in classrooms or the workplace. The fact, of course, is that, regardless, Christian topics are indeed being taught in many classrooms, as authentic faith-based information, though, sadly, the same cannot be said for the workplace. In other words, within the notion of concept egalitarianism there’s room for a variety of educational theories and approaches and for each to stand or fall by its merit. Clearly, Science has had an unfair advantage of visibility, influence and popularity of their teaching at the expense of Christianity, which has been disallowed the same free access to the minds of developing and older students. It cannot be missed that under such conditions, succeeding generations will learn to believe and accept that only Science has a legitimate and indisputable place in schooling. No doubt, Science would prefer to retain that privilege. Due to their vested interest in this matter, however, Science should not participate in the decision-making as to the kind of education permissible in classrooms or worse, have veto power.

On the issue of the legitimacy of certain other criticisms, which Science has made of Theology, for example, that God does not exist; the fact is, using scientific methods, Science cannot prove there is or isn’t a God. Therefore, Science

cannot know whether or not there is divine intervention in the world. Scientific principles are not the arbiter of what exists. Ideas are real in our minds so they exist because we are aware of them and not because they have been or are scientifically verifiable. In its milieu of operation, Science does not appear to have produced the formula or calculation to accurately measure or observe all ideas. Nor can Science prove the number of stars in the universe or of grains of sand there are on all of the beaches on earth, although stars and sand are observable and countable.

Christianity has a stronger case because within the setting that it functions, the problem of assuredness, for example, about how many stars and grains of sand there are is framed differently, namely: I do not know for sure, but God does. Ridiculing this response is neither elucidating nor intellectually sophisticated on the part of Science, since they cannot produce an accurate number, either.

The realm of certitude is perhaps where the difference between Science and Theology is most stark. For example, for Science, truth depends on a variety of conditions, which makes it relative; for Theology, truth depends on one entity, God or Jesus, which makes it absolute. Jesus said, "I am...the truth..." (John 14:6, NLT) In the area of temporal certainty, time denotes the past, present and future, in Science, and so, it is sequential and cumulative. In Theology also, time is sequential and cumulative but it is also temporally unbounded; the bible states: "A day is like a thousand years to the Lord, and a thousand years is like a day." (2 Peter 3:8, NLT)

Those who reject the different-but-equal relationship between Science and Theology and insist on the superiority of either are not reasonable and their stance is sometimes inexplicable to others who have a more balanced thought process. It is not a question of which side is superior. Every learning situation has three components: the content to be taught and learned, the teacher and the learner. The teacher must be qualified to teach the material. Theology and Science have competent teachers who use two different sets of facts. So then after all is said, Science and Christianity are just two doorways or portals to two different types of information that explain the universe, us included. (Philosophy may count as yet another knowledge entryway to understand truth.) From this perspective an attempt to "silence" the viewpoint of one type of knowledge seems irrational.

Accordingly, the approach that requires the universal teaching of Science but not of Christianity (or, perhaps, Philosophy for that matter), remains unfathomable; and this tendency may also, in some cases, amount to governmental censure. If it is ever the case, denying Science universal exposure in any democratic educational system would be equally senseless. The BSA article (in the final paragraph) rightly believes in "Science as a way of knowing..." And the central position of the current article is, as already noted, that indeed, essentially, both Science and Christianity are channels to knowledge. Therefore, it is unnecessary

for Science and Christianity to compete on whose cosmology should hold sway, if the goal of each is to educate rather than protect ideology. Whether the learning is harmful to the individual or society (as some critics would contend) or not, is a separate matter that can be legally investigated. Therefore, it is time for proponents from both camps to relinquish feuding in favour of détente, which essentially establishes a level playing field.

4. Conclusion

Seen as supporting the view that it is preferable to recognize the independent positions of Science and Theology, is the following statement attributed to the theoretical physicist and Nobel laureate, Steven Weinberg: “If language is to be of any use to us, then we ought to try and preserve the meaning of words, and ‘god’ historically has not meant the laws of nature (Stephen Hawking’s God).”

This advice greatly assists in maintaining the separateness of the communication platforms of Science and Theology, respectively. The vocabulary of the two may be the same or different but may not conceptually overlap even when they are similar. To take a cardinal example, apropos in this context, “God” in Christian Theology refers to the Father of Jesus, portrayed in Judeo-Christian Scripture as the Son of God the Creator sent (as our Savior or Messiah) to offer mankind reconciliation with God through Jesus’ voluntary sacrificial death on the cross. Different “gods” are the object of obeisance in a variety of religious and non-religious settings, though in the latter, including Science, the meaning tends to be more metaphorical than literal or substantive.

To legitimately argue for a rejection of the existence of the Christian God assumes knowledge of the principles on which His existence is established (by acquiring the information in the Christian Bible) and this, in turn, relates to the personal acceptance of those faith-based principles on which His existence is explained. In the same way to reject the existence of oxygen assumes knowledge of the process of establishing its existence (through scientific experiment), which implies an understanding of the scientific principles, relating to the properties of air, supporting its existence. As independent sources of knowledge, Science cannot reject the Christian God without an acceptance of how He is defined and known nor can Theology deny the existence of oxygen without the specific information of how it is defined and known. Paradoxically, however, by going through the process of understanding the existence of what you wish to reject, you have proven its existence, *de facto*. In other words, understanding how something is said to exist rules out denying its existence. Therefore, because their means of determining existence are valid though different, Science and Christianity do not have rational grounds for rejecting each other.

