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An Evaluation of William Craig and Armstrong's Debate on the Existence of God

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Abstract

William Craig has sought to defend theism by participating in numerous debates. In a debate with the American philosopher Sinnott Armstrong, which is also published in a book entitled "God", Craig in his first reason tries to prove the existence of God by denying "real infinity" and relying on the concept of beginning and "the need of every beginning for a cause". On the other hand, he takes Big Bang as a witness to his claim, but Armstrong rejects Craig's argument by referring to the existence of real infinity in the outside world and the existence of scientific evidence to negate the implication of the Big Bang on the beginning of the world. Based on this, when it is not possible to properly use experimental evidence as a proof of theological reasoning, such methods can put the belief in God in crisis. Therefore, lack of establishing the correct interaction between theology and science can be considered one of the most important weaknesses of Craig's argument on the existence of God. Finally, by introducing a scientific model, it is possible to provide a

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solution to establish a correlation between science and theology in such a way that theological evidence matches with experimental evidence and external truth, and no contradiction threatens the belief in God.

Key words

William Craig, Sinnott Armstrong, existence of God, Big Bang

Introduction

One of the methods of communication between theologians and atheist philosophers is to hold live debates so that theologians can answer the important challenges of the current era in a novel way. William Craig is one of the theologians who used the debate method to a great extent. In the debate between Theodore Dering and William Lynn Craig, regarding the existence of God, Craig used these cosmological arguments and cited new scientific findings. But in this research, we are trying to evaluate this debate based on the debate published in the book entitled "God" between William Craig and Armstrong. So even though the discussion of the existence of God has a long history, in recent years, this discussion revolves around the Big Bang cosmological issues and once in a while, scientists present a new theory to confirm or reject it, and consequently the existence of God faces challenges. In case, one should look for a fundamental solution so that scientific advances do not have the power to create doubt in beliefs. What is more important is that man has nothing except outside world in his knowledge. Therefore, it does not matter if a person who seeks to gain knowledge about existence is a philosopher, a scientist, or a theologian. Because what is certain is the sharing of the source of knowledge among theologians and scientists. Therefore, if we are looking for the creator of the world, we cannot reach this goal without knowing the world, with the difference that scientists explain material nature and theology seeks to complete the puzzle of the natural world. Therefore, nature is what they have in common, but the deviation is where we separate them, and this distinction causes science and theology to provide misaligned explanations. So, due to a common subject for scientists, philosophers, and theologians, the methodological boundaries of these sciences should be separated to have a scientific key in debates between scientists, theologians and philosophers.

Belief in the causality of the world is so clear and obvious that the contemporary atheist philosopher, Kai Nielsen, explains this example: "Suppose you suddenly hear a loud noise. You ask me, "What was the cause of this terrible sound?" And I reply: "Nothing, it just happened." "You don't accept that answer. In fact, you find my answer completely unreasonable." (Kai Nielsen, 1971, p.48).

By and large, all layers of scientific groups are faced with this question: “How has created this world?” And it is not exclusive to theologians. In search for this answer, by evaluating the interchange of views between William Craig and Sinnott Armstrong in expressing their arguments, we try to express a practical way of scientific proving of existence of God to make it clear how each science is out of the scientific standard. But since this discussion does not have the capacity to offer all the reasons that have been raised in this debate, we can only briefly evaluate the first reason that was raised by William Craig in proving the existence of God and rejected by Sinnott Armstrong. This is because with William Craig's first argument, we can provide a basic solution for the interaction of science and theology and the best practical solution for the interaction of theology and science.

1. Craig's First Reason: God Makes Sense of the Origin of the Universe

He believes that his reason makes theism more plausible than atheism, and starts with a mathematical reason and the need of every beginning for a cause, and refers to Big Bang as a confirmer and introduces "God" as a beginner and origin of the universe.

He says if the universe never had a beginning, it means that the number of events in the past is infinite. But mathematicians say that the existence of an actually infinite number of things leads to self-contradictions (unless you impose some wholly arbitrary rules to

prevent this). For example, what is infinity minus infinity? Well, mathematically, you get self-contradictory answers. For example, if you subtract all the odd numbers {1, 3, 5, . . .} from all the natural numbers {0, 1, 2, 3, . . .}, how many numbers do you have left? An infinite number. So infinity minus infinity is infinity. But suppose instead you subtract all the numbers greater than 2- how many are left? Three. So infinity minus infinity is 3! It needs to be understood that in both these cases we have subtracted identical quantities from identical quantities and come up with contradictory answers. Actually, you can get any answer from zero to infinity! (Craig & Armstrong, 2004, pp. 3-5).

