

On the existence of God from a philosophical and scientific perspective

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Introduction

Here, some of the arguments concerning the existence of God are examined as well as some of the replies to such arguments. Many of these arguments may have already been formulated in the past. The material presented is not any form of propaganda. The document begins by explaining a semantic point that is relevant to the rest of the arguments and is of general relevance to the topic. While some sections are scientific, the reader is reminded that because much of this text is predominantly philosophical, it may contain some elements that are subjective opinions and these do not claim to be absolute truths. Also, there are instances where the pronoun “he” is used for God although it is known

that the concept of God is usually without gender. The formality of capitalisation of the word God is usually used when referring to God in monotheistic religions but is in lower case otherwise.

Why is God's existence an issue? Many intellectuals maintain that the issues surrounding it are important because they have significant effects on human life. From a historical perspective, belief in deities has been influential on the development of cultures and systems of law and government. The mere presence of a God would in itself be important, since we would have to acknowledge him as our creator and his presence would shape our view of the universe and ourselves. However, in secular societies the issue can be completely inconsequential. Healthy social cohesion is evident in secular multicultural societies that advocate tolerance. In such societies, such beliefs are of little consequence on individual interactions and it is evident that people of faith and those who do not have one enjoy a strong social harmony. However, this does not by any means signify that the issue is not important on the global scale. Furthermore, the issue has regained attention in our age in particular, since scientific evidence is growing plentiful and the issue still shapes many aspects of international and internal politics. Some nation states advocate religious fundamentalism, and in these nations, the issue is more consequential. There is also international concern on the use of religion as justification for crimes and human rights violations.

Semantics of the word "God"

Many debates on the existence of God, it would seem, are severely hindered, on a discrepancy concerning the semantics of the word "God". The mere fact that that so many theists and atheists alike are able to confound the term in itself suggests that the term is inherently vague or at least multifaceted. Strangely, this simple semantic point has been somewhat neglected and yet carries significant weight. It becomes apparent when self-called "theists" frequently used the word out of context. It is interesting to consider why a term would be so confounded since most terms create no contention. In particular, mathematical concepts, which are well defined, seem to create no controversy. This could be because mathematical ideas and concepts are very similar between individuals. They are also meticulously defined. It is therefore proposed that for meaningful communication on the topic of God there is need to clarify what is meant by the word "God" and some of the concepts of "God" must at least be clarified if any useful debate is to occur. If the concept has several definitions, it may be useful to elucidate each of these, or at least made clear which one is being treated.

Of course the term may also be contentious because it may have been attributed to different "spiritual" experiences of different individuals. In this sense, it is used as a "joker term" to fill in where other words fail to describe a powerful experience or an entity. However, this can also sometimes be an incorrect usage and should be avoided. Another simple explanation for the extensive misuse of the word is that it is "buzz-word" that attracts attention. This could be because it carries extensive historical and emotional baggage. Again, use of the word merely to attract attention to headlines or titles as a psychological tool should be discouraged.

The concept of God is given to us by our societies' religions or tradition or it may be a concept that is attained by an individual through experience or reflection. It carries great weight and is often abstract so it can be difficult to define. While experiences and reflections on the nature of God vary, there is a basic general definition of the word "God" that is as follows:

1. In the context of monotheism:

A supreme being that is the ruler and creator of the universe and is intelligent, omnipotent, omnibenevolent and omniscient.

2. In a general context or in the context of polytheism:

A superhuman or supernatural being that is worshipped as having power or influence over nature or humans.

These two definitions seem to generally reflect the core of what is meant by the term according to several dictionaries [1, 2] and it is the general idea as it appears in theology and in most mainstream religions. Sometimes, the above definitions are extended to include such characteristics as omnipresence. Of course in religions the belief of God is vastly extended into a larger belief system, often based around scriptures. It is mostly in these specific details that different faiths vary and in which a particular faith has its identity. In particular, Abrahamic religions extend the concept of God in that God has the ultimate state of perfection, can hear and respond to prayers, perform miracles and forgive and punish sins.

Many scientists have used the word God in a non-religious way as a pseudo-synonym for the universe or the concept of ultimate fundamental laws that govern the universe. The canonical example is Einstein's popular quote "God does not play dice with us". Although this can be an effective metaphor, it has been misunderstood and misinterpreted by so many people that it is maybe best avoided. Furthermore, it is proposed that this is an incorrect usage of the word, since it does not fit the basic definition. In light of Einstein's rejection of a Biblical God, this "Einsteinian" God presumably refers to a non-personal God whose one and only sole property is being the source of the fundamental natural laws of physics. This concept are almost akin to the concept of "universe", which would render our new concept of God redundant and inconsistent with the traditional definition. A somewhat more controversial concept is that of an entity that not only is responsible for the laws of physics and any universes emanating from them but that also extends beyond physical nature and is responsible for mediating in some supernatural or mystical way what many people experience as spiritual emotions. This is discussed later.

Now it is useful to define some other terms. Theism is simply the belief in one or more Gods. Atheism is the belief of being certain, or almost certain, of disbelief in a particular God or deity. This means that atheism must be defined with respect to a particular God. Most people are atheist with respect to older gods like Zeus and Odin but it is easy to be a theist with respect to the "Einsteinian" God, the point being that the latter is, in fact, not God since it is a wrong usage of the word. So advocates of this very "basic", and much more easily acceptable, "Einsteinian" God are not necessarily theists. Agnosticism is the belief that the truth concerning the existence of a particular God or deity is unknown or inherently impossible to prove or disprove. Again, agnosticism is defined with respect to a particular God. It is possible to be simultaneously a theist, agnostic or atheist with respect to different Gods. It is also worth noting that many atheists are agnostic atheists, in the sense that they admit that a particular God is ultimately unprovable, but are almost certain that that God does not exist. The reverse is often sometimes true: an agnostic who says their certainty that God does not exist is about 99% could be considered an atheist since his certainty is very high, although not complete. However, the spectrum can be a little bit nebulous and this line between agnosticism and atheism is not always well-defined. In familiar language, agnosticism is sometimes taken to mean a simple lack of a definite belief by default, resulting from either not making up your mind or not having considered the issue at all. Theoretically, in the sense of this latter definition, minds of very young children born into secular societies would be

agnostic with respect to all Gods. Sensory experience and thought should be what tips the scales into one of the three positions for each possible God. However, indoctrination often tips the scales in a biased way. In this sense, Richard Dawkins rightly states that young children should not be “labelled” with a particular religion, or any other belief system for that matter.

Pantheism is the belief that God is an all-encompassing immanent entity that is identical with the whole of nature or the universe. Pantheism can be religious if the universe is regarded as a conscious God-like entity that is personal. Naturalistic pantheism is a more atheist-inclined form, acknowledging the mysticism of nature but maintaining that nature is all that exists and that it is not a deity in the traditional sense. Many older religions have pantheistic-like elements, including the “mother nature” view of the Earth when our vision of the universe was restricted to the Earth. Panentheism is similar to pantheism in that God exists as every part of nature but extends timelessly beyond as well, such that the universe is only the manifest part of God and that he pervades it. The “Einsteinian” God concept is therefore somewhat similar or equivalent to pantheism. Here, in the definition of pantheism, we see that God is meant to mean something significantly different than its traditional meaning because in the traditional meaning, “God” carries “baggage” attributes like a conscience, personality, intelligence, etc, not to mention that he can hear prayers, perform miracles, forgive sins and punish us. The only justification for the pantheists’ use of “God” might be because of the grandeur of the entity, both as a holistic entity and as an entity that is much unknown or whose origins we may never even know. However, this being said, we already have the terms universe and nature, so God is somewhat of a misnomer here, with only metaphorical value.

It is also important to note that the term “atheism” has been created somewhat artificially because so many people have a belief in a God. Astrology is not a very popular belief, so there is not a specific word for “non astrologers”. Atheism and agnosticism are almost interchangeable with “non-believer”, which in some senses reflects more accurately that it is merely a lack of adherence to a particular belief system.

