Signs of the Divine:
Evidences Pointing to the Existence of God

Many things exist that cannot be seen. Thoughts, feelings, gravity, and numbers are all invisible, yet we are sure of their existence. Scientists are confident that dark matter and the Higgs Boson (sometimes called the "God Particle") are real, though we'll never see either one. Likewise, Scripture assures us that though God is invisible, we can know he's there. In fact, every person has "a deep, inner sense that God exists, that they are his creatures, and that he is their Creator" (Wayne Grudem, *Systematic Theology*, 169).

Paul tells us in Romans 1:18-32 that everyone knows something of God and his attributes, and that humans by nature are worshippers. However, unbelievers suppress this knowledge and worship idols in place of God. The Psalms thus declare the unbeliever to be wicked and foolish (Psalms 10:3-4; 14:1; 53:1).

Additionally, we can know God exists through the general revelation of creation and the special revelation of Scripture. With respect to the former, the heavens declare the glory of God (Psalm 19:1), God's character and power are "clearly perceived in the things that have been made" (Romans 1:20), and even the changing seasons are evidence of his existence (Acts 14:17). With respect to the latter, Scripture begins with the assumption of God's existence (Genesis 1:1) and gives evidence of his works throughout redemptive history.

Nonetheless, many people stubbornly reject the collective testimony of their inner witness, the world, and the Word. And they foist their sophisticated objections on others—especially in the world of higher education. It behooves us, then, as Christians to offer sophisticated responses. Though such responses cannot change the heart, they can, to quote Zach Lee, "shut the mouth" and provide opportunity for unbelievers to think more maturely about God. What's more, careful arguments can help believers wrestling with doubts by confirming the Spirit's inner witness that God exists and that they belong to him (Romans 8:16).

Traditionally, Christian thinkers have offered four types of arguments for the existence of God: **cosmological**, **teleological**, **moral**, and **ontological** arguments. Since Scripture simply assumes the existence of God, these arguments marshal evidence from extra-biblical realms like philosophy, mathematics, and science. In our contemporary educational climate, these fields are largely foreign to many of us. Some of what follows might thus seem difficult. But what more exciting, life-altering venture could there be than discovering that, when it comes to God, there are good reasons to believe "he is there and he is not silent" (to quote the title of a book by Francis Schaeffer)?

The Evidence of Existence (Cosmological Arguments)

Medieval philosophers endlessly debated whether the universe had a beginning. In the High and Late Middle Ages, Western philosophers virtually assumed it did. But when Enlightenment philosopher Immanuel Kant declared the universe to be infinite in the late eighteenth century, it seemed the whole world thought it inhabited an eternal cosmos. It wasn't until the early twentieth century that the tide began to reverse, thanks to new discoveries in so-called hard sciences and retrieval of philosophically-driven cosmological arguments. So what are cosmological arguments?

One Origin

Cosmological arguments are "a family of arguments for the existence of God that postulate God's existence as the ultimate cause or ground or explanation of the cosmos" (C. Stephen Evans, *Pocket Dictionary of Apologetics & Philosophy of Religion*, 29).

In other words, cosmological arguments begin with the existence of the universe and reason their way to **God** as the best explanation for its origin.

Two Types

Cosmological arguments generally take one of two forms: (1) the ***horizontal*** form (think of a timeline extending back to eternity past), which seeks to establish an *originating* cause of the universe; and (2) the ***vertical*** form (think of a ladder of authority; i.e, a chain of command), which seeks to establish an *ongoing* cause of the universe.

The *horizontal* form of the argument (establishing an *originating* cause) looks like this:

1. Every event that had a beginning had a cause.
2. The universe had a beginning.
3. Therefore, the universe had a cause (Normal L. Geisler, *Systematic Theology*, 1:27).

This argument hinges on the premise that the universe *came* to be. It traces causation back in time to the *beginning*.

The *vertical* form of the argument (establishing an *ongoing* cause) looks like this:

1. Every effect has a cause.
2. The universe is an effect.
3. Therefore the universe has a cause (Norman L. Geisler and William D. Watkins, *Worlds Apart*, 54).

This argument trades on the idea that the universe *continues* to be. It traces *present* causation upward in a chain of command. Unlike the horizontal form, which stresses temporal priority, the vertical form stresses priority in rank.

Three Thinkers

Cosmological arguments first appeared among early Christian philosophers who argued against the idea of an eternal universe. But it was medieval Islamic theologians who gave them traction. A version known as the *kalam* (Arabic for "speech" or "doctrine") cosmological argument was developed by **al-Ghazālī** (1058–1111), who stated the argument this way:

"Every being which begins has a cause for its beginning; now the world is a being which begins; therefore, it possesses a cause for its beginning" (Ghazālī, cited by Craig, *Reasonable Faith*, 80).

This is the classical *horizontal* form of the argument, positing an *originating* cause of the universe. Since the *kalam* argument is the most prominent one today (and is perhaps the most effective), it will receive fuller treatment in a later section.

The classical *vertical* form of the cosmological argument, advancing an *ongoing* cause of the universe, was developed by **Thomas Aquinas** (1225–1274). In his massive (8 volumes in Latin and 22 volumes in English!) yet unfinished *Summa Theologica*, Aquinas presented his now famous "five ways" to argue for the existence of God. The first three ways represent forms of the cosmological argument.