He refers to David Hilbert that states, "The infinite is nowhere to be found in reality (David Hilbert, 1964, pp. 139-141). Therefore, since past events are not just ideas, but are real, the number of past events must be finite. Therefore, the series of past events can't go back forever; rather the universe must have begun to exist.

Craig states that this conclusion has been confirmed by discoveries in astronomy and astrophysics. The astrophysical evidence indicates that the universe began to exist in a great explosion called the "Big Bang" around 15 billion years ago. Therefore, as Cambridge astronomer Fred Hoyle points out, the Big Bang theory requires the creation of the universe from nothing. Because, as one goes back in time, one reaches a point at which, in Hoyle's words, the universe was "shrunk down to nothing at all." (Hoyle, 1975, p. 658). Thus, according to Big Bang model, the universe began to exist and was created out of nothing.

We can summarize his argument thus far as follows:

1. Whatever begins to exist has a cause.

2. The universe began to exist.

3. Therefore, the universe has a cause.

Craig continues that premise (1) "Whatever begins to exist has a cause "seems true, at least, more so than its denial. However, a number of atheists, in order to avoid the argument's conclusion, have denied the first premise. It is said that sub-atomic physics furnishes an exception to the first premise, since on the sub-atomic level events are said to be uncaused. In the same way, certain theories of cosmic origins are interpreted as showing that the whole universe could have sprung into being out of the sub-atomic vacuum (Craig& Armstrong, 2004, p. 8).

He believes that this objection is based on misunderstandings. First, not all scientists agree that sub-atomic events are uncaused. Many physicists today are quite dissatisfied with this view (the so-called Copenhagen Interpretation) of sub-atomic physics and are exploring deterministic theories like those of David Bohm.[1] Thus, sub-atomic physics is not a proven exception to the first premise. Second, even on the traditional, in-deterministic interpretation, particles do not come into being out of nothing. They arise as spontaneous fluctuations of the energy contained in the sub-atomic vacuum; not come from nothing.[2]

Third, the same point can be made about theories of the origin of the universe out of a primordial vacuum.[3] So vacuum is not nothing, but is a sea of fluctuating energy endowed with a rich structure under the physical laws. Robert Deltete sums up the situation: "There is no basis in ordinary quantum theory for the claim that the universe itself is uncaused, much less for the claim that it sprang into being uncaused from literally nothing."[4]

As to this premise, the typical objection that is raised against the philosophical argument for the universe's beginning is that modern mathematical set theory proves that an actually infinite number of things can exist. For example, there are an actually infinite

number of members in the set {0, 1, 2, 3, . . .}. Therefore, there's no problem in an actually infinite number of past events. But this objection is far too quick. First, not all mathematicians agree that actual infinites exist even in the mathematical realm.[5] They regard series like 0, 1, 2, 3, . . . as merely potentially infinite; that is to say, such series approach infinity as a limit, but they never actually get there. Second, existence in the mathematical realm does not entail existence in the real world. To say that infinite sets exist is only to postulate a realm of discourse, governed by certain axioms and rules that are simply presupposed, in which one can talk about such collections.[6]

Given the axioms and rules, we can discourse consistently about infinite sets. But that's no guarantee that the axioms and rules are true or that an actually infinite number of things can exist in reality. Third, in any case, the real existence of an actually infinite number of things would violate the rules of transfinite arithmetic. As we saw, trying to subtract infinite quantities leads to self-contradictions; therefore, transfinite arithmetic just prohibits such operations to preserve consistency. But in the real world there's nothing to keep us from breaking this arbitrary rule. If I had an actually infinite number of marbles, I could subtract or divide them as I please.

Sometimes it's said that we can find counter-examples to the claim that an actually infinite number of things cannot exist, so that this claim must be false. For instance, isn't every finite distance capable of being divided into 1/2, 1/4, 1/8, on to infinity? Doesn't this prove that there are in any finite distance an actually infinite number of parts? The fallacy of this objection is that it once again confuses a potential infinite with an actual infinite. You can continue to divide any distance for as long as you want, but such a series is merely

potentially infinite, in that infinity serves as a limit that you endlessly approach but never reach. If you assume that any distance is already composed of an actually infinite number of parts, then you're begging the question. Namely that there is a clear counter-example to the claim that an actually infinite number of things cannot exist.