Deism is a theistic position, where God created the physical universe but while he has a plan for it, he does not alter it by intervening in human affairs or suspending the natural physical laws that govern it. An important aspect of deism is that it maintains that logic, reasoning, human experience and observation of the natural world leads to truths about God. Hence it rejects revealed truths about God such as those in Abrahamic scriptures. This position became prominent in the Western World after the Age of Reason. Modern deists acknowledge that the nature of God cannot be objectively known so they hold a wide range of views on the nature of God and God’s relationship to the world. Pandeism combines elements of pantheism and deism. It is like naturalistic pantheism but with a sentient and conscious designer, God, who designed the universe. Panendeism combines deism and panentheism. It is like pandeism but maintains that the God is greater than the universe and has a separate existence alongside it, whereas pandeism maintains that God is incorporated into the universe as part of it. In other words, pandeism maintains the current universe constitutes the entirety of God but panendeism maintains he is even greater. Pandeism explicitly accepts the scientific view of the universe’s evolution, including chemical abiogenesis and biological evolution. Some choose to place a distinction where pandeism is a system with a cold, impersonal God, whereas pantheism includes a warm and experiential God.

Blaise Pascal describes a mystical experience in which he encountered the “God of Abraham, God of Isaac, God of Jacob, not of the philosophers and scholars” [3]. He thus draws a distinction between the two. Much of the rest of this document argues that these two are fundamentally different and so are their supporting arguments and their consequences for humans.

Philosophical considerations of God

The “first cause” argument

The argument is that the universe is like a chain of causes and effects and that therefore a “first” cause must exist and that this “uncaused” cause is God. This reasoning is similar to the claim in the monotheistic framework where God is the ultimate first cause of everything in the universe. He is the “prime mover”. Some theists even choose to define God as this very entity. Choosing to define God in this way is again somewhat similar to the “Einsteinian” God who “created the laws of physics”. Let us put aside for a moment that using this concept as the one and only sole definition of God is a misuse of the word God (since it is different from the basic definition). Indeed such an entity exists. It is true that the universe had to come from somewhere and that nothing can come from nothing. However, the argument says nothing about the entity. Atheists, agnostics and scientists already have words to refer to this entity: “the unknown universe” or “the unknown origin of the universe”. And there is no evidence that it fits the definition of God. In other words, there is no reason to believe it has the properties of intelligence, omnipotence, omniscience and omnibenevolence.

The study of the universe is treated in physics, and so we would be able to explore the nature of God insofar as the scientific method allows us. Anything beyond the reach of science would be, by definition, supernatural and unverifiable. This is a basic metaphysical problem since we may be forever destined to merely speculate about such an entity. Its nature and origin might forever be a mystery to us. As Carl Sagan said, referring to the concept of God, “why not skip a step and say the universe has an unknown origin?” This question is related to the “why was there anything at all in the first place” question, which may be a question that we may not ever answer by any means we possess, regardless of the existence of God. All the “spin-offs” of the concept that God is in some way equivalent to the universe, like deism, theistic pantheism and pandeism, all share the feature that God is in some way “conscious” or “intelligent”. These attributes are again somewhat speculative although ultimately there may be no way of verifying them in an absolute way. However, the argument on its own says nothing about these attributes. Such attributes are also somewhat very human-specific and it might be unfounded to attribute them to an entity that we do not or cannot know about. After all, the argument that the presence of human suffering, as discussed later, rather counts against the universe being sentient, conscious or intelligent suggests a rather more neutral entity with respect to humans and human morality. Therefore the argument is very unhelpful since it says nothing about the entity in question and is merely a re-iteration of secular observation.

Considerations on the God presented in Abrahamic scripture

Monotheistic religions based on scripture maintain that God has in fact revealed himself to us through scripture and that through these scriptures and other means he has told us about his nature and our relationship with him. However, this claim raises a variety of issues. Firstly, we now experience that the scientific method leads us to verifiable truths that are in contradiction with scripture. In light of this, God is either deceptive or inconsistent with scripture. This is examined later. Secondly, the claim

leaves us with a plethora of questions that expatiate the complications associated with scripture. Taking the Judeo-Christian Bible, for example, questions include:

1. Why does God not continue to create miracles (impossible occurrences) as he did in the times that scripture was written?
2. Why do angels (or other supernatural entities) only appear to some individuals?
3. Why does God not send another “son” or prophet to help us strengthen our relationship with him?
4. Why were there no useful scientific facts, nor clear, unambiguous, specific prophecies (that could not have been self-fulfilling) in the scripture?
5. Why are prayers that ask for a completely beneficial outcome not granted (even those that seem to be physically permissible)?
6. Will people who reject the Biblical concept of God be sent to hell?

Of course there may be answers to these questions, but they always have to be based on speculation from scripture. There is no way to test whether the answers are true or not. Often scholars that are considered experts in theism or learned holy people may come up with different answers. This occurs to a much lesser extent in other disciplines like science. The reason is probably because in science a theory can be tested by designing an experiment and the outcome, if the experiment is designed correctly, should clearly resolve the issue and provide an answer. This does not occur for the scripture-based speculative “hypotheses” such as those that might attempt to answer the above. This vast speculative framework that scripture-based faiths lead to therefore seems to be almost personalised, where the answers depend on personal interpretation. There is also the possibility that the ancient scriptures that form the base of many religions, in particular the Abrahamic scriptures, were written as myths that were possibly exaggerated forms of the events, with the remaining content possibly added to encourage a cohesive society but not necessarily historically or scientifically true. This possibility is sometimes considered with the face-value interpretation of scripture using Occam’s razor and subsequently accepted as the preferred explanation. Some maintain that there are scientific claims in the Bible and the Qur’an. These include alleged passages in the Bible that mention dinosaurs [4] and verses in the Qur’an that allegedly describe the Big Bang [5] and the emergence of life from water [6]. However, many of these passages are ambiguous so as to allow many interpretations and therefore are unspecific. Pseudo-poetic language is often inherently vague and quote mining for passages that resemble descriptions of scientific historical events is trivial. For example, one could almost as well say that Hesiod, the Greek oral poet, who lived around 700 BCE, also had knowledge of a Big Bang or a “big crunch” as emanating from Zeus’s thunderbolt [7]:

“Astounding heat seized Chaos: ... it seemed even as if Earth and wide Heaven above came together.”

The idea of descriptions of scientific events on its own also neglects to address why, if God really did intend those passages to refer to scientific events, he was not more precise and why he failed to deliver any scientific pieces of knowledge that would have been very useful and valuable. Examples would include the germ theory of disease, Newtonian mechanics, or even more simple things like dietary advice. Some have said that the language is scaled to the “simplicity” of the people at the time, but young teenagers do not have any difficulty grasping concepts from junior or children’s science textbooks, so this proves basic scientific concepts can be formulated in simple language and understood. Therefore the argument that God had to adjust the technical level of the language so as to make it comprehensible or accessible to the time and people is invalid.

C. S. Lewis presents us with the Jesus trilema, which is that because Jesus claimed to be the son of God, he was either delusional, a liar, or indeed the son of God. However, this trilema is not posed every time a person claims to be the son of God, as many have since then. It is possible that Jesus meant some of his words metaphorically, and in no way would that undermine the power of his moral teachings as moral lessons. It is also possible that in the time the Bible has come to us the descriptions of Jesus's life have become distorted by "Chinese whispers" phenomenon. Indeed information technology back then was virtually nonexistent and could have therefore easily been susceptible to distortions or censorship.

This "personalised" aspect of what is interpreted by scripture has similarities with another important human observation. Many theists claim that one of the reasons, if not the main reason, for their belief in God that they have had a personal experience that proves to them the existence of God. These experiences vary greatly, but they are not felt by many people. In fact, the amount of people who claim to have a clear, lucid experience of a specific God-related supernatural entity, such as an angel, seems to be a relatively small portion of the entire theist populace. Nonetheless, they are still very numerous and they are very powerful testimonies and do point towards the existence of a God in the sense that they could, in theory, emanate from a supernatural entity. Here we have the human populace split into two considerable fractions: one that claims to have had a direct personal experience of God (or a specific God-like entity), and those who have not. The reason for this difference in human experience is noteworthy and a somewhat difficult problem. In fact, many instances of theological debates can be reduced to this seemingly fundamental problem. Again, some have used Occam's razor to prefer the explanation that such experiences are unknown works of the human brain, of which very much still remains unknown and which scientists still hope to elucidate. There is also no certainty that the entity that is responsible for these "personal experiences of God", if indeed an external entity at all, is not within the naturalistic framework and therefore not supernatural.

Other considerations

There is another very important point to consider here. According to the scientific framework, our brains evolved by the mechanisms of evolution. However, our brains could be "optimised" for spatial scales that we live in, thus not allowing us to comprehend intuitively the makeup of the rest of the universe. This is very well exemplified by the non-intuitive nature of quantum mechanics and makes a strong case for the quote by Eddington or Haldane:

"The universe is not only stranger than we imagine, it is stranger than we can imagine."

