

PROCLAMATION MINISTRIES

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SOME EPISTEMOLOGICAL
CONSIDERATIONS WHEN INVESTIGATING
THE ORIGIN OF THE UNIVERSE

BY

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INTRODUCTION

The subject of the origin and vastness of the universe has staggered the minds of great thinkers through the ages. It has enchanted the minds of poets and novelists and given much consternation to cosmologists, physicists, theologians, and philosophers who have sought to grapple with the unfathomable complexities of this universe. The great German philosopher Immanuel Kant (1724–1804), who argued that God is unknowable and that God-talk is outside the domain of our sense perception, was nevertheless awestruck by the “starry sky above and the moral law within”—the physical universe that surrounded him and the moral imperatives that governed his life.¹ Indeed, our understating of this universe continues to grow with each passing day, and in this Einsteinian universe we cannot predict what surprises await us.

My purpose in this paper is to share five important epistemological considerations to help us wade through the plethora of data drawn from various disciplines relative to the origin of the universe.² By no means is this an exhaustive list, for it is beyond the scope of this paper to provide one. There are plenty of excellent published resources on epistemology for anyone interested in delving into it. I hope that the reader will consider these concepts as guideposts for engaging in intellectually honest discussions.

THE LAW OF NON-CONTRADICTION

Every belief system—theistic or naturalistic—espouses some form of cosmogony. On closer examination, we discover that these cosmogonies differ from one another and are radically opposed to each other. The materialistic or naturalistic view of cosmogony says that the universe is uncaused. It simply exists. In contrast, for example, the Christian theistic view holds that a transcendent, self-existent, uncaused, personal being created this universe *ex nihilo* by *fiat* with a purpose: that is, from nothing without the aid of any preexisting matter. Clearly, these two views (theistic and materialistic) are at odds, and both cannot be true at the same time because “any proposition that attributes contradictory properties to some subject at the same time and in the same sense must be false.”³

¹ Kant observed that in every person there is an “oughtness” (right and wrong) that is inescapable. To violate this moral imperative is to suffer guilt. Though Kant said that God is unknowable, he used the moral argument for the existence of God. He argued that the moral imperative within us must be grounded in an objective standard. And for the objective standard to be meaningful, what is necessary is justice—reward for good behavior and punishment for bad behavior. Since justice is never fully administered in this life, said Kant, there has to be life after death to have complete justice. In order to administer justice in the afterlife, there has to be a judge who is morally perfect, omniscient (all knowing), and omnipotent (all powerful).

² Epistemology is the study of the nature of knowledge, its scope, and the means of obtaining it. Webster’s Ninth New Collegiate Dictionary defines epistemology as the “study or a theory of the nature and grounds of knowledge, especially with reference to its limits and validity.”

³ Ronald Nash, *Is Jesus the Only Savior?* (Grand Rapids: Zondervan Publishing House, 1994), 54. It is important to note that the law of non-contradiction is a test for falsity. A statement may be inherently non-contradictory, but nevertheless false. There is nothing contradictory in saying that I live in Philadelphia, but it is a false statement because I live in Newark.

This is called the law of non-contradiction. In other words, a question cannot elicit two opposite responses at the same time and in the same sense, both claiming to be true. For example, if I say that a red car is parked in my driveway, my statement is understood to mean that the car is either red or non-red (though I could have been mistaken about the color), but not both at the same time.⁴ A shape cannot be both a square and a circle at the same time; it is one or the other. Philosopher Netland explains:

The price of rejecting the principle of non-contradiction is forfeiture of the possibility of meaningful affirmation or statement about anything at all—including statements about the religious ultimate. One who rejects the principle of non-contradiction is reduced to utter silence, for he or she has abandoned a necessary condition for any coherent or meaningful position whatsoever.⁵

When we apply this inescapable law of non-contradiction to our inquiry into the origin of the universe, we cannot say that the theistic view of the creation of the universe and the naturalistic view of the origin of the universe are both true at the same time. It is one or the other. We may say that both views are wrong and that the truth about the origin of the universe may rest elsewhere. But we cannot affirm that both views are true at the same time. C. S. Lewis, who was a professor of Medieval and Renaissance literature at Cambridge University, puts this matter in elegant simplicity: “As in arithmetic—there is only one right answer to a sum, and all other answers are wrong: but some of the wrong answers are much nearer being right than others.”⁶

When a person states that the universe was created by an intelligent, transcendent being, one who is self-existent, omnipotent, omniscient, and omnipresent, that individual is making a reasonable statement compatible with the law of non-contradiction. One may say that he or she is wrong, but one must agree that the person is making a reasonable statement because truth, by definition, is exclusive. It is important to keep in mind that the law of non-contradiction carries no content; it is only a tool to ascertain the relationship between propositions, whether or not they are contradictory, and whether the conclusions drawn follow the premises. It does not tell us what to think, but how to think.