As to confirmation of premise (2), it is true that there are many theories to the Big Bang theory that do not involve a beginning of the world. But while such theories are possible, it has been the overwhelming verdict of the scientific community than none of them is more probable than the Big Bang theory. If you get down to specifics you find that there is no mathematically consistent model that has been so successful in its predictions or as corroborated by the evidence as the traditional Big Bang theory.

He also mentions that Sometimes people will ask, "If the universe must have a cause, then what is God's cause?" But this question reveals an inattentiveness to the formulation of the argument. The first premise does not state whatever exists has a cause, but rather whatever begins to exist has a cause. Since God never began to exist, would not require a cause, for He never came into being. Nor is this special pleading for God, since this is exactly what the atheist has always claimed about the universe: that it is eternal and uncaused. He mentions that the atheist's claim is now rendered untenable in light of the beginning of the universe. In sum, we have a good argument for God's existence based upon the origin of the universe (Craig& Armstrong, 2004, p. 8).

2. Armstrong's Reasons Against Craig's First Reason

Armstrong criticizes Craig's claim that there is no infinity in the real world to deny the necessity of God's existence and states that Craig argues that the universe must have had a beginning, because it cannot

be infinite. Why not? Craig answers, "What is infinity minus infinity? Well, mathematically, you get self-contradictory answers. Infinity minus infinity is infinity and infinity minus infinity is 3! This implies that infinity is just an idea in your mind, not something that exists in reality." This argument never mentions minds or reality before its conclusion. Its premises refer only to numbers. Consequently, if the argument showed anything about infinity, it would also show that there cannot be an infinite number or an infinite series of numbers. If the number itself or our idea of it implied a contradiction, there could not be any such number or any consistent idea of it. Calculus would be out the window.

Craig derives his contradiction by subtracting infinity from infinity. How do mathematicians avoid this contradiction? They simply limit the operation of subtraction to a certain domain, so that you are not allowed to subtract infinity. Why not? Because it gets you into contradictions! What better reason could you want? There is nothing strange or dubious about this limit on subtraction. Mathematicians also limit the operation of division. You can't divide any number by zero. Why not? Because this would also yield contradictions. That does not show that zero is not a number or is not real. The actual number of pink elephants in this room really is zero, believe me. So the limit on subtraction also does not show that infinity is not a number or is not real or is only in your mind or anything like that. I admit that infinity is puzzling. It seems strange that the number of odd integers is equal to the total number of integers (both odd and even) in the sense that there is a one-to-one correspondence between the members of the sets. That's weird. But it is not contradictory. So this can't show that infinity does not exist in reality (whatever that means) (Craig& Armstrong, 2004, pp. 41-42).

Many people's views on infinity do lead to outright contradictions.

Even some mathematicians bungle it and end up claiming that actual infinities are impossible. Craig quotes David Hilbert, who was a great mathematician, but Craig's appeal takes an authority out of context. Craig's quotation is from a paper published in 1926.[7] Hilbert himself soon recognized that his finitist project was undermined by Gödel's incompleteness theorems in 1931.[8] More importantly, even if Hilbert had not recanted, almost all mathematicians today recognize that infinity can be handled without contradiction.

Craig might admit that infinity is not self-contradictory, but still deny that anything infinite actually exists. However, actual infinities are not hard to find. First, there is an infinite number of real numbers between one and two. Craig cites one mathematician who regards this set as "merely potentially infinite," because "such series approach infinity as a limit, but they never actually get there." This spatial metaphor is misleading. If I count to 10 and then stop, I potentially count to 20, but I do not actually count to 20. That fact does not even begin to show that the number 20 is not real. The number 20 actually exists whether or not my counting actually gets there. Some numbers are so high that nobody has ever counted to them or could ever count to them. Maybe we can "never actually get there," but the number series itself actually exists anyway.[9]The same goes for infinity. If someone asked how many real numbers exist between one and two, the answer would be, "Actually, it's infinite." (Craig & Armstrong, 2004, pp. 42-43).