Aquinas' first argument sought a cause for the existence of *motion*. "Whatever is moved must be moved by another" (*Summa Theologica*, Part 1, Question 2, Article 3) and an infinite regress of movers is logically absurd. Like a series of gears, one causes the motion of another. But even an infinite number of gears would sit motionless if not set in motion by something else. The gears' *potential* for movement must be *actualized* and potential cannot actualize itself (Norman L. Geisler, *Baker Encyclopedia of Apologetics*, 161). Aquinas thus determined there must ultimately be an "unmoved mover," a first cause we identify as God.

Aquinas' second argument sought a cause for the existence of *objects*. Like his argument from motion, Aquinas argued there cannot be an infinite regress in a chain of causes. All objects have an "efficient cause," meaning their very existence is dependent on something before it. That is, nothing can cause itself to exist. Certainly, "there is no case known (neither is it, indeed, possible) in which a thing is found to be the efficient cause of itself; for so it would be prior to itself, which is impossible" (*Summa Theologica*, Part 1, Question 2, Article 3).

Aquinas' third argument sought a cause for the existence of *beings*. Often referred to as the argument from contingency, this form of the cosmological argument distinguishes between *necessary* and *contingent* existence. That is, there's a difference between that which *must* be and that which *might* be. That which is necessary *must* exist by its very nature; it cannot be otherwise. That which is contingent *might* exist but its non-existence is a logical possibility, too. You and I do not exist necessarily; we would not exist had our parents never met. Our existence is thus dependent on something both external and prior to ourselves. This is true of our parents, their parents, their parents' parents, and so on. But where does it end? We have again stumbled upon the problem of infinite regress. "Therefore we cannot but postulate the existence of some being having of itself its own necessity and not receiving it from another, but rather causing in others their necessity. This all men speak of as God" (*Summa Theologica*, Part 1, Question 2, Article 3).

The classical cosmological argument of German philosopher **Gottfried W. F. von Leibniz** (1646–1716) is different than the *kalam* and Thomistic versions. Looking beyond the explanatory *cause* of the universe, he sought a sufficient *reason* for its existence. Accepting Aquinas' *what* (i.e., cause), Leibniz searched for the *why* (i.e., reason) behind the cosmos. He determined that nothing within the universe could be the sufficient reason for its existence, since every single thing within it is contingent (that is, dependent on something else). Even the universe considered as a whole cannot supply sufficient reason for its existence. After all, it's just a collection of contingent things, so it must be contingent itself (William Lane Craig, *Reasonable Faith*, 83).

Leibniz observed that things in the universe don't simply transpire; they happen for a reason. Everything then *exists* for a reason. But as with a series of causes, there cannot be an endless chain of reasons behind all that exists. So we butt up against the problem of infinite regress once more. If we are to finally arrive at an explanation, we must land on a first cause without a reason that is external or prior to itself. It must be "an intrinsically intelligible or self-explanatory being" (J. P. Moreland, *Scaling the Secular City*, 17). This being is God.

Four Fields

The cosmological argument has enjoyed renewed interest and influence in recent years, owed largely to the retrieval and expansion of the classical *kalam* argument by Christian philosopher William Lane Craig (1949–). Listed in 2016 by *The Best Schools* as one of the 50 most influential living philosophers, Craig has developed a holistic cosmological argument that appeals to **philosophy**, **mathematics**, **science**, and **theology**.

Craig presents his argument in the following form:

1. Whatever begins to exist has a cause.
2. The universe began to exist.
3. Therefore, the universe has a cause (William L. Craig, *Reasonable Faith*, 92).

Regarding the first premise, Craig notes that it is "so intuitively obvious, especially when applied to the universe, that probably no one in his right mind *really* believes it to be false" (William Lane Craig and Quentin Smith, *Theism*,

Atheism, and Big Bang Cosmology, 57). Nevertheless, atheist Quentin Smith stated in his published debate with Craig that "the most reasonable belief is that we came from nothing, by nothing, and for nothing" (*Theism*, 135). So how do we argue for premise 1?

It's an axiom of metaphysics (the **philosophical** study of ultimate reality) that something cannot come into being from nothing (William Lane Craig and J. P. Moreland, *Philosophical Foundations for a Christian Worldview*, 468). Craig comments:

> To claim that something can come into being from nothing is worse than magic. When a magician pulls a rabbit out of a hat, at least you've got the magician, not to mention the hat! But if you deny premise 1, you've got to think that the whole universe just appeared at some point in the past for no reason whatsoever…. This is simply the faith of an atheist. In fact, I think this represents a greater leap of faith than belief in the existence of God. For it is, I repeat, literally worse than magic. If this is the alternative to belief in God, then unbelievers can never accuse believers of irrationality, for what could be more evidently irrational than this (William Lane Craig, *On Guard*, 76-77)?

Some argue that quantum mechanics has demonstrated that something can indeed come from nothing, noting that subatomic particles can appear spontaneously in a quantum vacuum (see, e.g., Lawrence M. Krauss, *A Universe from Nothing*). But here's the rub: A quantum vacuum "is not truly empty but instead contains fleeting electromagnetic waves and particles that pop into and out of existence" (Phillip F. Schewe and Ben Stein, *Physics News Update*, Number 300, December 20, 1996). In short, a quantum vacuum is *something* rather than *nothing*!