In other words, our brains, as well as our other sensory machinery, have evolved to have a narrow perception, not just for sensory detection but also for mental processes. A good example is the very narrow range of the electromagnetic spectrum that can be detected by our eyes. In a similar way our brains may have difficulty in comprehending processes outside our usual local spacio-temporal scales.

Logical contradictions

An evident problem that is immediately obvious, given the concept of God described in the basic definition and the more extended scripture-based monotheistic God, is that some of the attributes

of God lead to an inconsistency. Similar arguments to this have gone under the name of “the argument from evil”, the first of which was probably Epicurus (341 - 270 BCE). It is most simply described using a pseudo-ploysylogism with simple Aristotlean logic and deductive reasoning.

1. If God was omnibenevolent and omnipotent, he would avoid unnecessary human suffering
2. God is omnibenevolent
3. God is omnipotent
-
4. There is no unnecessary human suffering

5. There is unnecessary human suffering

Here we have a contradiction: the conclusion, statement 4, is false and we know that statement 5 is true (“Unnecessary suffering” here is contrasted to “suffering”, which may be a necessary condition for happiness as we perceive it, since it may be impossible to know what happiness is without any experience of at least some suffering or “unhappiness”). Either the logic is wrong, or one or more of the premises are wrong. Let us examine each of them. The logic is correct. Statement 4 follows from the 3 premises above it. Statement 2 is correct since this is a defining and necessary attribute of God. Ditto for statement 3. Statement 1 is the statement that probably most theists would argue has a problem. Theists frequently maintain that God gave us free will and that he cannot force us to do the right thing, lest we become like “robots”, so our suffering is our own fault. Some also say that God wants us to reach heaven on our own and that it would simply be too easy to give us heaven up front from the start without working for it. Some say that God is like a father figure that sometimes has to punish his child to make him learn when he disobeys and so allows suffering. All three of these lines of thought can be problematic. For argument’s sake let us assume God gave us free will. From human history, we know that humans have spontaneously engaged in actions that generate human suffering, such as war. God, being omniscient would have known that we would spontaneously do so, and being omnipotent, why would he not have equipped us with superior moral skills or social skills to avoid it, such as superior moral or emotional intelligence? Or why not give us some apparatus in our bodies that facilitates social communication, such as a physiological apparatus that allows sharing of mental experience and distant communication? He could also have set up structures or guidelines that would encourage social cohesion or help us attain it. Or he could have given us structures and guidelines that can help us on our way to being spiritually more elevated and humane. Of course this is precisely what Judeo-Christian scripture maintains he did with the 10 commandments [8], but something more descriptive and extensive, both in content and how it should be interpreted, is referred to here. Yet there is no evidence of divine intervention of this kind, except perhaps for our ability for true altruism and love for others, but even that is sometimes insufficient to counter our other less noble dispositions, since there have still been many acts of war and corruption throughout human history. With unlimited knowledge and power, God should have been able to conceive of a mechanism to allow us to experience or reach heaven or understand his mystery without the extent of suffering that we have gone through, even with our alleged free will. Many also say that God is perfect. If a perfect being can only create perfect things, and we are God’s creation, then why are we not perfect? This point is re-examined later.

The point that God didn’t want to give it to us all up front and make us “work” for heaven is an interesting notion, but ultimately problematic. For starters, some have to work harder than others to have a happy life due to “luck of the draw” circumstances in which various people are seemingly born. Assuming reincarnation does not occur, people are born with genetic, social and economic predispositions out of sheer accident. But even looking at humanity as a whole, a similar point as the one made previously applies: one could easily imagine God being able to provide facilities to reach a

heavenly state without as much suffering as has happened. An example is as follows: earthquake-proof houses and towns are superior to those that are not. Consider an earthquake that kills hundreds of people and makes many more hundreds homeless. Why not kill only tens of people and not hundreds? Surely this alone would suffice to make us learn our lesson: build earthquake-resistant houses. The loss of a single person in itself constitutes a tragedy, so there is no apparent reason for the extra loss. God being omniscient and omnipotent must surely have a more sophisticated technique to make us learn from our mistakes without the amount of suffering that is present. In short, there is unnecessary suffering; other examples include the many thousands of deaths resulting from pandemics of pathogenic bacteria.

This short investigation suggests that premise 1 above is correct. Therefore, we come to an important result: either God is not omnipotent or he is not omnibenevolent. Again let us examine these separately. Firstly, if God is not omnipotent, he is not God by definition. But for argument's sake let us allow for the existence of a non-omnipotent God. This would imply that he is not all-powerful and that there are forces in the universe that he does not control. By extension, he is a lower being than the universe. Then why worship a being that is not the ultimate being or the highest being in the universe? Why worship an entity for which there are things that are beyond his control or which he is not part of? Indeed again, this is not necessarily a God worthy of the name and arguably does not deserve worship. It would mean that in some way God must be "inferior" the rest of the universe that he does not control or which he is not a part of, since he himself on his own does not compose the whole mystery in its entirety. The only possibility is that he is the second highest being after the universe and the highest being with intelligence and power if the rest of the universe that is not a part of him is completely neutral and without intelligence. This is possible, but is merely speculation with no evidence and no foundation and it is inconsistent with the notion that of God being the greatest possible being.

Now the second possibility is God being not omnibenevolent. This is one of the most worrying and unpleasant prospects. Again a non-omnibenevolent God is not God by definition, but let us consider it anyway. It would imply that God is not wholly good and that maybe he even does things that cause human suffering intentionally and deliberately. This is now much more akin to the kind of God described in the Old Testament of the Judeo-Christian bible. This God, arguably, is not worthy of worship either, for why worship an entity which is not wholly good or partly "evil". Again it is indeed possible that God is this way, but also again it is a pure speculation with no evidence or any foundations. In a more familiar but equally unpleasant proposition, God may be a scientist experimenting with universes and we happen to be one of his experiments which he is simply conducting for good sport. Many people have formulated this idea before. If God is indeed this way, a more appropriate course of action would be negotiation, reasoning and attempting to plead with him for pity, rather than worship. Such a God is no longer "merciful" or "all-loving". Such unpleasantness makes a case for anti-theism and has parallels in the real world in a vigilant and authoritative totalitarian society. Ironically, however, such a God, given the unnecessary suffering in the world, is more likely than the "all-loving God" that is claimed to exist by a large fraction of the theist populace.

In conclusion, the attributes of God are internally inconsistent. Much of this follows from the simple fact that unnecessary suffering is mutually exclusive with the human concept of perfection. The reasoning is simple and can be formulated by a young teenager. Nonetheless, millions of adults believe in a God with these attributes.

Use of the word “God” and cosmological arguments

Different religions extend the idea of God in many different ways. However, this is not in itself a negative, since different religions could represent different human attempts at understanding the great mystery just like competing theories try to come up with an underlying law that explains a scientific set of observations. Except, of course, that the natural “universe” that science claims to understand is not necessarily attributed properties of omniscience and omnipotence.

Usage of the word God for cosmological entities is frequent and is a misnomer, as mentioned earlier. It is indeed true that there must have been something before the Big Bang of our universe. It is true that time, at least as we know it in this universe, must have started a finite amount of time ago. It is true that nothing can come from nothing (if there really is absolutely nothing existing). But this is not what cosmologists claim; they do not believe that “something came out of nothing”. Cosmologists now have theories for why the Big Bang happened and what there was before it, after it and what will happen to our universe. Two theories in particular, while still partly speculative and at present difficult to test, are very strong and very successful at explaining and describing what we observe in the universe and what probably occurred before and after the Big Bang. These are loop quantum cosmology (LQC) and string theory. Both of these offer an explanation that unifies the 4 forces that govern the universe (weak, strong and electromagnetic, described by quantum mechanics, and gravity, described by general relativity). LQC, which is based on loop quantum gravity (LQG), solves the Big Bang singularity problem by proposing the universe was not a complete singularity before the Big Bang but just extremely dense and after reaching a density threshold it exploded and expanded. It is possible that some of the “memory” of fundamental constants from the previous universe may have been lost upon the Big bang explosion, although this is a matter of some contention at the time of writing so is unclear [9]. LQG describes spacetime as discrete quanta in the Planck scale. String theory, the other candidate theory, uses a large mathematical framework where fundamental forces and particles are described as resulting from 11-dimensional strings. The theory points to a multiverse, where, by anthropic reasoning, human existence is not just possible but inevitable. Like LQG, it describes very well the fundamental forces of the universe. It is possible that some aspects of these theories may be supported or disproved by experiments like the detection of cosmic background radiation and experiments in particle colliders, which attempt to “re-create” the conditions of the Big Bang. Even if not in the near future, some experiments might theoretically be possible one day to support or disprove the theories. There is quite a strong case for the multiverse in physics. Recent developments in superstring theory and M-theory, which stands for membrane-theory, suggest that sub universes are created when two higher-dimensional parallel branes collide and result is a big bang that gives a 4-dimensional universe like ours.