LIMITS OF SCIENCE

In any discussion about the origin of the universe, invariably we will refer to scientific discoveries for shedding light on the subject. When we do that, we must be careful to guard against the trap of scientism, a term coined by the atheist Auguste Comte (1798–1857). Scientism, or what is commonly called scientific positivism, is the belief that the scientific method is the only way for arriving at the truth. Many years ago, William Clifford, a mathematician from England, in his essay, *The Ethics of Belief*, wrote, “It is wrong, always,

⁴ A good example of a contradictory statement would be “No one can know anything.” A person only needs to ask how he or she came to know that “no one can know anything.” Such a statement is self-defeating. A skeptic’s question, “How do I know that I exist,” is self-refuting because one must exist to ask such a question. In denying his existence, he affirms it.

⁵ Harold A. Netland, “Exclusivism, Tolerance and Truth,” *Missiology* 15 (1987): 84–85.

⁶ C. S. Lewis, *Mere Christianity* (New York: Collier Books, 1952), 43.

everywhere, for anyone, to believe anything upon insufficient evidence.”⁷ This sort of “scientific fundamentalism” is just as obnoxious to an inquiring mind as any religious fundamentalism encountered in life.

Scientists who are informed about the philosophy and limits of science do not insist that there is nothing beyond the observable. Clifford’s claim that only what can be known by science or empirically tested is believable is in itself not a statement of science. It is a philosophical statement about science. Philosopher J. P. Moreland notes:

How could the statement itself be quantified and empirically tested? And if it cannot, then by the statement’s own standards, it cannot itself be true or rationally held. Another way of putting this is to say that the aims, methodologies, and presuppositions of science cannot be validated by science. One cannot turn to science to justify science any more than one can pull oneself up by his own bootstraps. The validation of science is a philosophical issue, not a scientific one, and any claim to the contrary will be a self-refuting philosophical claim.⁸

The pursuit of science itself is based on several philosophical presuppositions. Chief among them are: (a) senses are reliable to give us accurate information, (b) our mind is rational and the universe is rational such that we can study the universe, (c) there is some uniformity and order in nature for inductive study, and (d) the laws of logic are true and theories correspond to reality. There are others. Moreland maintains, “The point is that science is just not a discipline that is isolated from other fields of knowledge in such a way that it fits into a neat compartment.”⁹ The fact that there is no generally accepted definition of science among scholars itself points to the limits of science.

Extreme evidentialism invoked by Clifford and others would profoundly undermine our search for knowledge. We all know from human experience that we rationally believe the existence of entities or realities without empirical evidence. How do we know that the world that exists external to us corresponds to what is perceived by our senses? What evidence is there that our mind perceives the world as it really is? Yet we believe that the world we see really exists. How do we know others have a thing called mind? Does the mind of another person lend itself to empirical examination? Can we slice the brain and see the mind? We see the body, motion, and other physical attributes of a person standing before us, but how do we know that he or she has a mind? What evidence can we offer for the existence of thoughts? Yet we believe that others have mind. Think of the many beliefs you hold simply because you heard it from someone else, without meeting Clifford’s criteria.

How do the limits of science apply to our investigation of the origin of the universe? Because empirical science deals with observations of nature as it exists, any conclusions we draw are only tentative and provisional. Unlike mathematics and logic, science does not deal with “proofs”; it deals with “evidence.” Only in mathematics and logic do we talk about proofs. When a proposition is proved in mathematics, it becomes a theorem that is true

⁷ W. K. Clifford, “Ethics of Belief,” *Contemporary Review* 29 (Dec. 1876–May 1877) 295. This is available at <http://www.uta.edu/philosophy/faculty/burgess-jackson/Clifford.pdf>

⁸ J. P. Moreland, *Scaling the Secular City* (Grand Rapids: Baker Book House, 1987), 197.

⁹ *Ibid.*, 199–200.

forever, unless some flaw is detected in the proof. It remains unchanged. No such thing exists in science. Science cannot prove the existence of any entity. Instead, science can establish the existence of an entity with a high degree of probability. It deals with tentative conclusions based on available evidence, which may change with new observation and data. Therefore, science deals with theories that are posited as the best explanation of the observed data at a given time. These theories are subject to change when new data emerge that challenge the prevailing theories.

What this means is that any materialistic or theistic proposition regarding the origin of the universe is only a theory, not a proof. Our challenge is to determine which of these theories best explains the available evidence. Scientists who are informed of the limits of empirical science do not use the words “proof,” “prove,” and “proven” in their discussion of science. Once, the world-renowned atheist Anthony Flew, in a debate with philosopher Alvin Plantinga of Notre Dame University, was reported to have said, “Al, I will not accept a single thing you say tonight unless you prove to me that God exists.” In response, Plantinga blew a puff of his cigar smoke on Anthony’s face and said, “I don’t have to.” You see, Anthony Flew simply presupposed that it is the burden of the theist to show that God exists.