Atheist David Albert agrees. In a review of the book *A Universe from Nothing*, Albert noted:

> The fact that particles can pop in and out of existence, over time, as those fields rearrange themselves, is not a whit more mysterious than the fact that fists can pop in and out of existence, over time, as my fingers rearrange themselves. And none of these poppings, if you look at them aright, amount to anything even remotely in the neighborhood of a creation from nothing (David Albert, "On the Origin of Everything," *New York Times*, January 13, 2012).

Craig thus concludes:

> So it's not an example of something coming into being without a cause. The quantum vacuum and the energy locked up in the vacuum are the cause of these particles. And then we have to ask, "Well, what is the origin of the whole quantum vacuum itself? Where does *it* come from?"…. You've simply pushed back the issue of creation. Now you've got to account for how this very active ocean of fluctuating energy came into being. Suddenly, we're back to the origins question (William Lane Craig, interview with Lee Strobel, *Is God Real?*, 24).

In support of the second premise—that the universe began to exist—Craig marshals evidence from the fields of mathematics and science.

The **mathematical** crux of the *kalam* argument is the distinction between *potential* (i.e., abstract, conceptual) infinities (found in modern mathematical set theory) and *actual* (i.e., concrete, tangible) infinities (for a technical discussion of the mathematics involved, see J. P. Moreland, *Scaling the Secular City*, 20-22).

Potential infinities are sets of numbers that perpetually increase but never reach a final count. Philosopher Douglas Groothuis illustrates the concept with a verse from John Newton's 1772 hymn "Amazing Grace":

> When we've been there ten thousand years,
> Bright shining as the sun,
> We've no less days to sing God's praise,
> Than when we've first begun (*Christian Apologetics*, 210).

Our number of days in eternity will accrue nonstop. They are *potentially* infinite. Modern mathematicians have construed ways of dealing conceptually with such *potentially* infinite quantities and numbers. But there's a big difference between the conceptual realm of mathematics and the real world.

As the final line in the stanza of "Amazing Grace" cited above suggests, there will be a starting point for our days in eternity. "We've no less days to sing God's praise than when we've first *begun*." In other words, *potential* infinities are always finite in reality. Why? "Adding one more member to a finite set, no matter how often this is done, will simply result in a larger finite set" (J. P. Moreland, *Scaling the Secular City*, 22). There are thus no *actual* infinities in the real world. They can only exist in our minds.

Just as there are no actual infinities in the real world, there can be no infinite regress in reality. Try to imagine an infinite number of days extending into the past. How many days would need to pass before we reached today? We can't answer this question. If the past number of days is infinite, then we're forced to conclude that today would have never come. It would be a logical impossibility. The form of the argument looks like this:

1. An infinite number of days has no end.
2. But today is the end day of history (history being a collection of all days).
3. Therefore, there were not an infinite number of days before today (i.e., time had a beginning) (Norman L. Geisler and Frank Turek, *I Don't Have Enough Faith to Be an Atheist*, 90-91).

If there were an infinite past number of days, we'd not only fail to reach today; we'd never even reach a single day. After all, every day would need to follow an infinite number of days. What are the implications for the universe?

> If the universe never began, then it always was. If it always was, then it is infinitely old. If it is infinitely old, then an infinite amount of time would have to have elapsed before (say) today. And so an infinite number of days must have been completed—one day succeeding another, one bit of time being added to what went before—in order for the present day to arrive. But this exactly parallels the problem of an infinite task. If the present day has been reached, then the actually infinite sequence of history has reached this present point: in fact, has been completed up to this point—for at any present point the whole past must have already happened. But an infinite sequence of steps could never have reached this present point—or any point before it. So, either the present day has not been reached, or the process of reaching it was not infinite. But obviously the present day has been reached.
>
> So the process of reaching it was not infinite. In other words, the universe began to exist. Therefore, the universe has a cause for its coming into being, a Creator (Peter Kreeft and Ronald K. Tacelli, *Handbook of Christian Apologetics*, 59).

On the **scientific** front, Craig traces the course of twentieth-century discoveries leading to the emergence of the big bang theory (*Reasonable Faith*, 100-116). Albert Einstein lit the fuse in 1917 with his theory of general relativity, which basically showed that time, space, and matter are interlocked. One cannot exist without the other. Dutch astronomer Willem de Sitter later used Einstein's equations to show that the universe was expanding. This all pointed to a beginning for the universe.

What de Sitter argued theoretically, American astronomer Edwin Hubble confirmed visually. The Hubble telescope revealed that billions of galaxies exist and those nearest to ours were millions of light miles away. What's more, he observed a shift in the light spectrum of different galaxies, suggesting that stars in the galaxies were moving away from each other. Other discoveries showed that the farther away the galaxies got the slower they moved. All of this suggested that the universe was expanding from a central point of origin, as we'd expect to find after an explosion. The British astronomer Fred Hoyle pejoratively called this explosion the "big bang."

The Second Law of Thermodynamics supports the idea that the universe had a beginning. One way of stating the law is that the energy in the universe is being perpetually depleted. Thus, if the universe were eternal, it would have used all of its useful energy by now. An example of useful energy is our sun. Astronomers have determined that the

sun, like every other fire, will eventually burn out. And if it will eventually burn out, this proves that the universe hasn't always existed. If the universe were infinitely old, the sun would have died long ago.

What philosophers had recognized centuries earlier modern cosmology has now confirmed: the universe had a beginning. Time, space, and matter thus needed a cause, and that cause must be external and prior to these things. In fact, the cause of time, space, and matter must itself be time-less, space-less, and matter-less. God, of course, meets all of these qualifications.