The entity called “universe” or “multiverse” by cosmologists, is not necessarily the same as God. The words “universe” and “God” are not the same. The two terms are not interchangeable. The universe could very well be completely neutral with respect to human morality and it could be completely unconscious and unintelligent, whereas God has necessary attributes (such as omniscience and omnipotence). So merely saying that something must have pre-existed the Big Bang or that “nothing can come from nothing” merely proves the existence of a particular aspect of the universe. It does not prove God and it is not a compelling argument for God’s existence. Such a claim is a mere confounding of the two words.

Many also have said that the universe is finely tuned for life. This may be partly true, but if cosmology theories that allow anthropic reasoning are true, then life would have come about automatically. A more aggressive form of the strong anthropic principle is that a multiverse is not

necessary and that our universe's fine tuning was simply very lucky because otherwise we would not have been here to inquire on it. However, I admit this particular form of anthropic reasoning is not completely adequate since it does not completely explain the "fine tuning" of our universe. However it is not all together discardable since it is true that some systems must eventually take a state even if the individual probabilities of any one state are improbable.

Also it is important to note here that there may only be one fine-tuned fundamental physical constant, namely is the dark matter ratio. According to the cosmologist Steven Weinberg, this is the only fundamental physical constant that appears to be exceptionally fine tuned [10]. This realisation came to physicists when it was observed that our universe's expansion is accelerating due to a force called "dark energy", described by the cosmological constant (Λ) in the equations of general relativity. The discovery of dark energy and dark matter showed that they make up most of the universe. This exponential expansion of the universe is called cosmic inflation. Λ was originally introduced by Einstein in his equations of general relativity to describe a static universe, but it was then thought to be zero until recently is it given a small positive value. This value seems to be fine-tuned for allowing the formation of galaxies and hence for the emergence of intelligent life. There is no evidence, to the knowledge of the author, that any of the other fundamental physical constants are very highly fine-tuned. It is also worth noting that gravity, given the presence of galaxies, does not seem to be essential for the emergence of life, since much of the mechanisms in the formation, evolution and functioning of life are governed by chemistry, which is predominantly dependant on the 3 other forces (strong, weak and electromagnetic). There is also evidence suggesting that the weak force is seemingly not necessary for the emergence of life [11], although this has been put to doubt because of its importance in the formation of oxygen and hence the water molecule, deemed an indispensable ingredient for life to emerge [12]. It is also important that there is no evidence, to the knowledge of the author, to suggest that one or more of the other fundamental physical constants, if taken another value, would create more life than the amount we observe. Such a discovery would invalidate the claim that the universe was "purposefully" or "intelligently" fine-tuned for life. Given the actual scarcity of life in the universe, it is not unimaginable that this might be the case. Even on our own planet there are large regions that simply do not support life. The anthropic argument can actually count against God, since it shows that for life to occur, God had no choice but to fine tune Λ to allow the emergence of potential worshippers like us. If he really was omnipotent he might have been able to find different laws that achieve this more directly.

Many theists maintain that God created life and ourselves through evolution. While this is certainly a possibility, it is undermined by the apparent scarcity of life when we see that the vast majority of the area in the universe cannot support life. It also begs the question as to why, being omnipotent, God could not have taken a "short cut" like the one classical creationism describes instead of billions of years of evolution. And also, a caring intelligent creator would not have implemented genetic diseases and ailments. Furthermore, creating humans via evolution would imply that he intentionally and knowingly placed all the environmental hardships that our ancestors had to suffer through, such as ice ages, famines, droughts, etc. There is strong evidence that humanity went through a bottleneck in numbers near extinction about 70000 years ago [13]. In this sense, evolution counts against even the more "moderate" advocacy of theist doctrines.

Suggesting that the universe was created by an intelligent creator actually does not help in any way in understanding the universe since it does not explain anything about the nature of the creator, let alone how or why he created the universe. Science might not be able to say "why" the fundamental laws of physics are as they are, but it does offer explanatory power. If anything, having a creator as an explanation complicates the matter even more, since the questions and implications of an intelligent

creator rise exponentially. It also leads to an intellectual dead end, since it takes away the need for further explanations. This is true even more so if God is outside the reach of the scientific method. On a more familiar note, it would be somewhat sadistic of God to install in us our inquisitive nature and desire to understand him if he is unknowable through the use of our logical reasoning and powers of observation that he has endowed us with. And this is true even more so when we see that science has a track record of explanatory and predictive success. If God does exist and did create us and the universe, and if science does not lead to knowing him better, then that would imply that he is intentionally deceptive. Again, this contradicts the basic attributes of God.

More feeble attempts at using cosmological principles to prove God include statements like “God is the sum of all the energy in the universe”. This is again a misnomer and is unhelpful. The realisation that this type of statement was a misnomer and that it confounds what is meant by God was expressed to the author by a young teenager, which proves that these concepts are indeed somewhat simple to refute.

So in conclusion, the word God is used diffusely and some of the arguments surrounding God’s link with cosmology (those mentioned above) are not compelling. Steven Weinberg actually made the point that if a person actually knows what they mean by the word “God”, then they have the complete mystery there already, and if not, then maybe they do not know what they are talking about [10]. It is suspected that the mass usage of a word with such a diffuse meaning might be construed as a matter of ridicule under any other context if it wasn’t under the “protective bubble” of religion, which as Richard Dawkins points out is evident in our modern era.

The relationship of science with God

As discussed previously, the ultimate origin of the laws of the fundamental laws of physics might remain a mystery forever. This is related to the question of why did anything have to exist at all. In other words, why could there not have been a zero amount of anything, a complete void of utter non-existence of anything whatsoever? Or why is there any order at all in the physical universe, as opposed to complete and utter unpredictable chaos? As discussed previously, this is a metaphysical problem that is more fundamental than the existence of God. Even if we are products of blind chance in a dynamical multiverse, the existence of the multiverse itself would be a mystery.

While there are many gaps in our scientific knowledge, in the opinion of the writer, there are only about two or three major questions that science currently fails to explain in a way that could maybe suggest the presence of a higher entity, possibly, but not necessarily, supernatural, with elements akin to human consciousness or intelligence. Most other questions are specific aspects of these or reiterations of these basic questions.

The first, is an explanation for the nature and origin of human consciousness and emotion. Many human emotions are highly suggestive of a connection to a spiritual entity. Examples like accounts of human experiences from meditation are very powerful. Other emotions like conscience and compassion are also powerful. The nature of these is related to the much debated and historically contentious mind-body problem. However, human emotions could also be rooted in the biological intricacies of the human brain. This observation might one day be explained with neurology. It may be an instance of a gap of knowledge that may be attainable to understand with continued scientific investigation. However, some scientists have proposed that altruistic emotions as possibly misfiring of

evolutionarily constructed behaviours. Even powerful emotions like feeling connections with nature and seeing beauty in nature could maybe have an evolutionary explanation even if all the specifics of such an evolutionary mechanism have not been completely elucidated. It has also been suggested that our intelligence that separates us from other mammals is partly a rare genetic drift event. Patients that have suffered severe brain trauma or destruction of sections of their brain destroyed often have sections of their memory wiped out, suggesting that memory at least, if not emotion, is physically-based. While it is possible that our intelligence and our brain's capacity to generate such wonderful emotions could have evolved by evolutionary mechanisms, it is true that there is a partial gap of knowledge as to how we evolved to be so mentally different from other animals. It is interesting to ask, for instance, whether or not our ancestors felt love, compassion and conscience like we do today. However, this gap of knowledge that explains the origin of our capacity for human emotions does not directly suggest the presence of a God-like entity. Such a gap might be ultimately explainable in biological or evolutionary mechanisms, or, if it is due to a higher conscious entity, it is probably not one that is as depicted in the holy scriptures since the evidence is against these. And as mentioned before, if such a higher conscious entity exists, we know very little of its nature and we do not yet know if it is ultimately explainable in terms of science, or if it really is a truly supernatural entity that is completely out of reach by any physical means. Indeed, rather many people have maintained that they are "spiritual" but that they are not "religious". It is interesting here also to speculate whether or not it is possible to evolve emotional intelligence by some other means that evolution of replicating molecules or in such a way that a renewing individual could evolve such that it has intelligence and has happiness but is on its own without any other individuals akin to it.