Why should the theist bear the burden of “proving” that it is rational to believe in the existence of God? Isn’t it equally valid to say that “it is irrational to believe in the nonexistence of God” and impose on the atheist the burden of “proving” that God does not exist? It is much easier to verify that God exists than for an atheist to show that God does not exist. For example, if I say there is oil in India, all I have to do is to go to India and find some oil anywhere, and I will have met my burden of affirming my statement. In contrast, if I say that there is no oil in India, my burden of affirming that statement increases tremendously. I will have to go to India and drill every inch of the land to show that there is no oil anywhere. In fact, I will have to go back and drill again and again *ad infinitum* to “prove” that there is no oil in India.

For anyone to categorically claim that God does not exist implies that he or she has infinite knowledge. If not, it is conceivable that outside the sphere of his or her knowledge God possibly might exist. No wonder the Bible says, “The fool has said in his heart, there is no God” (Psalms 14:1; 53:1). Given the limitations of science and our limited knowledge of the universe and reality, to ask how any educated person could possibly believe that the universe is created or caused to exist by a transcendent creator is not only misinformed but condescending.¹⁰

¹⁰ For those who think that an educated person could not possibly believe that the universe is created by a transcendent being, I refer to *Intellectuals Don't need God & Other Modern Myths* by Alister McGrath. Dr. McGrath is a research professor of theology at the University of Oxford. In addition to a PhD in theology, he holds a PhD in microbiology from the University of British Columbia in Canada. He strongly believes that this universe is created supernaturally. Among hundreds of other eminent philosophers and scientists who believe that the universe is created are: Dr. Michael Behe (professor of biochemistry, at Leigh University, Pennsylvania, and author of *Darwin's Black Box*); William A. Dembski (author of *Intelligent Design: The Bridge between Science and Theology*); Dr. Dembski holds a PhD in mathematics from the University of Chicago and a PhD in philosophy from the University of Illinois); Patrick Glynn (resident scholar at Georgetown University and author of *God: (footnote continued)*

ORIGIN SCIENCE

The challenge confronting any investigator of the origin of the universe is the fact that we are dealing with an event that occurred once in the distant past (singularity), which is nonrecurring and not falsifiable by empirical methods. Modern scientific methods deal with regular patterns or events (regularities) in nature that are observable, so that if a theory does not fit the regularly observed patterns, it is rejected. Today, many philosophers believe that cosmology—the study of the operation of the universe—should be placed in the domain of “operation science” because it deals with regularities in the universe. In contrast, cosmogony—the study of the origin of the universe—falls in the domain of “origin science” because it deals with a singularity that occurred in the distant past.

When investigating the origin of the universe (singularity) by empirical methods that we use for studying observed regularities, we run into a problem: what happened at the moment when the universe came to be is not available for observation. Moreover, the past cosmic event is not repeatable for falsifying any of our hypotheses. Geisler and Anderson note: “It is the fact that origin science deals with singularities which make predictions impossible. No trend can be read from a singularity, that is, from a solitary event which forms no part of a recurring pattern of events. . . It is a forensic look backward toward a past singularity from which no particular conclusion can be drawn about any future creative events.”¹¹

A rational approach for investigating the origin of the universe is to apply the bedrock nonnegotiable presupposition of science—the law of causality. The law of causality states that every *effect* has a cause. Or to put it differently, whatever begins to exist has a cause. The term *effect* contains within it the idea of an antecedent cause.¹² Sproul, Gerstner, and Lindsley correctly note: “If the sequence we observe involves effects (characteristics of contingent beings), then we may properly search for their antecedent causes. It is only in the case of a necessary being, a being who is not an effect, that the search for antecedent causality may and must cease.”¹³

The evidence – the reconciliation of faith and reason in a post-secular world; he holds a PhD from Harvard University); and John Polkinghorne (a fellow of the Royal Society and author of *Science and Creation: The search for understanding*; he is a former professor of mathematical physics at Cambridge University).

¹¹ Norman Geisler and J. Kerby Anderson, *Origin Science* (Grand Rapids: Baker Book House, 1987), 105–106.

¹² The statement “Every effect has a cause” is an analytically true statement, because by definition the word “effect” means something that has been caused by something else. Similarly, the word “cause” means something that produces something else. For example, “All bachelors are unmarried men,” is a true statement because by definition “bachelor” means an unmarried man. We don’t have to interview every bachelor to determine if this is the case. If someone is married, we don’t call that person a bachelor. On the other hand, the statement “some bachelors have a Mercedes Benz” is not an analytically true statement because it needs to be established that, indeed, some bachelors do own a Mercedes Benz. The term “bachelor” does not carry within it the notion of owning a Mercedes Benz.