The final piece to Craig's version of the *kalam* argument ultimately leads to a **theological** conclusion. Not only must the cause of time, space, and matter be timeless, spaceless, and immaterial; it must be personal. Why? For starters, there can be no scientific explanation for the origin of the universe, since there are no natural laws preexisting it. The originator of the universe must have been supernatural and possessed the personal volition to create.

What's more, as we've already noted, the cause of the universe must be timeless, spaceless, and immaterial. Only two types of things meet these conditions: abstract objects (e.g., numbers) and minds. Of course, abstract objects can't cause anything. This requires a personal agent with a mind that expresses volition and intentionality. And the God described in the Bible is the transcendent, all-powerful being who meets these requirements.

The Evidence of Design (Teleological Argument)

The teleological argument is "an argument for the existence of God that takes as its starting point the purposive (teleological) character of the universe. The argument is often termed 'the argument from design' and comes in many different versions" (C. Stephen Evans, *Pocket Dictionary of Apologetics & Philosophy of Religion*, 113).

In the thirteenth century, Thomas Aquinas used a form of the teleological argument in his last of "five ways" to demonstrate the existence of God. It enjoyed widespread popularity in the eighteenth and nineteenth centuries, especially following the appearance of William Paley's (1743–1805) *Natural Theology*. However, the more Darwinism gained steam, the less popular the argument became. It has only been in recent years that the argument has been revitalized, owed to scientific discoveries showing that our universe is fine-tuned for life and that life is specifically complex on multiple levels. This renewed form of the teleological argument has been dubbed "intelligent design."

Intelligent design in our complex universe points to an intelligent cause behind it. At its core, the argument looks like this:

1. Every design has a designer.
2. The universe manifests design.
3. Therefore, the universe has a designer (Norman L. Geisler and William D. Watkins, *Worlds Apart*, 54).

The first premise was most famously illustrated by William Paley. Paley argued that if he stumbled upon a watch lying on the ground in the woods, his natural instinct would not be to assume the watch had always been there. Rather, he would assume that its complexity—represented by its interdependent parts assembled for the purpose of telling time—pointed to an intelligent designer. He would not assume that random parts had by chance joined together over time and formed an instrument useful for marking hours of the day. As Paley stated:

> There cannot be design without a designer; contrivance without a contriver; order without choice; arrangement without anything capable of arranging; subserviency and relation to a purpose without that which could intend a purpose; means suitable to an end, and executing their office in accomplishing that end, without the end ever having been contemplated or the means accommodated to it (William Paley, *Natural Theology*, 8).

The second premise—that the universe manifests design—has become far less controversial in recent years. Four decades, ago famed atheistic astronomer Fred Hoyle noted:

> A common sense interpretation of the facts suggests that a super intellect has monkeyed with physics, as well as chemistry and biology, and that there are no blind forces worth speaking about in nature. The number one calculates from the facts seem to me so overwhelming as to put this conclusion almost beyond question (Fred Hoyle, "The Universe: Past and Present Reflections," in *Annual Review of Astronomy and Astrophysics 20*, 16).

Seemingly desperate to maintain his atheism, Hoyle championed the view that alien life was seeded on earth by debris that fell from space. Of course, this raises the question: How did *that* life originate? Nonetheless, Hoyle's observation—and wildly speculative explanation—show how unavoidable the conclusion is that the universe bears marks of intelligent design. Indeed, as Hoyle once colorfully quipped, "the origin of life is about as likely as the assemblage of a 747 by a tornado whirling through a junkyard" (cited in *The Creation Hypothesis*, edited by J. P. Moreland, 190-91).

What sort of evidence cries out for such a view? We'll briefly touch on three scientific observations.

A Finely-Tuned Universe

First, the universe has been precisely calibrated to sustain life. Many refer to this as the "fine-tuning" argument. Simply put, our universe, solar system, and planet exhibit several conditions that must be "just right" in order for life to exist. Not only must each of these conditions be "just right"; their balance with each other must be "just right" as well.

How many conditions are we talking about? Astrophysicist Hugh Ross sets the number at a staggering 322 (see Hugh Ross, "Probability for Life on Earth," at www.reasons.org/articles/probability-for-life-on-earth), concluding that "less than 1 chance in 10^{282} (million trillion) exists that even one such life-support body would occur anywhere in the universe without invoking divine miracles."

Calling the universe "a razor's edge of precisely balanced life-permitting conditions," J. P. Moreland offers the following seven examples:

- If gravity's force were infinitesimally stronger, all stars would burn too quickly to sustain life; if ever so slightly weaker, all stars would be too cold to support life-bearing planets.
- If the ratio of electron to proton mass were slightly larger or smaller, the sort of chemical bonding required to produce self-replicating molecules could not obtain. The same is true for the electromagnetic force in the universe.
- If the strong nuclear force were slightly stronger, then the nuclei essential for life would be too unstable; if it were slightly weaker, no elements but hydrogen would form.
- If the rate of the universe's expansion had been smaller by one part in a hundred thousand million million, the universe would have recollapsed and could not form or sustain life.
- Quantum laws are precisely what they need to be to prevent electrons from spiraling into atomic nuclei.
- If the Earth took more than twenty-four hours to rotate, temperatures on our planet would be too extreme between sunrise and sunset. If the rotation of Earth were slightly shorter, wind would move at a dangerous velocity.