Next Armstrong point to the Big Bang theory and its lack of validity in citing the beginning of the world. He says; Craig also cites Big Bang theories as empirical evidence for a first moment and, hence, against an infinite past and, eventually, for God. Claims like this have been common since a Big Bang theory was first developed by a priest named Lemaitre. In 1951, Pope Pius XII cited this Big

Bang theory as evidence for God. Lemaitre responded, "As far as I can see, such a theory remains entirely outside any metaphysical or religious question. It leaves the materialist free to deny any transcendental Being. For the believer, it removes any attempt to familiarity with God."[10] Craig is no more justified than the Pope in inferring God from the Big Bang.

One reason is that Craig's inference to God depends on a questionable interpretation of the physics of the Big Bang. Craig emphasizes, "Physical space and time were created in that event, as well as all the matter and energy in the universe," so there was no time or space or matter or energy at all in any form before the Big Bang. Some scientists do talk this way, but none of this speculation is essential to the physics or required by the evidence. That is why contrary hypotheses, such as a non-empty quantum epoch, are still seen as live options that are not ruled out by the evidence.[11] But then why do any scientists deny time before the Big Bang? They are talking about time as we know it. When Hawking is more careful, he says, "the classical concepts of space and time break down as do all known laws of physics."[12]

We cannot know anything about time before the Big Bang, and no claim about time before the Big Bang is needed or could be used to explain or predict anything that we observe now. Still, none of this implies that there was no time at all in any form before the Big Bang (when was that?). Scientists ignore temporal relations that are needless, useless, and unknowable, but to go further and deny such relations is at best conjecture. It is not required by theory or evidence. We just can't know one way or the other. When physicists do speculate on such matters, they adopt differing views. Some say that before the Big Bang all space, time, matter, and energy were collapsed into a point called a singularity. This singularity is a unique sort of

reality, but it is still real,[13] if only because it has infinite density. So even this theory does not require creation out of nothing (Craig& Armstrong, 2004, p. 44).

Most physicists today reject the idea of a singularity. One reason is that recent discoveries produce doubts that gravity is always attractive, which is a key assumption in the argument for a singularity. Instead of a singularity, many physicists propose that the classical epoch governed by classical physical laws began with the Big Bang, but before that was a quantum epoch with no beginning. All that existed during this quantum epoch was "a sea of fluctuating energy," but it was "not nothing." The Big Bang then arose probabilistically with no determinate cause, in some way analogous to the decay of radioactive atoms according to quantum theory. Hence the name "quantum epoch."

In response, Craig denies that any event can be uncaused, but this claim is contrary to standard quantum theory. Craig is right that "not all scientists agree that [some] sub-atomic events are uncaused," but many scientists do agree with this. The lack of universal agreement hardly shows that most scientists are wrong to postulate uncaused events, and the fact that some scientists accept Craig's premise is hardly enough for a positive argument for God. On the other issue here, Craig is also right that in-deterministic quantum theory does not imply that particles come into existence out of nothing.

However, the quantum epoch's "sea of fluctuating energy" is also not nothing, even if we cannot know what it is. Thus, the principle that nothing comes from nothing creates no trouble for the hypothesis of a quantum epoch. Anyway, I do not need to claim that there was a quantum epoch. My point is only that we cannot rule out a quantum epoch. It is as likely as other hypotheses. We just don't know which hypothesis is true.

So many mysteries remain. Maybe no physical theory will ever fully solve it. But God won't solve them either. Here's why: A cause of an event is supposed to explain why that event occurred when it did rather than earlier or later and in the way it did rather than some other way. God cannot explain why the Big Bang occurred 15 billion years ago instead of 5 or 25 billion years ago, because, if the traditional God existed at all, He would exist equally and in exactly the same way as 5, 15, and 25 billion years ago. Furthermore, the hypothesis of God cannot explain why the Big Bang has any of the features it has, since, if the Big Bang had different features, God would be just as good (or bad) at explaining those other features. I will develop these points in Chapter 4, but it should already be clear why an eternal God adds nothing to the scientific explanations. To cite God as the cause of the Big Bang is to explain the obscure by the more obscure, which gets us nowhere.