The other question is somewhat related to the first and is why such a split in human experience occurs with respect to alleged supernatural experience. On one had, many humans have experienced what they construe as divine experiences whereas many other people, on the other hand, have not. Perhaps the two positions are merely extremes of semantics, where all people have had a "spiritual" experience but some people use the word "God" to help describe it, whereas others choose a more neutral description. However, this still leaves out the very specific examples of the many accounts where people have experienced specific detailed supernatural deity-related entities like angels. These reports might suggest, at least to the ones who have experienced them, something of a possibly divine supernatural origin. Many reports also speak of ghosts. It is interesting, however, that there have not been any absolutely irrefutable documents that testify as proof for such entities, possible because such manifestations are so easily possible to stage, especially with current technology. It also begs for a scientific project to attempt to detect such entities. Such attempts have presumably failed and it is easy to see why funding is given to more pressing matters of science rather than the detection of angels or ghosts. In light of the absence of evidence for these supernatural entities and God, and with the knowledge that we have of biology, Occam's razor might suggest that another explanation may be more favourable, such as hallucinatory-like mechanisms or as of yet unknown brain functions.

Dr. Michio Kaku, a contemporary string theorist and renowned populariser of science, reiterates Pascal's distinction between the God of and prayer and the God of scientists. He states that the ultimate scientific quest is to "read the mind of God" by finding the equation(s) that describe(s) all of physical reality, including, perhaps, even love. The basic problem is that we will never know if this equation, if we ever find it, will actually be "God" in his entirety or if, like in panentheism, this equation only represents the observable part of God and God extends beyond it in a realm that is completely inaccessible to our reason, comprehension or empirical exploration. If the most complete scientific theory that we can ever possibly achieve at some time in the future explains, or at least is consistent with, human emotions and what were perceived as "supernatural experiences", then, by definition, the rest of God would have to be complete speculation, since any human experience that

eludes the theory proposed would render the theory incomplete. This is another way of viewing the metaphysical conundrum in terms of deciding between pantheism and panentheism. It also begs the question of if the “supernatural” is merely a synonym of “the scientifically unexplained”. We also therefore see that the issue is whether or not God extends beyond the physical world in such a way that it is strictly impossible for us to observe with the scientific method. If so, the only way to know God would be via supernatural experience. So we see that the real contention of the issue of God lies in the interpretation of these “supernatural experiences”. The question is how much faith we place in the potential of the scientific method. In other words, does it have the potential to, eventually, explain human emotion, consciousness and “supernatural experience”. Is there something outside the physical world? Many observations suggest that the universe is completely physical, such as those that were mentioned earlier. Our modern scientific framework explains most phenomena. However, it is So it is because we can have faith in science to explain the human experiences that appear to be supernatural that God, as in the basic definition, is not the only explanation and thus the presence of those experiences do not confer proof of God. The human populace is not much split in “supernatural experiences”, but most, if not all, have felt emotions such as friendship, compassion and love. The entire issue can then basically be summarised in the question of whether or not such emotions are physical. This is where the true contention lies, since the global populace is truly and widely split on this question and the issue has not been yet resolved in an absolute way. The position of physicalism answers the question positively and asserts the absolute authority of physics in this way. It is also interesting to consider if discovering a natural physical basis for love would undermine it. Probably it would not, since our knowledge of its mechanisms would not change the way we experience it and its importance, even though we might view it from a different angle. After all, we can see that physicalist-like belief systems still allow appreciation of emotions and a rich, fulfilling life. It is also worth considering here whether it is possible to create a sentient computer or artificial human. If so, this would prove physicalism as a possible, though not necessarily the only, basis for human mind and emotion. This is similar to the Turing test. Indeed, a computer that passes the test would, in fact, be equivalent to a human for all intents and purposes.

Lack of evidence for God

Scientific evidence for an intelligent, omnipotent and omniscient supreme creator is lacking. What would constitute convincing evidence? This differs across individuals, but examples might include:

1. Any specific, detailed, non self-fulfilling prophecies predicted by scripture.
2. Worship of a particular god predisposes people to be more healthy, lucky or happy.
3. Lack of belief predisposes people to be more unlucky.
4. Praying for something makes it come true.
5. Other verifiable physical evidence.

To the knowledge of the writer, all these are lacking. But does this lack of evidence constitute reason to affirm the non-existence of God? Should we look for evidence that proves God or evidence that disproves God? This is an instance of an actual real technical issue in science. For example, we now know that smoking strongly correlates with cancer and, in fact, can cause cancer. But in our investigation to elucidate the link between smoking and cancer, should we first assume that smoking does not cause cancer and then look for evidence that it does cause cancer? Or should we first assume that smoking does cause cancer and look for evidence that it does not cause cancer? This initial

assumption of “status quo” that the object of our investigation is absent is called the null hypothesis (H_0) and it can sometimes make sense to shift it, although the default position is taken to be scepticism, so in the smoking example the first position is preferred. However, in waiting for the evidence, many people could have died of cancer. This illustrates that the null hypothesis should be considered in light of previous human experience. For example, we might have had clues that smoking caused cancer from our previous knowledge of biology and chemistry and so should have been put off smoking before the proper evidence came in. Unfortunately, in many cases the evidence only comes once the damage has been done. So in the case of God, we should be sceptic by default and only convert if proof of God appears. In other words, the burden of proof lies with the believers. However, such proof seems to be lacking.

Having said this, it is impossible to disprove the existence of God. However, there is no evidence supporting his existence. The popular quote by Christopher Hitchens “What can be asserted without proof can be dismissed without proof” is relevant here. To illustrate this point, non-believers’ militancy developed parody religions, such as the Invisible Pink Unicorn (IPU), the Flying Teapot and most notably the Flying Spaghetti Monster (FSM) (Pastafarianism). The Flying Teapot (aka the Celestial Teapot) is not so much a parody religion; it is merely an analogy first coined by the philosopher Bertrand Russell to illustrate the point that the burden of proof lies with the believer. He said that if there was a flying teapot orbiting the sun or, say, dissimulated among the bits of rocky material that constitute the rings of Saturn, its existence would be unverifiable since even our most powerful telescopes. As with God, it is impossible to disprove the existence of the IPU or FSM or the Flying Teapot. But there is no evidence supporting their existence. If I want to prove that the IPU exists, then the onus is on me to provide a proof. So in other words, the burden of proof is on me, the point being that if physical evidence for God is completely lacking, God, FSM, the Flying Teapot and the IPU have the same status in human credibility.

One particular agnostic position is to maintain that since we do not know whether or not God exists there is a 50-50 chance he does. One could say the same thing about the celestial teapot, but our knowledge of physics give us a priori information that allow us to calculate that the celestial teapot is probably not existent. More specifically, this applies to the talking snake [14] and the virgin birth [15]. Claims such as those fly in the face of uniformitarianism, a belief which people take for granted as they fly in aircraft at 1000s of meters of altitude without the panic of worrying that the established laws of physics might haphazardly cease operating. The scientific method usually places confidence for its claims at least at 95%, except those that could have other alternative interpretations. Most established scientific facts, such as principles and laws have a much higher confidence. Human experience has shown that the laws of physics generally operate in the same way in our area of the universe. If, within our lifetime, we see that these laws operate unchangingly day after day, it is not an unreasonable assumption that they have been operating in the same way in the past in the absence of evidence that suggests otherwise.

Further logical inconsistencies

These are simpler discrepancies in the attributes of God for a God concept that is slightly extended from the basic definition. Some are only applicable to the Judeo-Christian dogmas but they can reveal that there are some inconsistencies with the stories concerning Genesis and the creation of man. Only a few are mentioned here, but they are numerous and pervasive in Abrahamic scriptures.

1)

1. Something perfect can only create perfect things
2. Humans were created by God
3. God is perfect

4. Humans are perfect

5. Humans are not perfect

2)

1. If Adam was perfect, he would have rejected Eve's offer to eat from the apple in spite of temptation
2. Adam was created by God
3. God is perfect
4. Adam was perfect

5. Adam rejected the temptation of the apple

6. Adam didn't reject the temptation of the apple

3)

Ditto, but for Eve and Satan in the proposition 1 and Eve instead of Adam in all other propositions.