- If the oxygen level on our planet were slightly less, we would suffocate; if it were slightly more, spontaneous fires would erupt (J. P. Moreland, *Scientism and Secularism*, 146).

DNA

The second type of evidence is found in DNA. Scientists discovered in the twentieth century that DNA contains, processes, and conveys information to create and organize the proteins that form the building blocks of our bodies. Sequences of four nucleotides—guanine (G), adenine (A), thymine (T), and cytosine (C)—function like characters in our alphabet, communicating detailed instructions to all one hundred trillion cells in our bodies. By necessity, this information is both extremely complex and highly ordered. What's more, it's immense. As biochemist Michael Denton has noted:

> The capacity of DNA to store information vastly exceeds that of any other known system; it is so efficient that all the information needed to specify an organism as complex as man weighs less than a few thousand millionths of a gram. The information necessary to specify the design of all the species of organisms which have ever existed on the planet... could be held in a teaspoon [of DNA] and there would still be room left for all the information in every book ever written (Michael Denton, *Evolution: A Theory in Crisis*, 334).

But how did such complex, highly ordered, and vast information originate? As William Dembski has noted, "Neither algorithms nor natural laws… are capable of producing information" (William Dembski, *Intelligent Design*, 153). We need a causal power for information and this information must originate in a *mind*. Information is, after all, communication between minds speaking a common language.

We are not making a mere analogy to language. "The coding regions of DNA have *exactly* the same relevant properties as a computer code or language" (Stehpen C. Meyer, interviewed by Lee Strobel in *Is God Real?*, 68). The late American physicist Hubert Yockey concurred: "We are not dealing with anything like a superficial resemblance between DNA and a written text. We are not saying DNA is like a message. Rather, DNA is a message" (Hubert Yockey, cited by Charles Thaxton, "A New Design Argument," in *Cosmic Pursuit* 1.2, 19). Intelligence alone can account for the existence of this message.

Irreducible Complexity

Just as DNA requires an intelligent cause, other biological functions display what biochemist Michael Behe calls *irreducible complexity*. According to Behe, "An irreducibly complex system is one that requires several closely matched parts in order to function and where removal of one of the components effectively causes the system to cease functioning" (Michael Behe, "Intelligent Design Theory As a Tool for Analyzing Biochemical Systems," in *Mere Creation*, edited by William A. Dembski, 178).

Behe illustrates this principle with a mousetrap. Its various parts—base, spring, hammer, etc.—are by themselves useless. A minimum number of precisely sized and positioned parts must work in tandem with one another for the contraption to work. Removal of a single part would render the mechanism useless.

Similarly, some biological functions are as simple as they could be and still work. It is thus impossible for them to have developed gradually in stages via macroevolution. Behe notes:

> No one at Harvard University, no one at the National Institutes of Health, no member of the National Academy of Sciences, no Nobel prize winner—no one at all can give a detailed account of how the cilium, or vision, or blood clotting, or any complex biochemical process might have developed in a Darwinian fashion. But we are here. Plants and animals are here. The complex systems are here. All these things got here somehow: if not in a Darwinian fashion, then how (Michael Behe, *Darwin's Black Box*, 187)?

Take, for instance, Behe's example of blood clotting. When you cut your finger, a highly complex system involving 12 pro-clotting proteins and 10 anti-clotting proteins work together to locally thicken the blood and seal the cut. All 22 proteins perform different functions to ensure that the blood clots in the right place to the right extent. One missing protein would result in a system failure. You'd either hemorrhage and lose too much blood or your blood would congeal throughout your body and cease to flow. Either way, you'd die. There is no way to reduce the number of interacting proteins and experience a healthy blood clotting cascade. Thus, there could be no earlier stage in an evolutionary process. Blood clotting is as simple as it can get. It is irreducibly complex.

Natural Law, Chance, or Design?

A finely-tuned universe, DNA, and irreducible complexity are ultimately due to one of three things: natural law, chance, or design. If it is due to **law**, from where did the law come? Science can't answer this question. J. P. Moreland explains:

> In all cases of scientific explanation, one already has to have a universe in existence before scientific explanation, initial conditions, laws of nature, and so forth have something to which they can apply. Scientific explanations presuppose the universe in order for those explanations to be employed in the first place. Thus, *a scientific explanation cannot be used to explain the very thing (the universe) that must exist before scientific explanation can get off the ground* (J. P. Moreland, *Scientism and Secularism*, 139).

In short, "what it takes for the universe to exist cannot exist within the universe" (Peter Kreeft and Ronald K. Tacelli, *Handbook of Christian Apologetics*, 61).

It is highly improbable that these things are due to **chance**. Consider the seven examples given above by Moreland. If things like the rate of the universe's expansion, the force of gravity, or the charge of an electron were different by a billionth of a percentage or more, then the universe could not sustain life (J. P. Moreland, *Scientism and Secularism*, 145-46). Believing that chance explains the life-sustaining conditions of our universe is a blind leap of faith!

Our final option is that our finely-tuned universe, DNA, and irreducible complexity are all the result of **design**. This is more than a fallback option (sometimes called "God of the gaps"). We can actually assess the probability of design. William A. Dembski outlines what he calls an "explanatory filter" for sifting things that are *intentional* from those that are *necessary* or *accidental* (for a full treatment, see William A. Dembski, *The Design Inference*; for his shorter treatments see *Intelligent Design*, 122-52, and *The Design Revolution*, 87-115).