Amicable co-existence rather than rivalry brings about mutual acceptance, which in turn leads to mutual respect. Both Science and Christianity may feel equally proud of their respective value in the world. Being on equal footing of legitimacy, there will be no need for one side to exalt its own usefulness and accomplishments while denouncing or attempting to refute those of the other.

Sometimes, of course, such bias is simply indicative of ignorance. A case in point is this statement made in the BSA article:

“Creationism has not made a single contribution to agriculture, medicine, conservation, forestry, pathology, or any other applied area of biology. Creationism has yielded no classifications, no biogeographies, no underlying mechanisms, and no unifying concepts with which to study organisms or life. In those few instances where predictions can be inferred from Biblical passages (e.g., groups of related organisms, migration of all animals from the resting place of the ark on Mt. Ararat to their present locations, genetic diversity derived from small founder populations, dispersal ability of organisms in direct proportion to their distance from eastern Turkey), creationism has been scientifically falsified.”

This set of selected assertions presumes knowledge that Christianity (Theology) has never made and cannot make meaningful contributions to the world, ever. In response to the specifics of the criticism, which impugns Theology’s lack of scientific contribution, firstly, I call attention to the statement from the website of the National Geographic Society, stating: “A Belgian priest named Georges Lemaître first suggested the big bang theory in the 1920s, when he theorized that the universe began from a single primordial atom.” “Origins of the Universe 101”, written by Michael Greshko and National Geographic staff, published January 17, 2017 (Greshko & National Geographic Staff, 2017). Francis Collins, who wrote the book, *The Language of God* is the physician and geneticist who led the Human Genome Project. This bestselling book presents a God-based view of evolution. Secondly, I invite the writer(s) of the BSA article to go to Google and key in: “scientific contributions of Christianity” or such search words. I expect they will be surprised by the vast amount of information about scientific discoveries of Christians, some of which have provided the bases of modern-day scientific experimentation and discoveries, as well as being responsible for the founding of many universities, which have produced Science’s excellent scholars among whom (as reported above) was the founder of their basic cosmological principle. The main point here, however, is that Science can applaud its scientific discoveries and Christianity can thank God for the people who have made these scientific contributions, including Christians. In essence this is an expression of mutuality that testifies to the solidarity of humanity. As such, can we agree both Science and Christianity are equally important to the world and come from equally valid though different perspectives?

Acknowledgements

Texts identified as NLT are from: The Holy Bible, New Living Translation, copyright © 1996, 2004, 2015 by Tyndale House Foundation. Used by permission of Tyndale House Publishers, Carol Stream, Illinois 60188. All rights reserved.

Conflicts of Interest

The author declares no conflict of interest.

References

- Castelvecchi, D. (2019). How Fast Is the Universe Expanding? Cosmologists Just Got More Confused. Hotly Anticipated Technique Fails to Resolve Disagreement over Speed of Cosmic Expansion—For Now. *Nature*, *571*, 458-459. <https://doi.org/10.1038/d41586-019-02198-z>
- Ekeberg, B. (2019). Cosmology Has Some Big Problems. *Observations*. <https://blogs.scientificamerican.com/observations/cosmology-has-some-big-problems/>
- Greshko, M., & National Geographic Staff (2017). Origins of the Universe 101. *National Geographic Society*. <https://www.nationalgeographic.com/science/article/origins-of-the-universe>
- Hawking, S. (1996). The Beginning of Time. *Libquotes*. <https://libquotes.com/stephen-hawking/quote/lbv0v0j>
- Kaplan, M. (2011). Archaeopteryx No Longer First Bird. *Nature*, *443*. <https://doi.org/10.1038/news.2011.443>
- Shu, F. H. (2021). Cosmology. *Encyclopedia Britannica*. <https://www.britannica.com/science/cosmology-astronomy>
- Steinhardt, P. J. (2011). The Inflation Debate: Is the Theory at the Heart of Modern Cosmology Deeply Flawed? The Inflation Debate: Cosmology. *Scientific American*, *37*-43. <https://doi.org/10.1038/scientificamerican0411-36>
- The National Aeronautics and Space (NASA) (n.d.). Understanding the Evolution of Life in the Universe, Universe 101: Our Universe. *The National Aeronautics and Space*. https://map.gsfc.nasa.gov/universe/uni_life.html
- The National Center for Science Education (NCSE) (2008). *Botanical Society of America. Statement on Evolution*. <https://ncse.com/media/voices/botanical-society-america>
- Thomas, N. (2021). Darwin's Many Doubts. *Evolution News & Science Today Today*. <https://evolutionnews.org/2021/11/darwins-many-doubts/>
- Xu, X., You, H., Du, K., & Han, F. (2011). An Archaeopteryx-Like Theropod from China and the Origin of Avialae. *Nature*, *475*, 465-470. <https://doi.org/10.1038/nature10288>