¹³ R. C. Sproul, John Gerstner, and Arthur Lindsley, *Classical Apologetics* (Grand Rapids: Zondervan Publishing House, 1984), 111.

David Hume (1711–1776) was a strong critic of the law of causality. Though he doubted the ability of our senses to accurately perceive the causal relationship to events, he did not question the existence of actual causes. He said that just because one event follows another, we cannot assume that the first event is the cause of the second. In essence, Hume was concerned about how we can know the causal relationships but not the existence of causes. He wrote, “But allow me to tell you that I never asserted so absurd a Proposition as that *anything might arise without cause*”¹⁴ Just because one does not immediately perceive a causal nexus does not mean there is no cause for an effect. The limitation of our knowledge of unseen causes is not sufficient to jettison the law of causality. If we cannot rely on our senses to perceive the external world, however imperfect they may be, it would be impossible to engage in science. The reliability of our senses is a fundamental presupposition of science.

When we apply this law of causality to cosmogony, the following argument emerges: the universe either had a beginning or it did not. If it had a beginning, it was either caused or uncaused. If the universe was caused, the cause was either personal or not personal. If the universe did not have a beginning, it means it always existed. To claim that the universe had no beginning is to say that the universe is an actual infinite with an infinite succession of past events. Moreland explains the problem with a universe that is an actual infinite:

If there is an actual infinite, it must occur, as it were, all at once. It can be put as follows: It is impossible to traverse (cross) an actual infinite by successive addition. The temporal series of past events has been formed by successive addition. Therefore, it cannot be actually infinite. But since it is not infinite, it must be finite (i.e., it must have a first term). And this is what we mean by saying the universe had a beginning. . . . Now the present moment has as its ultimate chain of causal antecedents the entire history of the cosmos. If any past event has not already been actualized, the present could not have occurred. This means that the past is actual and contains a specifiable, determinate number of events. This chain of events must have had a first member. Without a first member, there would be no second, third, or *n*th member in the chain where the *n*th member is the present event So if the past is actually infinite, the present moment could not have been caused; that is, it could not have come to be.¹⁵

Moreland’s argument is that if the universe is an actual infinite with no beginning, we could not traverse an actual infinite and arrive at the present moment. The fact that we are here means the universe is not infinite. Philosophically, a beginningless, infinite universe leads to several unacceptable consequences.¹⁶ While infinite is an idea, it does not exist in reality. Not all mathematicians agree that an actual infinite exists even in the realm of

¹⁴ David Hume, *The Letters of David Hume*, 2 vols. ed. J. Y. T. Greig (Oxford: Clarendon Press, 1931), 1:187, letter to John Stewart, February 1754. Quoted in William Lane Craig, “Why I Believe God Exist,” in *Why I Am A Christian*, ed. Norman Geisler and Paul K. Hoffman (Grand Rapids: Baker Books, 2001), 63.

¹⁵ Moreland, 28–29.

¹⁶ William Lane Craig offers the following example as an unacceptable consequence of an actual infinite. Assume a library has an infinite number of red books and infinite number of blue books. Let us also assume that each book has an infinite number of pages. If there is an actual infinite, there would be just as many pages in one book as in the entire collection of books. This does not make sense to us. Does it? Cited in Moreland, 23.

mathematics. When we think of infinite, we are normally referring to potential infinity, not actual infinity.

Today, most scientists accept the fact that the universe had a beginning. The Big Bang model of cosmogony, which is a widely accepted view, postulates that the universe as we know it (matter, energy, space, and time) had a beginning some fifteen billion years ago. Three significant observations support this model: the expansion of the universe, detection of a cosmic microwave radiation echo that is consistent with a universe that began with an explosion, and steady decrease of usable energy (the second law of thermodynamics). Noted physicist Stephen Hawking explains: “In fact, the theory that the universe has existed forever is in serious difficulty with the Second Law of Thermodynamics. The Second Law states that disorder always increases with time. Like the argument about human progress, it indicates that there must have been a beginning. Otherwise, the universe would be in a state of complete disorder by now, and everything would be at the same temperature.”¹⁷

Those who say that the universe is uncaused generally appeal to Heisenberg’s uncertainty principle (HUP), otherwise called the principle of indeterminacy.¹⁸ They argue that at the subatomic level, elementary particles are known to appear and vanish without an apparent cause. Heisenberg argued that the impossibility of predicting with certainty the future position and momentum of an elementary particle implies that these particles have “freedom” to behave uncaused.¹⁹ Physicists are divided on the question whether or not these particles are formed without a cause. The Copenhagen school of Niels Bohr proposes that the ability of these particles to appear uncaused is ontological; that is, the capacity to appear uncaused is built into their nature. The school of Max Planck argues that the explanation is epistemological; that is, we simply don’t know what the cause is. It may be of interest to note that Einstein was not convinced that indeterminacy is the explanation of the behavior of particles at the subatomic level; rather, it is our inability to make accurate measurements. He stated, “God does not play dice with the universe.”