Dembski appeals to professional fields like forensic science, which use highly refined methods for determining whether something was caused naturally or intelligently. For instance, detectives investigating a death must decide whether it was due to natural causes, an accident, or an intentional act. Dembski applies similar rationale to the origin of life.

In order for an occurrence to be deemed intentionally designed, Dembski argues that it must pass three tests:

1. The occurrence must be *contingent*. That is, no natural law made it *necessary* to have occurred. Ice forms because the properties of water demand it at a certain temperature. The properties of water may have been determined to form ice by a designer, but the design itself is baked into the laws of nature. Water *must* freeze at 32°F.

2. The occurrence must be *complex*. That is, it's improbable. Dembski compares this step to randomly spinning the dial on a safe and hoping it'll open the lock. A dial marked with 100 numbers and requiring 5 alternating turns would yield 10 billion possible combinations. Blindly landing on the right combination is highly improbable.

3. The occurrence must be *specific*. That is, is must be more than complex; it must also have meaning or

> significance. It must be a *special* occurrence. Imagine a million monkeys hammering away on keyboards for 10 hours a day since the beginning of time. Their arrangements of letters would be complex (it's highly improbable they could be repeated), but nonspecific. To be specific, they would need to produce, say, the works of Shakespeare. What are the odds? Even assuming a universe billions of years old, physicist Seth Lloyd determined that sheer chance could only produce the first few lines of Hamlet. Anything more "would require greater computational resources than the universe possesses" (Seth Lloyd, *Programming the Universe*, 58-59).

Our finely-tuned universe is contingent, complex, and specific. It displays the signs of a vastly complex and specified order that cannot ultimately be explained by natural law. It thus requires the intentionality of an intelligent agent.

But if the teleological argument is true and God designed our universe for life, then why do some things appear to be designed well and others less optimally? It's important here to note that Romans 8:20-23 teaches universal consequences to human rebellion. Creation is thus fallen, and all Christian applications of the teleological argument take this into account. Indeed, we should expect to see both optimal design and occasional deformity in the created order. This is not due to a deficient creator, but rather a disobedient creation.

Further, many purportedly suboptimal designs have been shown to be less problematic than originally thought. The inverted retina in the human eye and the panda's thumb come to mind (see William A. Dembski, *The Design Revolution,* 59-60, and Richard Thornhill, "The Panda's Thumb," in *Perspectives on Science and Christian Faith* 55.1, respectively).

People have complained about the design of the eye, but no one has yet suggested how to improve it without messing up its "camera specs," including resolution, frame rate, and light sensitivity.

Stephen Jay Gould has famously criticized the panda's thumb for being non-opposable (and thus clumbsy), but Japanese biologists have shown through CAT and MRI scans that certain bones in the panda's paw give it far more dexterity than originally thought (see Hideki Endo, et al., "Role of the Giant Panda's 'Pseudo-Thumb,'" in *Nature* 397, 309-310).

Finally, intelligent design does not need to necessarily equal optimal design. Addressing the late Stephen Jay Gould's contention that an intelligent designer would only design optimally, William A. Dembski says, "To find fault with biological design because it misses some idealized optimum, as Gould regularly used to do, is simply gratuitous. Not knowing the objectives of the designer, Gould was in no position to say whether the designer proposed a faulty compromise among those objectives" (William A. Dembski, *The Design Revolution*, 59). Besides, as Dembski observes:

> Design is a matter of tradeoffs…. Just because a design could be improved in the sense of increasing the functionality of some aspect of an organism, this does not mean that such an improvement would be beneficial within the wider ecosystem within which the organism finds itself. A functionality belonging to a predator might be vastly improvable, but it also might render the predator that much more dangerous to its prey and thereby drastically alter the balance of the ecosystem, conceivably to the detriment of the entire ecosystem (William A. Dembski, *The Design Revolution*, 60-61).

The Evidence of Morality (Moral Arguments)

Moral arguments are "arguments that God must exist as the ground of the moral order (or some aspect of that order, such as moral obligations) or as the explanation of certain moral facts" (C. Stephen Evans, *Pocket Dictionary of Apologetics & Philosophy of Religion*, 77).

Some have misunderstood moral arguments as suggesting that a moral life necessitates belief in God. However, the issue is not whether an unbeliever can *act* morally, but whether an unbeliever can *account* for morality. Moral

arguments attempt to show that objective moral values and duties exist and they are grounded in the existence of God. In other words, it's the *fact* of God—not *faith* in God—that's required for objective morality.

A common form of the argument looks like this:

1. If God does not exist, then objective moral values and duties do not exist.
2. Objective moral values and duties do exist.
3. Therefore, God exists (William Lane Craig, *On Guard*, 129).

What do we mean by objective moral values and duties? Simply put, objective morality is that which is true for all people in all places at all times. It is absolute and universal, entirely independent of human opinion. If God does not exist, morality (if it can even be said to exist) is necessarily subjective and arises out of nothing more than the result of an evolutionary process that seeks to ensure the welfare of the herd (see the brief critiques of conventionalism, utilitarianism, and evolutionary ethics in Mark D. Linville, *Is Everything Permitted?*). Yet objective values do exist and we all recognize this on some level.