4)

1. All angels were created by God
2. God is perfect
3. All angels are perfect
4. Satan was an angel
5. If Satan was perfect, he would not have envied God and fallen from grace

6. Satan would not have envied God and fallen from grace

7. Satan did envy God and fell from grace

Therefore, this "evil" must have come into Satan from some other place. This could be a fundamental problem with our human conception of "perfection". Assigning perfection to God is probably always leads to an inconsistency. Many non-perfect things exist, so once again, this undermines another basic attribute of God: omnipotence. Again, this inconsistency was noticed by a teenager. Such logical inconsistencies take a trivial amount of inspection of the Judeo-Christian dogmas to uncover.

Pascal's wager and considerations on the origin of divine law

Pascal's wager is in fact not an argument for God's existence. It is an argument in favour of believing in God. It does not treat the actual existence of God, only the belief in one. It would otherwise be dismissed here if it did not raise some noteworthy issues. In its basic form, the rationale

behind the wager is to consider separately all the possibilities that are played out regarding the existence of God and our belief in him. Disbelief in God if God exists would engender an infinitely negative outcome (going to hell) and a neutral outcome if he does not exist, whereas belief on God would engender an infinitely positive outcome (going to heaven) if he does exist and merely a finite negative outcome if he does not. Therefore the “safest bet” would be to believe to avoid an infinitely negative outcome. This rationale can be represented and analysed with choice theory, with the payoff matrix shown below.

Payoff matrix

	God exists	God does not exist
Believe in God	$+\infty$	$-n$
Do not believe in God	$-\infty$	n

Where n is a finite integer. From this it is easy to see the best choice would be to believe in God.

However, the “wager” makes the very crucial assumption that the mere fact of not believing on it’s own is necessarily going to send you to hell. This prospect has several problems attached to it. Such a belief would entail that the ultimate forces operating in the universe, be it God and the Devil or God alone, make an important judgement on something as arbitrary as your belief in him. Plato, centuries before Christ and in the midst of a polytheistic society, said,

“Is that which is holy loved by the gods because it is holy or is it holy because it is loved by the gods?” [16]

This points out an important issue on divine dictation of moral codes and whether or not moral codes of divine origin necessarily mirror the purely human definitions of goodness. The answer to the question also carries on the weight that human welfare carries in the divine grand plan. If divine and secular moral codes are interchangeable, then the divine origin of the codes would be redundant and it would undermine the usefulness of religion as a system for moral cohesiveness. If they are not, then human welfare is not a top priority for God, which could be contradictory with Godly attributes, as discussed earlier. In practice, very often moral codes of holy scripture have a large overlap with moral codes that can be constructed from a secular humanistic perspective and ethical reasoning. An example is Christ’s well known moral law of ethical reciprocity (also formulated in many other religions, philosophies and cultures):

“do to others what you would have them do to you” [17]

The Dalai Lama, the highest authority in Tibetan Buddhism and Nobel Peace Prize winner, also commented on the issue when he said,

“All major religious traditions carry basically the same message, that is love, compassion and forgiveness ... the important thing is they should be part of our daily lives.”

So in that sense, all religions worship a similar God. Again, this is a useful phrasing but an incorrect usage of the word God. However, scripture often contains “extra” commandments that enforce the authority of the deity. An example is from the 10 commandments of the Judeo-Christian Bible:

“... you shall have no other gods before me ... You shall not make for yourself an idol ... for I the Lord your God am a jealous God, punishing children for the iniquity of parents, ... but showing steadfast love to the thousandth generation of those who love me and keep my commandments.” [8]

The concept of having fundamental love and respect and providing service for fellow human beings is more consequential, from a human perspective, than the individual's belief in God. Yet still someone who maintains these human values will go to hell nonetheless if they are lacking the belief in God. Again such a God would be internally inconsistent for simultaneous omnibenevolence and omnipotence. The person in question need not even be agnostic or atheist. Surely at some point in human history a member of some non-monotheistic religion, say Hinduism, must have been exposed to the Abrahamic scriptures and had the claims made in them explained to them and still they decided to stick with their native religion. Then, such a person would have been sent to hell even if they upheld some of the other commandments present in the scriptures that are humanly more important, such as treating others with respect and compassion. There is also the assumption that the correct God is being worshipped. Perhaps merely being in the wrong Abrahamic religion suffices to constitute a breach of faith in God that will send you hell. It is also worth considering the myriad pre-monotheistic civilisations were dealt with. What would have happened, say, to Aztecs, ancient Egyptians or Native Americans upon their death? Surely they would have been forgiven in their ignorance. Now if someone still advocated to such beliefs today, in knowledge of Abrahamic scriptures, they would be sent to hell; this would place God as the worse Human Rights abuser in the known universe, unless his power was contending with another power like the Devil, but again this would severely undermine the metaphysical and philosophical integrity of God as a concept, as discussed earlier. Sam Harris makes the point that if indeed merely being in the wrong Abrahamic religion constitutes a breach of faith, most people will go to hell due to mere statistics and any random human is more likely to go to hell than be saved by mere probability.

Replies to other specific arguments for the existence of God

1. The argument from design

This was formulated by William Paley (1743-1805) who used an analogy with a watch: he pointed out that if the pieces of the watch are in a box and you simply shake the box in an unintelligent fashion, then the pieces cannot come together to form the watch. It requires an intelligent designer for the pieces to come together to create the watch. Therefore by analogy the earth, humans and the rest of the universe show signs of design so they must also have been designed by a very able designer.

This argument was invalidated as early as the 18th century by David Hume and it has been invalidated many times since then. It may have seemed logical or rational when we had complete lack of naturalistic knowledge, which may explain the predominance of theocracy and religion in early human societies and primitive humans. The presence of a watch or a painting or a building points to an intelligent entity because we have no naturalistic explanation for them. Indeed, there are no watches, paintings or buildings that predate the birth of humans. If there was, then indeed it would point to other hypotheses like pre-human terrestrial civilisations or visits from extraterrestrial civilisations or some other intelligent being. We now have naturalistic explanations for many phenomena, including the earth, humans and the evolution of the universe. The origin of the form of the physical laws, as described previously, does not yet, or may never have, a naturalistic explanation because it could be a

fundamentally unanswerable metaphysical question. But, as described previously, this lack of knowledge does not necessarily point to a God but rather to a neutral entity that may be metaphysically impossible to know. Our “explanation”, then, of the origin of the universe is answered in terms of an increasingly more fundamental theory of physics, although the ultimate origin of the form of this theory is unknown and may never be known. Therefore again the argument is unhelpful and says nothing about the fundamental entity that may have “designed” us that is not already observed by scientific philosophy. It is a bit like saying that the “laws of physics” are “omnipotent, omniscient, and omnibenevolent”. On the contrary, it seems the laws of physics are not so: they are responsible for a universe that seems to be very scarce in life and even in the life that we know of, there is unnecessary suffering that arose by natural means. There seems to be nothing “omnipotent, omniscient, and omnibenevolent” about the thousands of ordered structures that occur in the universe like ice crystals (which occur outside Earth as well). A more intriguing possibility is that specifically our minds were created by God, but again, our minds may have a natural cause and all other claims remain somewhat speculative.

Peter Kreeft, a Catholic apologist, comments on the argument from design and the first cause argument saying,

“The proofs do not by any means prove the everything the Christian means by God, but they do prove a transcendent, eternal, uncaused, immortal, self-existing, independent, all-perfect being. That sounds rather like God. A pretty thick slice of him anyway.” [18]

In fact, the arguments, or “proofs” as Kreeft calls them, do not prove a single defining attribute of God. The entity alluded to in the arguments is not necessarily transcendent, depending on how you define the universe. For example, the universe is transcendent with respect to just our “sub-universe” or the Big Bang on its own if you consider that the unknown universe is a larger entity that caused it, or if you consider a dynamic multiverse where our Big Bang universe is only one of many. So “transcendent” is a misnomer here. “Eternal”, “uncaused”, “immortal”, “self-existing”, again, can all be said of the universe, putting aside that immortal and eternal are synonyms in this context. “Independent” can also be said of the universe, since by definition, it is all that exists. “All-perfect” is an incorrect attribute, since the proofs say nothing about the perfection of the alluded entity, and the human conception of perfection is obviously not present in the universe, as evidenced by unnecessary suffering. As a result, the slice of “God” that is proved is so thin that it can be said of the universe, and the real attributes of God, such as intelligence, omnipotence, omnibenevolence, omniscience and omnipresence remain lingering without support. Ironically, the proof of these characteristics is only a mild task compared to the burden of proof that remains for the rest of the claims about God in the Catholic position.