Three points can be made regarding these quantum phenomenon. First, these particles “arise as spontaneous fluctuations of the energy contained in the subatomic vacuum; they do not come from nothing.”²⁰ Second, what seems to appear at the subatomic level does not

¹⁷ Stephen Hawking, *The Beginning of Time*. Lecture delivered in 1996. <http://www.hawking.org.uk/the-beginning-of-time.html>

¹⁸ Werner Heisenberg’s principle of uncertainty says that it is impossible to simultaneously measure with precision the position and momentum of a subatomic particle. The more precisely one measures one variable (position) of the particle, the less precise will be the measurement of the other variable (momentum) and vice versa. The very act of observing induces change in one of the variables.

¹⁹ The difficulty of measuring particles that are moving at 5,000 miles per second in different directions is clearly understandable. But to extrapolate this phenomenon to argue that cause and effect, in general, do not exist is unwarranted and runs counter to our experience. Just because we cannot fully determine the motion of an individual molecule in a gas or predict all the details of a car accident, does not mean there is no cause for these events. The Heisenberg’s principle of uncertainty is not a principle of uncausality, but the principle of unpredictability.

²⁰ Geisler and Hoffman, 64.

correspond to our experience of cause and effect at the macro level in the universe. If these particles move unpredictably in different directions, it may be that the necessary and sufficient conditions for their behavior (cause) are within them rather than external to them. This does not mean that there is no cause for their behavior. Third, it is reasonable to deduce that their cause is undetectable at the present time. Our inability to measure and predict the behavior of an elementary particle does not mean that there are no causes for its behavior. Sproul, Gerstner, and Lindsley note:

The presumption of no-cause rests on the presumption of exhaustive knowledge of all causes, visible and invisible. The conclusion is fatal to all science for it vitiates the scientific method. . . . To jump from saying we do not know the cause for the apparently random behavior of subatomic particles to saying there is no cause for their behavior, is to jump from the finite to the infinite. Here we see real quantum motion—in the gratuitous leap of the intellect from the finite to the infinite, doing radical violence to the limits of induction”²¹

If the universe had a beginning, how did it begin to exist? It is important to keep in mind that our known laws of physics and the empirical methods of science can only help us to probe the origin of the universe up to 10^{-43} second after the Big Bang, but they break down at singularity. Stephen Hawking, who along with Roger Penrose formulated the space-time theorem of singularity, writes:

At a singularity, all the laws of physics would have broken down. This means that the state of the universe, after the Big Bang, will not depend on anything that may have happened before, because the deterministic laws that govern the universe will break down in the Big Bang. The universe will evolve from the Big Bang, completely independently of what it was like before. Even the amount of matter in the universe, can be different to what it was before the Big Bang, as the Law of Conservation of Matter, will break down at the Big Bang.²²

The Big Bang model raises the question: what was the state of affairs prior to singularity? If prior to singularity there was no matter, energy, space, and time, how could anything begin to exist spontaneously from absolutely nothing? Atheist Kai Nielson gives this illustration, “Suppose you suddenly hear a loud bang . . . and you ask me, ‘What made that bang?’ and I reply, ‘Nothing, it just happened.’ You would not accept that. In fact you would find my reply quite unintelligible.”²³ If this is true for the little bang, why shouldn’t it be true for the Big Bang?²⁴ C. S. Lewis wrote, “If there was a controlling power outside the universe, it

²¹ Sproul, Gerstner, and Lindsley, 113.

²² Stephen Hawking, *The Beginning of Time*. Lecture delivered in 1996.
<http://www.hawking.org.uk/the-beginning-of-time.html>

²³ Geisler and Hoffman, 63.

²⁴ Ascribing a natural or material cause to Big Bang would take us into an infinite regress of causes, unless of course the first cause is a personal, uncaused, necessary being, self-existent, and one who transcends time, space, energy, and matter. To ask what caused such an uncaused qualitatively transcendent necessary being or first cause is to commit a category fallacy. A category fallacy is the error of ascribing the wrong features to a wrong thing. For example, to ask “What is the color of my height?” is to commit a category fallacy, for it assumes heights have color. The argument that the
(footnote continued)

could not show itself to us as one of the facts inside the universe—no more than the architect of a house could actually be a wall or staircase or fireplace in that house”²⁵

The inescapable question that one must answer is: why is there a universe rather than not? Stephen Hawking, considered the most brilliant theoretical physicist since Einstein, ends his bestselling book, *A Brief History of Time*, with these words: “Up to now, most scientists have been too occupied with the development of new theories that describe *what* the universe is to ask the question *why* . . . we and the universe exist. If we find the answer to that, it would be the ultimate triumph of human reason—for then we would know the mind of God.”²⁶