A common example is the statement "torturing babies for fun is wrong." We all agree that such behavior is morally reprehensible and loathsome. It's self-evident. As J. Budziszewski would say, this is something "we can't *not* know" (for a defense of universal moral principles, see J. Budziszewski, *What We Can't Not Know*). How do we explain such universal moral intuition?

Paul tells us in Romans 2:14-15 that basic moral knowledge is part of God's general revelation of himself to mankind. It's an inborn faculty of the mind. This is why morally sensitive people agree that murder, rape, and incest are wrong. So what are we to make of moral monsters who see no standard of behavior? Such people do not merely possess a different point of view; they are broken beyond the norm (remember, we are all equally *fallen*, but we are not all equally *broken*). Humans suppress the truth (Romans 1:18) to various degrees, and God has given some over to "a debased mind to do what ought not to be done" (Romans 1:28). The result is someone who is "simply morally handicapped, like a color-blind person who cannot tell the difference between red and green, and there's no reason to think that his impairment should make us call into question what we see clearly" (William Lane Craig, *God, Are You There?*, 37-38).

What about disagreements among those who remain morally sensitive? C. S. Lewis surveyed moral standards in various cultures and found a great deal of commonality (C. S. Lewis, *The Abolition of Man*, 95-121). He sums up the situation like this:

> If anyone will take the trouble to compare the moral teaching of, say, ancient Egyptians, Babylonians, Hindus, Chinese, Greeks and Romans, what will really strike him will be how very like they are to each other and to our own…. I need only ask the reader to think what a totally different morality would mean. Think of a country where people were admired for running away in battle, or where a man felt proud of double-crossing all the people who had been kindest to him. You might just as well try to imagine a country where two and two made five. Men have differed as regards what people you ought to be unselfish to—whether it was only your own family, or your fellow countrymen, or everyone. But they have always agreed that you ought not put yourself first. Selfishness has never been admired. Men have differed as to whether you should have one wife or four. But they have always agreed that you must not simply have any woman you liked (C. S. Lewis, *Mere Christianity*, 19).

Of course, we can find exceptions to Lewis' comment about universal rejection of selfishness. For example, the German philosopher Friedrich Nietzsche championed a view called *perspectivism*, which argues that objective truth is a myth and morals thus constantly change (neutrally, in this view) to suit the interests of individuals and cultures. But what Lewis noted was a general agreement within and between whole societies across time.

Moral arguments show there can be no objective morality without God. Nonetheless, some atheists, unwilling to concede that things like murder, rape, and incest are morally subjective (i.e., not *inherently* and *necessarily* wrong), have argued for objective morality apart from God. They affirm *that* objective morality exists, but they can't explain

why it exists. It's accidental. It's a "chance morality." William Lane Craig finds this view, which he calls Atheistic Moral Realism, unsatisfying:

> I must confess that this alternative strikes me as incomprehensible, an example of trying to have your cake and eat it, too. What does it mean to say, for example, that the moral value *Justice* just exists? I don't know what this means. I understand what it is for a person to be just; but I draw a complete blank when it is said that, in the absence of any persons, *Justice* itself exists. Moral values seem to exist as properties of persons, not as abstractions—or at any rate, I don't know what it is for a moral value to exist as an abstraction. Atheistic moral realists seem to lack any adequate foundation in reality for moral values but just leave them floating in an unintelligible way (William Lane Craig, *God, Are You There?*, 35-36).

What's the practical upshot? "Moral rules without grounds or justification need not be obeyed" (Francis J. Beckwith and Gregory Koukl, *Relativism*, 167). In other words, the atheistic moral realist is left without moral obligation, despite claims to the contrary.

Objective morality must be grounded in an ultimate reality, and that reality must transcend us. The nature of objective morality demands this. At its very core, it is prescriptive (it is not merely descriptive of human behavior), authoritative (it obligates obedience), exhortational (it issues forth in propositional commands), and, as we've already noted, universal (it applies to all people in all places at all times). What ultimate reality might one posit here other than God? God alone can account for all of these things.

Moreover, the ultimate reality behind objective morality must be *personal*. As noted above, objective moral duties are commanded. And "a command only makes sense when there are two minds involved" (Francis J. Beckwith and Gregory Koukl, *Relativism*, 166).

This leads to another point: Since objective morality is immaterial (it possesses no physical properties), it must be grounded in a source that is immaterial. This means that the source cannot be grounded in humanity, since humans are (partially) material, contingent beings (they need not exist). God, however, is immaterial and necessary; that is, his divine essence is not physical and he "is the sufficient reason for [his] own existence as well as for the existence of every contingent thing" (J. P. Moreland and William Lane Craig, *Philosophical Foundations for a Christian Worldview*, 466). What immaterial, necessary source of objective morality could exist other than the mind of God?

As philosopher Paul Copan has noted:

> Intrinsically valuable, thinking persons do not come from impersonal, nonconscious, unguided, valueless processes over time. A personal, self-aware, purposeful, good God provides the natural and necessary context for the existence of valuable, rights-bearing, morally responsible human beings. That is, personhood and morality are necessarily connected; moral values are rooted in personhood. Without God (a personal being), no persons—and thus no moral values—would exist at all: *no personhood, no moral values*. Only if God exists can moral properties be realized (Paul Copan, "The Moral Argument for God's Existence," in *Evidence for God*, edited by William A. Dembski and Michael R. Licona).