3. The Basics of Criticism and Evaluation of the Debate

First, it is necessary that the methodological realm of sciences is noted to explain the realm of interaction between science and theology in order to prevent the non-scientific interventions of these two sciences in each other's methodological realm and base the evaluation of this debate on it. For this reason, it is necessary to emphasize the interaction between experimental and metaphysical sciences and introduce the interactive and inherent relationship of these two sciences as a rational way to create interaction between science and theology. Because theology, in the intellectual method of proving beliefs, only shares a method with metaphysics; therefore, it cannot interact with empirical sciences, which have no commonality in its subject and method. Therefore, by emphasizing the close relationship between science and metaphysics and trying to make metaphysics provable, we can return it to its scientific position and then the

interaction of theology with metaphysics to rationally prove the fundamental religious teachings can be introduced as a scientific and necessary matter. In this way, theologians are not allowed to argue based on empirical findings in defense of beliefs; and as a result, religious teachings are not exposed to uncertainty, damage, and doubt.

Among the best and most practical defenses that have been made in this era for the revival of metaphysics are the efforts of Jonathan Lowe, Morganti and Tahko. These efforts are in a way that consider metaphysics as a provable science related to nature. Lowe distinguishes the method and the subject of metaphysics, while considering them as overlapping sciences, and Morganti and Tahko, in their moderate natural metaphysics plan, have recognized the commonality of the subject and the distinction of the method for these two sciences. Therefore, just as Aristotle put a single subject (existent) as a common source of division for physics and metaphysics, based on the view of Morganti and Tahko, these two branches of philosophy, even though they have a single subject, study the existence with two different methods (Morganti, M., & Tahko, 2017). Thus, two different methods to know two different aspects of a single subject are acceptable.

In order to establish the relationship between science and metaphysics, in the thesis of integration of metaphysics and experimental sciences, while he believes in independent methods and subjects for these two sciences, he considers them to be synergetic. He believes that metaphysics is based on understanding of the nature and is not like logic which is concerned with concepts. He emphasizes the necessity of interaction between science and metaphysics and believes that these two sciences cannot be considered as independent sciences in knowledge giving (enlightenment). According to Lowe, the interaction between science and metaphysics is not optional because

science presupposes metaphysical assumptions. That is, although they are related to two different fields of knowledge, they cannot be considered independent of each other. Lowe claims that metaphysics is both possible and necessary as a form of rational human inquiry. Low sees metaphysical possibility as an inevitable prerequisite for reaching reality. As Lowe argues, this metaphysical possibility must be presupposed before experience because it determines whether the things we examine are real or not. Therefore, in order to know what is real, metaphysical possibility is necessary (Lowe, 1998, p. 21).

Accordingly, although metaphysics is not an a priori science and depends on the nature and understanding of the real relationships of the external world, its method is a priori due to the fact that it studies the relationships of beings in general, and it can explain the real world without a posteriori validation method. In this regard, Lowe believes that metaphysics helps us to distinguish the real possibility from the feasible possibilities. According to Lowe, experience cannot play its role in determining what is real if there is not a prior metaphysical limitation of what is. Although Lowe introduces the subject of metaphysics and science as independent, he considers them to be related and dependent on each other. He says that empirical science deals with what is, not what should or could be. Thus, metaphysics makes us pay attention to these possibilities, but which of the possible structures exists is determined by experience (Lowe, 1998, p. 9). So experience alone cannot determine what is actual in the absence of metaphysics (Lowe, 2009, pp. 7-8).

Based on the statement that was involved in the formation of metaphysics, it is clear that metaphysical propositions are not meaningless and unprovable, but like empirical propositions, they are provable and therefore meaningful. Even the verifiability applies to metaphysical propositions. Lowe does not consider any pure prior

science possible since every previous science has some degree of connection with reality and experience. He clearly rejects this idea that some kind of purely prior knowledge is involved in metaphysical activity and considers it an awkward caricature. Rather, he emphasizes that every prior knowledge is preceded by a type of posterior knowledge (Lowe, 2014, p. 26).