THE NATURE OF TRUTH

Long ago, the Roman governor Pilot asked Jesus, “What is truth?” The search for truth and knowing what it is has been the subject of philosophical thinking since the dawn of history. In his book, *Reality Isn't What It Used to Be*, Walter Truett Anderson humorously gives us an insight into how our understanding of truth has evolved since the premodern era. The premodern objectivist umpire would have said, “There’s balls, and there’s strikes, and I call ’em as they are.” The modern constructivist umpire would have said, “There’s balls and there’s strikes, and I call ’em as I see ’em.” And the postmodernist radical constructivist umpire would say, “They ain’t nothing until I call ’em.”²⁷ In other words, truth is absolute to the premodernist and relative to the modernist; to the postmodernist, truth is created according to his or her whim.

If truth is relativized, subjected to our feelings, or created according to our whim and fancy, life becomes unmanageable and chaotic. In a famous debate between the atheist Bertrand Russell and Catholic priest Frederick Copleston on the existence of God, Copleston asked Russell how he justified the difference between right and wrong. Russell answered that he differentiated them as he distinguished blue from yellow. Copleston asked, “You distinguish blue and yellow by seeing them, so you distinguish good and bad by what faculty?” Russell replied, “By my feelings.”²⁸ Commenting on this exchange, Christian apologist Ravi Zacharias wrote, “Copleston was very gracious, for had he wanted to draw philosophical blood, he could have decimated Russell’s argument. In some cultures they love

universe is self-existent and uncaused is untenable in view of a preponderance of evidence pointing to the beginning of the universe.

²⁵ C. S. Lewis, 33.

²⁶ Stephen Hawking, *A Brief History of Time* (New York: Bantam Books, 1990), 174–175.

²⁷ Anderson, Walter Truett, *Reality Isn't What It Used to Be: Theatrical Politics, Ready-to-Wear Religion, Global Myths, Primitive Chic and Other Wonders of the Postmodern World*. (San Francisco: Harper and Row, 1990), 75.

²⁸ Debate between Bertrand Russell and Father Copleston on the existence of God. <http://www.philvaz.com/apologetics/p20.htm>

their neighbors; in others they eat them, both on the basis of feeling. Would Russell have had a preference?”²⁹

It’s important to distinguish truth from knowledge. Truth about reality is a proposition that corresponds to reality, and it is true for everyone everywhere, and for all time. Truth is not created by humans; it is independent of our perceptions, language, and beliefs and is ontologically prior to our knowing. For example, the truth that time is related to the speed of light is not created by human beings but is discovered as a fact of the universe. It was true before Einstein discovered it and is true for all time. Similarly $2 + 2 = 4$ is true for all people, all the time, and in any place. Truth is not subject to a majority opinion, nor is it a reflection of one’s intentions.

Knowledge, on the other hand, is one’s understanding of the nature of reality. Thus truth is knowable. We may not have absolute knowledge of all truths, but we can know some truths with certainty and others with varying degrees of confidence. I know with certainty that I exist, and for me to say “I do not exist,” I must exist. I know with certainty that there are no square circles. If truth is knowable, how should one choose a belief system when inundated with dissonant voices and competing world-views? According to philosopher Ronald Nash, “when faced with a choice among competing touchstone propositions of different world-views, we should choose the one that, when applied to the whole of reality, gives us the most coherent picture of the world.”³⁰ Philosopher Gordon Clark explains:

If one system can provide plausible solutions to many problems while another leaves too many questions unanswered, if one system tends less to skepticism and gives more meaning to life, if one world-view is consistent while others are self-contradictory, who can deny us, since we must choose, the right to choose the more promising first principle?³¹

A world-view must pass certain tests to establish its truthfulness. It must be logically consistent within its own tenets, must provide an empirically verifiable picture of reality, and must be experientially satisfying. While these tests are not fail-proof, they are a good start. Historically, philosophers and apologists have used a number of tests—Agnosticism, Rationalism, Fideism, Experientialism, Evidentialism, Pragmatism, and Combinationalism—for establishing the truthfulness of a belief system. They have their strengths, but in the final analysis, they prove to be deficient as tests for truth.³²

If no test for truth is sufficient, it would be impossible to establish one view over other opposing views. Fortunately, according to philosopher Geisler, it is not a lost cause. There is hope. He proposes that a world-view may be considered true if it passes the test of

²⁹ Ravi Zacharias, *A Shattered Visage: The Real Face of Atheism* (Tennessee: Wolgemuth & Hyatt Publishers, Inc., 1990), 55.

³⁰ Ronald Nash, *Faith and Reason* (Grand Rapids: Zondervan Publishing House, 1988), 51.

³¹ Gordon C. Clark, *A Christian View of Men and Things* (Grand Rapids: Eerdmans, 1952), 34.