2. The ontological argument

While there are many versions of this argument, the most simple form is as follows:

1. God is the greatest possible imaginable entity for which no greater thing can possibly be imagined (God is the most perfect entity imaginable)
2. Necessary existence is a perfection
3. Therefore God exists

This argument is somewhat irrelevant, since it assumes the existence of God *a priori*. An entity must first exist if it is to be assigned any attributes to it or if it is to have any attributes at all. Attributing necessary existence to an entity whose existence you are trying to prove defeats the object and is nonsensical. Also, it is easy to imagine a fictional entity and then claim that one of its attributes is necessary existence. The fact that such an entity can be conjured does not imply that it must exist.

The concept of an infinitely great being is similar to the mathematical concept of infinity, which is clear in our minds. While we can easily have the concept of “infinitely large” or “infinitely good” things, and such ideas do not necessarily exist in reality. It may be argued that in reality there must exist an entity for which there is none greater, but this depends on the individual’s appreciation of words like “greatness” and “goodness”. And such an entity, if exists, may not necessarily correspond to God, or at least may not necessarily have all of the defining attributes of God.

3. The common consent argument

Peter Kreeft says that “atheism comes late in a person’s life and in human history” and that because so many people before us have been theists, “you have to be something of a snob to be an atheist”. The former point is incorrect. Atheism with respect to the Abrahamic God is probably quite frequent in children that are raised with secular beliefs. Scepticism is the default position of scientists and probably the same in children without indoctrination. It is true that atheism comes late in human history, but, as mentioned previously, this is because humanity has undergone a shift in natural philosophy. A history of belief in an idea does not make it true. People throughout history believed the Earth was flat. Yet we now believe it is not flat. The fraction of time in human history that the spherical Earth belief has been in prevalence is minute, yet it does not undermine its validity. Slavery was hugely popular in very many cultures throughout history for a very long time, yet it is no longer tolerated today by the majority of the world. This type of unfounded demonization of atheists and atheism is a recurrent theme in many extremist preachings.

4. The argument from conscience

This is the argument that because our conscience has absolute authority, it must have a divine origin. There is no reason to believe our conscience came from a divine entity. It is much more likely that it comes from a simple reflection and realisation that other minds are sentient and exist in the people around you and that people have similar emotions and mental experiences to your own mind. As discussed earlier this conscience is often not the same as your instincts, but this may have several explanations. For example it could be a product of our intelligence, which could be due to an evolutionary event, such as a genetic drift. While it is true that, like some human emotions, the exact origin of consciousness has not yet been determined, there is no evidence to suggest that it emanates from a divine entity. However, it is true again that the exact specifics of evolutionary mechanisms for the emergence of our conscience are not completely understood, if they did occur, but this does not imply that they are non-existent.

Concerning the protection of religious faiths in God

The protection that religion has is evident from the amount of respect that it is given. Perhaps it could be partly justified from a mere human perspective, since it is hurtful to ridicule an idea that someone believes in strongly, whether or not the idea is logically or ideologically right or wrong. Hence if the protective bubble of religion is to endure, it would be merely an instance of fundamental human respect that forbids the ridicule of an idea that people are emotionally attached to irrespective of the actual technical validity of the idea. Where such laws hold, however, the feeling should be reciprocal. It is when crimes done in the name of an objectively unverifiable idea that we see exactly how much this balance can be tremendously skewed. It is not surprising to see the rise of atheist militancy in response to this. Books and cartoons seem mild compared to some religion-inspired crimes, yet these have been met again with violence in many cases, such as death threats. It seems that the amount of religion-inspired Human Rights breaches are numerous compared to those that are naturalist-inspired, which are virtually non-existent, if not zero. After all, reports of murders in the name of, say, string theory or evolution, are completely unheard of. This might be so because, as Dawkins points out, there is no logical path from the belief to the crime. A person, given the order to commit, say, a murder or a genocide, if truly they believe the order comes from God, would have a strong motivator to commit it. Weinberg comments on this in his quote:

“With or without religion, you would have good people doing good things and evil people doing evil things. But for good people to do evil things, that takes religion.”

Yet, for some, fundamental physics theories have the potential to fill many of the niches, though indirectly, that have historically been filled by religion, although this may differ as a matter of individual appreciation. Historically however, the wars and crimes committed directly under the influence of religion are numerous and continuing, including the crusades, the Spanish Inquisition, the Israeli-Palestine conflict and many terrorist attacks. Sam Harris comments that a world where people maintain beliefs for which they have no evidence is probably not a good recipe for social and international security. He also correctly points out, that given certain beliefs, an atheist or a heretic is more dangerous than the worse child molester or serial killer. This is because the former can say something that can damn your child’s soul to hell forever, whereas the latter will cause temporary suffering. He further goes on to guessing that such mentality can explain the mass killings of people from a different belief system, such as burning of heretics and the crusades.

It is true that religion can carry a very important emotional foundation and that it is often the base or a person or society’s life philosophy. However, many other non-religious ideas have been held with equal conviction. Examples include secular or agnostic ethical moral codes, values associated with patriotism, socio-political convictions, duties to a family, friend or a society and a spectrum of other non-religious convictions. As Dawkins points out, these do not have as high a respect status as religion yet throughout history people have sacrificed for them tremendously or held them in very high regard. Attempts at someone’s patriotism, secular philosophy or political party using books and cartoons are seldom met with death threats, or at least not in non-totalitarian nations.

Usefulness of religion and God concepts

Another issue is brought up in response to the claim, somewhat irrelevant, that religion is useful for society. Sam Harris, in a debate with Rabbi David Wolpe at the American Jewish University, says,

“There are three ways to defend religion. One is to argue that religion is true ... Another is to argue that religion is useful ... the idea that religion is the basis for morality ... Even if I conceded that religion is profoundly useful ... that would not for a moment grant credence that one of our books was dictated by an omniscient being or that such a being exists. Religion could function like a placebo. I could invent a religion for you right now that would be guaranteed to be useful, in fact more useful than any religion in existence.”

As mentioned earlier, there is a large amount of overlap between religious divine law/morality derived from scripture, and secular morals derived from secular ethical reasoning (e.g. do not kill people). However, in addition to the overlapping set, it seems Abrahamic scriptures have in addition, laws that describe punishment for disobedience or non belief, such as for example eternal damnation during your afterlife (e.g. hell). In some religious extremist dogmas, there is often a reward for obedience. While not written explicitly in the Qur’an, some suicide bombers believed their martyr death would secure 72 virgins in heaven, among other rewards. This is also observed in older religions: Vikings believed they would be sent to Valhalla, the Norse heaven where Odin lived, if they died in battle, which might explain some of their belligerent attunements. This is highly suggestive that the addition of these “clauses” in scripture was included to enforce obedience through fear of punishment and thought of reward, all to encourage social cohesiveness and altruism. Indeed, such a fear is a very powerful motivator. “What a horrible reason to be moral,” says Richard Dawkins.

While the inclusion of secular human laws enforceable by secular human states constitute a “fear” factor on their own, some have argued that even these do not suffice for anarchy or chaos to break out: that humans need to be assured that their laws have a divine component to them. Again, the fact that many secular communities and nations operate without particularly more crime than their fundamentalist religious counterparts counts against this. It may also be that many humans choose to obey the law primarily because they understand their ethical value and are genuinely concerned about other members upon realising that they too have a sentient mind.

As Richard Dawkins points out, there is a case for religion not only not being useful but having a negative effect in its extreme forms. Dawkins illustrates this by saying that if you believe in a God, and in particular a God with Abrahamic attributes, there is a logical path that will lead you to inflicting harm on other people who do not share your view. Examples of this are religious wars fought for the right of land that each religious group thought was given to them by God, such as fighting for Jerusalem during the Crusades and the Israeli-Palestine conflict over the Gaza strip. Dawkins then points out that there is no such path for agnosticism or atheism. If it is possible to develop morals for a cohesive society in the absence of religion, then the more “useful” alternative would be agnosticism or athiesm, since they remove these religion-motivated crimes. While very many noble, admirable and extremely self-sacrificing deeds have been done in the name of religion, the same is true for actions motivated by agnostic or secular beliefs or secular/agnostic moralities.