4. Criticism and evaluation of Craig and Armstrong's arguments

One of the most important metaphysical foundations of experimental sciences is the principle of causality in the world. Thus any transformation in the world of matter takes place as a result of leaving power to action, under the influence of the natural efficient cause. And the understanding of any evolution in the world goes back to this important metaphysical principle. Based on this, the material relations of the world will never face sequence (infinite regression). Therefore, in cosmological proofs such as the proof of occurrence (creation), after proving that every event requires a cause, based on the metaphysical foundations of empirical sciences and the nature of preparatory cause, the existence of God is not proven through the negation of sequence. In this way, the interaction of theology with metaphysics helps it to reach the eternity of the world of matter in order to prove the necessity of the cause of existence by relying on the principle of understanding (the principle of contradiction) and complementing the proof of occurrence with the Siddiqui argument (Javadi-Amuli, 2016, p. 52). That is, in the world of matter, every occurrence needs a cause. Because according to the metaphysical foundations of empirical sciences it is proved that matter in its actuality does not reach the first material cause, because that matter also needs another matter to get actuality (as an actualizer), and because the determination of matter (specification) is possible by forms and the

world is understood through the distinction of forms, there is an inevitable need for a formal cause. This is Because the proof of occurrence only describes the causes in the realm of material nature and a transcendental cause is not proven. In fact, occurrence is the description of the material world and creation is not in the events of the world, because they are just a preparer (preparatory cause). So we don't have the past infinite events collectively now. For this reason, infinity is impossible if all its components exist, but nature is constantly happening. Therefore, potential infinity is not impossible, and based on the principle of contradiction, it is obvious that the explanation of the world without a formal cause is incomplete (Vaez-Javadi, 1362, p. 352). Therefore, each actualizer in actualization is independent of other causes. Since preparatory cause does not play a role in existence, a formative cause, beyond the matter, is necessarily needed. Therefore, interaction with metaphysics, according to Jonathan Lowe, first invalidates incorrect ideas in empirical sciences and secondly helps us prove the existence of God (see: Guta, 2021). As the experimental sciences, if they use metaphysics, they can reach correct conclusions about the explanation of the system of existence in confirming or rejecting the scientific theories of this science. For example, in case of using the metaphysical foundations of experimental sciences, it can be concluded that the Big Bang is not the starting point of creation, and based on the foundations of science, for this phenomenon to occur, the material actualization factors are needed before it.

Now Craig's argument can be carefully evaluated. Craig believes that we don't have an actual infinity outside thereby events must have a beginning! While the actual infinity outside does not harm the existence of God. If Craig would not relate the necessity of the cause with a beginning, there is no necessity to negate infinity in

the external world. Because the proof of occurrence, regardless of any proof of the beginning or eternity of the world, is related to the understanding of the occurrence of the universe which find out through understanding the existence, and even without discovering any empirical theory, it is possible to argue for the existence of the universe.

In addition, as Armstrong also points out, the fact that infinity does not have an objective example outside does not mean that it does not exist outside. The outside world is full of infinity. In other words, infinity is outside, but it does not have an objective example, and this human inability to determine an objective example for it has led to the invention of the concept of infinity. Therefore, although his reference to Hilbert is correct about infinity, this is not a proof of the necessity of the beginning of the universe at the point of the Big Bang. And although infinity does not have an objective example in the outside world, it does not mean its absence, like the concept of eternity also implies the same meaning.

Thus, according to the metaphysical foundations of science, the events of the world cannot be considered to have a limit in the forward movement, nor can a beginning be imagined in the backward movement, and the material world has no beginning. Therefore, as today in experimental sciences, models have been presented to negate the implication of the Big Bang on the beginning of the world, although sometimes it is associated with the purpose of confronting theism, these models are not only a negation of the belief in God. However, they are a confirmation of the eternity of the material world; and the eternity of the material world also does not contradict the beginning of a part of the universe in the Big Bang, and Craig need not try to come up with a single "beginning" for the universe. Therefore, his reference to the Big Bang as the beginning is not

correct and it is not even consistent with scientific findings, and as Armstrong also points out, science does not claim creation from nothing. Therefore, contrary to Craig's belief, the eternity models of world are not in favor of atheism. Therefore, reliance on the "beginning" generally collapses the first premise because according to metaphysical foundations of science, the question of this reason continues constantly and non-stop.

Therefore, his second premise, in which the world has a beginning, also collapses with the metaphysical foundations of science, and science does not acknowledge that the material world has a beginning in the Big Bang. Thus, both the introductions of this argument have problems and cannot be used as evidence to prove the existence of God. Thus, even if we consider the Big Bang as the beginning of the evolution of a certain phase of the universe, we cannot accept Craig's claim because what invalidates this argument is his emphasis on God's will to create the world at the moment of the Big Bang, which leaves no room for such justification. And if the beginning means the beginning of God's creation, this argument is baseless and unprovable because the metaphysical foundations of science, which have a rational basis, do not confirm it.