³² For an extended discussion of various tests for truth and their relative strengths and weaknesses, see Norman Geisler, *Christian Apologetics* (Grand Rapids: Baker Book House, 1976), 13–133.

undeniability. Conversely, a belief system is considered false if it is *unaffirmable*.³³ Let's look at these tests more closely. *Undeniability* is a test for truth. What is undeniable is necessarily true.³⁴ My existence, for instance, is undeniable. To deny my existence, I must exist. Therefore, my existence is undeniable.

Unaffirmability is a test for falsity. If a statement cannot be affirmed, it must be necessarily false. Just because a statement is sayable or meaningfully statable, it does not necessarily follow that the statement is true. An agnostic's assertion, "I know that one cannot know anything about reality," is unaffirmable. It implies that he knows something about reality—that is, "one cannot know anything about reality." Similarly, the verbal expression, "I cannot speak a word of English," is unaffirmable because in making that statement, I am actually speaking several words of English. Therefore, the statement is false.

How do these tests of truth relate to the question of the origin of the universe? Perhaps a helpful way to answer this question is to ask if the available evidence derived from philosophy, theology, science, and human experience point to a created universe or an uncreated universe, recognizing that what is unaffirmable is necessarily false and what is undeniable is necessarily true. A corollary to this question is to ask whether or not a created or an uncreated universe corresponds to reality as we know it. It helps to keep in mind that any explanation we posit for the origin of the universe—theistic or materialistic—must be internally consistent, empirically sufficient, and experientially relevant.

FAITH AND REASON

What is the role of reason and faith in the investigation of cosmogony? Is it possible to resolve the question of cosmogony by reason alone (rationalism)? Or does one arrive at the truth of the origin of the universe by faith alone (fideism)? Too much confidence in reason may lead to skepticism, because no person can be argued into embracing a world-view by the sheer force of reason alone. Similarly, too much emphasis on fideism to the exclusion of reason may also lead to doubt and unbelief, because people do have legitimate questions about life that need rational and credible answers.³⁵ If faith has a role in our investigation of cosmogony, how do we define faith? How is it related to reason? These are some of the questions philosophers, theologians, and even scientists wrestle with when dealing with questions of eternal significance.

Reason is that aspect of our mental faculty that allows us to look at the data conveyed by our senses, understand their meaning and relationships to each other, and interpret their significance or lack thereof. As Kant would say, reason helps to give form and structure to the sense perceptions of the external world. By the power of reason, one is able to make a case for or against a proposition (e.g., "God exists."). However, it is by faith that a

³³ Ibid., 141.

³⁴ Geisler makes a distinction between definitional undeniability and existential undeniability. In the case of definitional undeniability, an affirmation may be undeniably true if it exists. Existential undeniability deals with actual realities.

³⁵ James Taylor, *Introducing Apologetics* (Grand Rapids: Baker Academic, 2006), 12.

proposition is received as truth and settled in the heart and mind of an individual. So, then, faith is not unreasonable. It is supported by reason, and good reasons, indeed!

Faith is not, as some might think, a blind leap into the dark hoping that someone might be there to catch us. To exercise faith, one must have a certain level of information or content (Latin: *notitia*). Faith is not vacuous. Second, faith gives intellectual assent (Latin: *assensus*) to a proposition. If I ask, “Do you believe that Barak Obama is the first African American president of the United States?,” how would you respond? You would say “Yes,” meaning you give a mental assent to the proposition and affirm the truthfulness and rationality of that statement. There is a third element of faith, which is called trust (Latin: *fiducia*). Here, one not only gives a mental assent to the truthfulness of a proposition, but also places a personal trust. For a Christian, the object of trust is the person of Jesus Christ. The Bible says, “But these are written that you may believe that Jesus is the Christ, the Son of God, and that believing you may have life in His name” (John 20:31, NKJV). In Christian theology, trust (*fiducia*) is an important part of “saving faith.”

Faith is not based on scientific proof. For example, if I can prove with mathematical certainty that God exists, or if I have personally seen God, I don’t need any faith to believe in the existence of God. Thomas Aquinas rightly said that you cannot have both faith and proof of the same object. Reasonable faith, on the other hand, involves the “will to believe” when there is a “preponderance of evidence” regarding the unseen object of faith, or when the object of faith cannot be settled by an examination of the available evidence. Stephen Layman writes:

When evidential considerations leave us unable to settle a matter, there is still a sense in which it can be reasonable, in a practical sense, to believe. After all, while well-evidenced truth is one of the goods humans reasonably seek, it isn’t the only good. Thus, if I cannot in my own mind settle a given religious issue, such as the existence of God, simply by examining the available evidence, but I can gain greater moral motivation or hope for living by so believing, it may still be rational, at least in a practical sense, to do so.³⁶