The atheist position is often demonised by bogus claims that absence of a belief in God are responsible for human catastrophies such as the mass murders in the regimes of Hitler, Mao, Stalin and Pol Pot. This is refuted elsewhere in another document, but suffice it to say that the regimes of these dictators were totalitarian ideologies that in fact resembles religion in their dogmatic nature and it was these ideologies that are much more probably responsible for the history surrounding them.

On a slightly separate note, it is worth considering other aspects of religious beliefs on human life and the effects that departing from them would engender. Steven Weinberg correctly argues that

loss of religion might lead to a significant loss of culture and art. This is a noteworthy point, but a hypothetical future disconnection with religion would only drag along religious art and culture if we depart from it in a careless way. The impact of a departure from religion would depend on its form.

The rich and vast amount of religion-inspired art and culture is of paramount importance and obviously not a desirable thing to part from. Not only is it part of our cultural heritage, but in many cases it is an integral part of human cultural advancement. In particular, I point to examples like religious architecture (cathedrals, temples, mosques, synagogues, etc.), religion-inspired literature and poetry that is not considered holy scripture, and religious music. All these are important cultural manifestations that deserve at the very least preservation and documentation if not continuous living renewal. But is it possible to maintain a religious culture while being detached from its original inspiring dogmas? Many observations suggest that it is. Many people still practice religious rites of passage or religious rituals at various epochs of their lives merely as a mark of respect for their familiars, their ancestry or their community or for continuity without necessarily believing in the original underlying motive for them. Many people listen to religious music for enjoyment without necessarily sharing the music author's original motivation for it or without interpreting it at face value.

It is also worth pointing out that non-religious "spirituality" or human emotion has produced amounts of art and culture that are similar to that which is spiritually motivated. Loss of religious dogmas will almost certainly not lead to a loss of human spirituality. Human emotion, longing and imagination would undoubtedly persist even in the absence of religion. So while it is possible that some art that without religion may otherwise not be there may be lost, it is proposed that this somewhat mystical human longing is a more primitive and fundamental human attribute that might fill this artistic void.

Conclusion

Conclusions are threefold. Firstly, there is a semantic problem in language in that the word "God" is poorly defined. While the general definition is that mentioned earlier, the word is very frequently used out of this meaning by pantheists and deists. On the other end of the scale, the definition is extended when used in mainstream religions particularly in Abrahamic religions. It would seem that we are almost in need of three separate words: one for the original God that is specific to a scripture and has a plethora of attributes, one for the deist God that is a very basic God in its definition and whose nature is maybe occluded, and one for the agnostic pantheistic God that is somewhat akin to the "Einsteinian" God. All of these are significantly different although they share a common ground in the awe they inspire in us. Since the philosophy of science is as close a "proof" as we will ever get from an objective standpoint, many attempts to "prove" the existence of God philosophically are fruitless since most of them take us back to the unknown origin of the universe. Other philosophical inquiries about the experience of human emotion could point to some supernatural transcendence but this is not necessarily a proof of God and such experiences might very well be based on natural laws that are part of the ultimately explicable universe. However, it is also possible that this nature will never be known.

Secondly, the God in the basic definition and the even more "extended" concept of God that we see in Abrahamic religions, such as one who can listen to prayers and forgive and punish sins, is almost certainly not existent due to lack of evidence, contradiction with scientific evidence, simple logical contradictions and philosophical inquiry that speaks against it. In fact, a non-"all-loving" origin of the

universe is much more likely than an “all-loving God”, since it bypasses these contradictions. Indeed, as Richard Dawkins points out, our universe with God would look significantly different from the one we experience. The concept of God in Abrahamic scriptures is suspiciously indicative that scriptures were written for purposes of social cohesion and not necessarily a divine revelation. Law from Abrahamic scripture is actually inferior to human-centered secular moral philosophies. This is evident from the amount of religion motivated crimes versus those done in the name of non-extremist secular philosophies based on human rights. It is also evident from the healthy cohesion in societies that are secular or even atheist in majority. Human-based ethical philosophies are also more adaptable, flexible, less speculative and more objective. The arguments presented here that attempt to “prove” God either fail completely or prove a very small “slice” of what is meant by God that does not relate to the more specific religious attributes of God. This slice is insignificant because it is either synonymous from the universe, or based on speculation. There might be objective ways to assert that particular religions are more likely than others because we often see that the complexity of a God concept scales with its unlikelihood in light of scientific knowledge. Human values often overlap between theist, agnostic and atheist beliefs. This, along with other observations, suggests that the source of good and hope stems from humans. “Know then thyself, presume not God to scan. The proper study of Mankind is Man,” says Pope [19].

Thirdly, we also see that the entity that is the origin of the universe is more likely to be neutral with respect to human emotions, does not necessarily have a purpose (in the sense that humans conceive of “purpose”), or may operate in an occluded way, thus lacking the basic defining attributes of God. In light of this and the lack of evidence for God, we conclude that the most likely “God” is synonymous with the universe, but with no extra attributes. Such a God is presented in deism, pantheism, pandeism, panendeism, and panentheism. However, the investigation shows us that the former three God concepts are essentially synonymous with the universe, so “God” is a misnomer here and an unnecessary concept. In the latter two cases, the extension of God beyond the physical world is merely speculation, since the issue of anything existing in the metaphysical supernatural realm has not been resolved. Similarly, the “God” concept of a truly supernatural entity that gives us our humanity is indeed possible, but cannot yet be ascertained. Such an entity could either be part of the yet unknown universe, or it may be a truly supernatural entity. Again, our best guesses at the issue lie in the philosophical interpretation of alleged supernatural experiences and human emotions and whether or not they have a physical natural basis. Individual experience in the global populace is split. It is probably true that both self-proclaimed theists and atheists alike have experienced spiritual moments, or at least powerful or life-changing events, but some attach them to deities and other not. This is a very important question that deserves exploration. We do not yet know if there is truly a supernatural entity with benevolence. We will never really know this until we reach a point in history where we have reached the absolute limit of scientific experimentation and inquiry and we still can observe a truly supernatural entity that gives us our emotions and our humanity. If this entity still remains unexplained within any possible scientific framework at that point and can in no way be accounted for in any way using the scientific method, then indeed there would be evident proof of a supernatural “God”. Since we haven’t reached that point, such an entity will therefore remain only speculative. However, even if such a “God” did exist, it could still be subject to the mutual exclusiveness of omnibenevolence and omnipotence.

References

1. *Oxford Concise Dictionary 10th Edition*. 1999.
2. *Dictionary.com*. [cited; Available from: <http://dictionary.reference.com/>].
3. Pascal, B., *Mémorial*. 1654.
4. *The Bible, Job 40:15–24*.
5. *Translations of the Qur'an, 51:47*. [cited; Available from: <http://www.usc.edu/schools/college/crcc/engagement/resources/texts/muslim/quran/>].
6. *Translations of the Qur'an, 21:30*. [cited; Available from: <http://www.usc.edu/schools/college/crcc/engagement/resources/texts/muslim/quran/>].
7. Evelyn-White, H.G. *The Theogony of Hesiod, (ll. 687-712)*. [cited; Available from: <http://www.sacred-texts.com/cla/hesiod/theogony.htm>].
8. *The Bible, Exodus 20*.
9. Ananthaswamy, A. *Did our cosmos exist before the big bang?* 2008 [cited 2008; Available from: http://www.newscientist.com/article/mg20026861_500-did-our-cosmos-exist-before-the-big-bang.html#].
10. *VOICES OF SCIENCE*. [cited; Available from: <http://richarddawkins.net/article,2868,VOICES-OF-SCIENCE---Available-Now-on-DVD,Richard-Dawkins-Steven-Weinberg-Lawrence-Krauss-PZ-Myers-David-Buss>].
11. Roni Harnik, G.D.K., and Gilad Perez, *A Universe Without Weak Interactions*. Phys. Rev., 2006.
12. L. Clavelli, R.E.W., *Problems in a weakless universe*. 2006.
13. Whitehouse, D.D. (2003) *When humans faced extinction*. **Volume**,
14. *The Bible, Genesis*.
15. *The Bible, Matthew 1*.
16. Plato, *Euthyphro 10*. 428/427 BC – 348/347 BC.
17. *The Bible, Matthew 7:12*.
18. Kreeft, P. *arguments-for-god*. [cited; Available from: http://www.peterkreeft.com/audio/08_arguments-for-god/peter-kreeft_arguments-for-god.mp3].
19. Pope, A., *An Essay on Man*. 1734.