In end of the argument, he re-emphasizes the need for a cause for every beginning, while the question always remains: “Why does God not have a beginning?” And certainly his argument cannot convince an atheist, because he has actually begging the question and presupposed what is expected to be obtained from the argument. So how could it satisfy an atheist? If Craig did not argue about the beginning and its relationship with the need for a cause, and instead justified the necessity for a cause with a certain and undeniable reason, Armstrong would not reject his argument with an acceptable reason, humans may not see or discover many beginnings. This means

that if science did not present the Big Bang as a theory of formation of the universe, how may it prove the necessity of a cause?

Therefore, although infinity does not have an objective example in the outside world, infinity cannot be denied in the world, as it is not possible to determine the exact points as the beginning of the creation of the world. That is, we accept Armstrong's reason in rejecting the first statement. In addition to the fact that Armstrong expresses his reason with experimental evidence, and we see today, quantum cosmology does not believe in the creation of the universe from nothing and presents a sea of fluctuating energies as a model for the time before the Big Bang. Just as the metaphysical foundations of science cannot explain creation from nothing, and regardless of the existence or non-existence of God, creation from nothing without previous matter has no scientific justification or evidence. Leaving aside all Craig's controversial arguments, the question remains: “How did he come to the conclusion that this cause is supernatural?” It is clear that understanding the occurrence and its need for a cause also confirms the continuity of this series. On the other hand, the deterministic chain is formed when the preparatory cause is available and they create the talent of next actuality, because with the absence of efficient cause as an actualizer, the next existence does not get actuality (Sadra, 1981, vol. 3, p. 68). Therefore, the Big Bang, like other natural events, cannot be created without material efficient cause, because nature follows a single law. So Big Bang also relies on a material cause! Therefore, this infinite series that Craig is trying to deny and end with Big Bang continues, because the basis of understanding the world is based on the distinction of forms. Therefore, the cause before the Big Bang is also a distinct and material cause, and as long as these material causes continue, we have

not reached the final cause. Therefore, the existence of the final cause is a rational necessity, because preparatory causes do not play any role in creation. Thus, the existence of God is not only a theological necessity but also a scientific explanation that is investigated in theology. By and large, instead of Craig's first proposition, perception rules the proposition "everything that exists has a cause". That is, the understanding of causality does not relate to the beginning. In this way, the understanding of the occurrence of the universe is associated with the understanding of material causes. As a result, everything that exists has a cause and is created. And naturally, every event has a beginning, but not a beginning that is creation from pure nothingness, but creation from previous nothingness (see: Sadra, 1981, vol. 7, p. 297; Barbour, 1362, p. 415). Based on this, concepts such as the beginning of the universe make sense within the framework of the Big Bang theory and considering its limitations, and do not necessarily represent an objective reality. (Stoeger, 1988, p. 222).

Apparently, Craig committed fallacy in referring to the opinions of scientists about causeless of Big Bang and the subatomic level, because as Armstrong criticizes his opinion, the intention of scientists is not to negate causality, but rather they emphasize the material space before the Big Bang and the limitless of existence. In addition, Craig has imposed his own presuppositions on his argument and this argument. Because the metaphysical foundations of science do not confirm the occurrence of the world in a single moment, but today science knows that the world came into being as a result of an evolutionary and gradual system, and in fact, it is a testimony to the truth of metaphysics on "every occurrence needs a cause"; Therefore, the Big Bang itself is the result of this gradual process.

It is clear that this argument does not follow. So atheists

oppose this statement. Because they do not deny the reason for the existence of the world, they merely deny transcendental being as a creator. Therefore, in the first stage, theology should prove the existence of this being as God, which is necessarily proved; not based on previous beliefs. It means that transcendental being is an intellectual necessity, because the existence of God is not proven from the connection between the beginning and the cause. But rather the existence of God is related with the necessity of created (occurrence) to creator and infinity of this chain. That is, we must prove:

1) The world is created. Everything that created has a cause. So the world has a cause.

2) If the cause of the world is created, it also needs a cause. Therefore, the cause of the world is not necessarily created or material.