With respect to cosmogony, it is misleading to ask, “Is there enough evidence for the existence of God?” A more helpful question might be, “Does theism better explain the observed phenomenon or the available evidence than atheism?” In the final analysis, both the atheist and theist will have to settle this matter by faith. The theist looks at the “preponderance of evidence” and wills to believe that God exists. The atheist, on the other hand, wills to believe that God does not exist in spite of an absence of convincing evidence and lack of exhaustive knowledge of reality, both visible and invisible. Richard Lewontin, a Harvard geneticist, in his review of Carl Sagan’s book *The Demon-Haunted World: Science as a Candle in the Dark* makes a stunning admission:

We take the side of science in spite of the patent absurdity of some of its constructs, in spite of its failure to fulfill many of its extravagant promises of health and life, in spite of the tolerance of the scientific community for unsubstantiated just-so stories, because we have a prior commitment, a commitment to materialism. It is not that the methods and institutions

³⁶ Stephen Layman, “Faith Has Its Reasons,” in *God and the Philosophers: The reconciliation of faith and reason*, ed. Thomas V. Morris (New York: Oxford University Press, 1994), 92.

of science somehow compel us to accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by our *a priori* adherence to material causes to create an apparatus of investigation and a set of concepts that produce material explanations, no matter how counterintuitive, no matter how mystifying to the uninitiated. Moreover, that materialism is absolute, for we cannot allow a Divine Foot in the door. The eminent Kant scholar Leis Beck used to say that anyone who could believe in God could believe in anything. To appeal to an omnipotent deity is to allow that at any moment the regularities of nature may be ruptured, that miracles may happen.³⁷

What keeps many scientists from considering a supernatural explanation for the origin of the universe is not the lack of evidence, but their *prior* commitment to materialism.

CONCLUSION

In this paper, I have tried to share a few epistemological considerations that are helpful when investigating the origin of the universe. The truth is that none of us approach this and other questions of life with a clean slate (*tabula rasa*). We look at them through the lens of our respective world-view, be it theistic or materialistic. As a Christian, I hold to a Judeo-Christian world-view and find that the available empirical evidence points me to a creator—one who is a self-existent, uncaused, transcendent, necessary being—who created this universe by His mighty word out of nothing. Albert Einstein, perhaps the greatest physicist of all time, said:

The human mind is not capable of grasping the Universe. We are like a little child entering a huge library. The walls are covered to the ceilings with books in many different tongues. The child knows that someone must have written these books. It does not know who or how. It does not understand the languages in which they are written. But the child notes a definite plan in the arrangement of the books—a mysterious order which it does not comprehend, but only dimly suspects.”³⁸

Einstein acknowledged that in the universe we see the signals of transcendence—“a definite plan in the arrangement of the books—a mysterious order.” The apostle Paul wrote, “For ever since the world was created, people have seen the earth and sky. Through everything God made, they can clearly see his invisible qualities—his eternal power and divine nature. So they have no excuse for not knowing God” (Romans 1:20, NLT).

I also believe that in the fullness of time, this transcended creator revealed Himself to us in the person of Jesus Christ. The Bible says, “Christ is the visible image of the invisible God. He existed before anything was created and is supreme over all creation. . . He made the things we can see and the things we can’t see—such as thrones, kingdoms, rulers, and authorities in the unseen world. Everything was created through him and for him. He existed before anything else, and holds all creation together” (Colossians 1:15–17, NLT).

³⁷ Richard Lewontin, *Billions and Billions of Demons* (review of *The Demon-Haunted World: Science as a Candle in the Dark*. Carl Sagan (The New York Review, January 9, 1997), 31.

³⁸ Albert Einstein Quotes on Spirituality. SimpleToRemember.com.
<http://www.simpletoremember.com/articles/a/einstein/>

Whatever world-view one may adopt, the challenge before us is to critically examine how well it answers the questions of life, such as origin, human predicament, salvation, morality, and destiny. The quest for truth is a journey in which one may experience profound doubts. “Faith means doubt,” said Thomas Merton. “It is not the suppression of doubt. It is the overcoming of doubt, and you overcome doubt by going through it. The man of faith who has never experienced doubt is not a man of faith.”³⁹ When we have exhausted the power of reason and are assailed by doubts, it is by faith that we overcome doubts. Martin Lloyd-Jones wrote:

Let me put it in the words of Blaise Pascal, that great French mathematician and scientist: “The supreme achievement of reason is to bring us to see that there is a limit to reason.” There, it seems to me, is the starting point. Use your reason, use your intellect; do so honestly, and you will come to the conclusion that there is a limit to reason. And then wait. It is at that point that God in His infinite grace and kindness meets us in revelation.⁴⁰

³⁹ Robert Inchausti, *Thomas Merton’s American Prophecy* (Albany: State University of New York Press, 1998), 169.

⁴⁰ Martin Lloyd-Jones, *Authority* (London: Inter-Varsity Fellowship, 1967), 13.