In this way, first we prove that the world needs a cause and then we prove the necessity of immaterial cause. In fact, causality is something that cannot be violated. In this way, the question of the atheists that why God does not have a cause is also clarified:

Something that has a cause is created. God is not created. So he has no cause. That is, with the continuation of the infinite series of events, we must necessarily find the final cause. In this argument, prior beliefs are not used in it. In this case, an atheist can also accept a correct and rational argument. Also, with this argument, beginning is not related to cause. So there is no need to confirm the Big Bang to prove God or reject the Big Bang to deny God, because Big Bang just is a part of creation. And we can consider limitless models as a stronger model to explain the world and existence of God. In other word, the universe is always creating.

Conclusion

After all, Armstrong's arguments do not lead to the belief in God. He has used certain arguments to refute Craig's argument because Craig's argument is not only a certain argument with correct premises that can reject Armstrong's arguments against it, but Armstrong's arguments, although they do not end to proving the existence of God, can help us to criticize Craig and prove the existence of God. Anyway as a theologian, Craig seeks to prove the existence of God and pursues a valuable goal, but on the other hand, one should pay attention to the method of theology in creating certain and rational beliefs. In this way, the material world does not have a beginning, but it is constantly evolving; and no scientific research will find the ability to disprove theism as a scientific explanation of the world.

Notes:

1- See James T. Cushing, Arthur Fine, and Sheldon Goldstein, Bohmian Mechanics and Quantum Theory: An Appraisal in Boston Studies in the Philosophy of Science 184 (Dordrecht: Kluwer Academic Publishers, 1996).

2- See John Barrow and Frank Tipler, The Anthropic Cosmological Principle (Oxford: Clarendon Press, 1986, 441).

3- See Bernulf Kanitscheider, "Does Physical Cosmology Transcend the Limits of Naturalistic Reasoning?" in Studies on Mario Bunge's "Treatise," ed. P. Weingartner and G. J. W. Dorn (Amsterdam: Rodopi, 1990, pp. 346–347).

4- Robert Deltete, Critical notice of Theism, Atheism, and Big Bang Cosmology, by William Lane Craig and Quentin Smith, (Zygon 30 (1995): p. 656). (N.B. the review was attributed to J. Leslie due to an editorial mistake at Zygon.

5- See, for example, Abraham Robinson, "Metamathematical Problems," (Journal of Symbolic Logic 38 (1973), pp. 500–516).

6- See Alexander Abian, The Theory of Sets and Transfinite Arithmetic (Philadelphia: W. B. Saunders, 1965), 68; B. Rotman and G. T. Kneebone, The Theory of Sets and Transfinite Numbers (London: Oldbourne, 1966, p. 61).

7- David Hilbert, "Über das Unendlische," Mathematische Annalen 95 (Berlin, 1926, pp. 161–90). Craig cites a reprint of a translation.

8- Kurt Gödel, "Über formal unendscheidbare Sätze der Principia Mathematica und verwandter Systeme I," Monatshefte für Mathematik und Physik 38 (1931). Thanks to Sam Levey for help on this paragraph and elsewhere.

9- Mathematical constructivists might deny this, but Craig is no constructivist, and it is hard to imagine any good reason to be a constructivist about numbers if you believe in God, since constructivism is motivated by skepticism about entities like gods.

10- Quoted in Marcelo Gleiser, The Dancing Universe: From Creation Myths to the Big Bang (New York: Penguin, 1997, p. 287). Thanks to Marcelo Gleiser for help at several points in sections 4.2 and 5.

11- Craig does criticize this theory: "Vacuum Fluctuation Universe theories ... cannot explain why, if the vacuum was eternal, we do not observe an infinitely old universe." (8) However, the universe that we observe is (in a way) infinitely old in this view, even if its classical phase (which is the phase that we observe) is not infinitely old. So it is not clear what Craig's objection is.

12- S. W. Hawking, "Breakdown of Predictability in Gravitational Collapse," (Physical Review D14, 1976. 2460) (my emphasis).

13- On the reality of a singularity, (see Quentin Smith in Craig and Smith, Theism, Atheism, and Big Bang Cosmology, p. 208).

14- For more detailed criticisms of Craig's scientific arguments, see Quentin Smith, "Atheism, Theism, and Big Bang Cosmology" and "A Defense of the Cosmological Argument for God's Non-existence" in Craig and Smith, Theism, Atheism, and Big Bang Cosmology (chaps. VII and IX).

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