The Problem of Evil

A final type of moral argument for the existence of God relates to the problem of evil. William Lane Craig structures the argument like this:

1. If God does not exist, objective moral values do not exist.
2. Evil exists.
3. Therefore, objective moral values exist (some things are truly evil).
4. Therefore, God exists (William Lane Craig, *God, Are You There?*, 39).

Note this merely addresses the *reality* of evil without reference to the *reason(s)* for evil. As Craig notes, the reality of evil, far from disproving God, actually supplies further evidence for his existence (as well as the fact that he is good). Without an objective morality grounded in God, we'd have no basis for determining what is good or evil.

Many attempt to skirt these implications by appeal to the Euthyphro dilemma. Originally applied by Plato to the Greek pantheon of gods (see "Euthyphro," in *The Dialogues of Plato*), subsequent thinkers have suggested it creates a Catch-22 for theistic moral objectivists. The supposed dilemma is generally framed like this: *Does God will something because it is good or is something good because God wills it?*

If God wills something because it is good, this means that goodness is something external to God and God need not exist for goodness to exist. But if something is good because God wills it, then morality is subjective and God could *ipso facto* declare something like murder to be good and we'd be obligated to obey. Of course, this would strip God of his moral supremacy (Douglas Groothuis, *Christian Apologetics*, 354). Either way, objective morality can't be rooted in God's commands.

So does the Euthyphro dilemma eliminate God as the grounds of objective morality? No, because there's a third option (supplied by Plato himself) that splits the horns of the dilemma, namely, that objective morality is rooted in the very nature and character of God (not his commands). God's commands flow out of God's essence. There is thus no moral standard external (and thus ontologically prior) to God. And he does not create objective morals any more than he creates himself (Douglas Groothuis, *Christian Apologetics*, 354). Rather, God's commands are "necessary expressions of the way God is" (William Lane Craig, *God, Are You There?*, 39).

In the end, there can be no standard beyond God's nature. Some object to saying the buck stops with him, but it needs to stop somewhere. Otherwise, we're left again with the problem of infinite regress.

Eric Hernandez, Apologetics Lead for the Baptist General Convention of Texas, explains the situation this way:

> Suppose we conducted a contest to see who could draw the best picture of the New York skyline, and our standard for judging the winner will be based on the New York skyline itself. But imagine someone challenged the results by asking, 'but what makes the New York skyline look like the New York skyline?' Clearly, this is absurd. There is no standard beyond the New York skyline to judge whether it is, in fact, the New York skyline. It looks like the New York skyline because that's precisely what it is by its very nature (Eric Hernandez, *The Lazy Approach to Evangelism*, 268).

Just as there is no standard for measuring the New York skyline beyond itself, there is no objective standard for morality beyond God himself.

The Evidence of a Perfect Being (Ontological Argument)

The ontological argument is an "a priori argument for God's existence holding that the concept of God implies his necessary existence." A necessary being is one whose "existence is no mere accident or contingent result but whose very nature is to exist necessarily" (C. Stephen Evans, *Pocket Dictionary of Apologetics & Philosophy of Religion*, 85, 79).

This is the most contested of the classical arguments for God's existence. It is too abstract for some Christian apologists' tastes and skeptics deny its soundness. Nonetheless, as a deductive argument it is formally valid and merits attention.

Originally developed by Anselm of Canterbury (1033-1109) and later named by Immanuel Kant (1724–1804) in *The Critique of Pure Reason*, a common feature of all ontological arguments is the claim that God is the greatest conceivable being. And since a maximally great being is possible to conceive, such a being must exist in every possible world and thus in reality.

In other words, we can conceive of no greater being than God. And to exist is better than not existing. Hence, God must exist. If this is still confusing, consider Anselm's following illustration:

> For when a painter considers the work which he is to make, he has it indeed in his understanding; but he doth not yet understand that really to exist which as yet he has not made. But when he has painted his picture, then he both has the picture in his understanding, and also understands it really to exist (*Proslogion*, Chapter 2).

Obviously, the painting is greater than the idea that prompted it, because it exists in both the artist's mind *and* in reality. If God only existed in the mind but not in reality, he wouldn't be the greatest conceivable being. The greatest conceivable being *must* exist in order to be the greatest conceivable being. Otherwise, something greater is conceivable. And something greater than God is inconceivable!

Anselm's First Argument

Anselm's argument took two forms. Douglas Groothuis lays out the first form like this:

1. God is understood or defined as a being "than which nothing greater can be conceived." Even the fool possesses this concept of God.
2. A thing exists either in (a) the understanding only (such as the idea of a painting before it is painted) or (b) in both the understanding and reality, such as existing in the mind of the painter and then existing on the canvas.
3. It is "greater" to exist in reality than to exist merely in the understanding.
4. If God exists merely in the understanding (existing only in the mind of the fool), then God is not the greatest possible being, since a being that existed in reality would be greater than a being that existed only in understanding.
5. But God is by definition the greatest possible being.
6. Therefore, God exists not merely in the understanding (as the fool claims) but in reality as well (Douglas Groothuis, *Christian Apologetics*, 184-185).

Since this is a formally valid deductive argument, the conclusion is true if the premises are true. Accordingly, attacks are leveled at the premises.

For example, a contemporary of Anslem, a monk named Gaunilo, argued that just because a perfect island can be conceived that doesn't mean that such an island necessarily exists. This is true enough. But the illustration misses the point. An island is a finite thing with inherent limitations. It cannot possess maximally great attributes like those possessed by a maximally great being, such as omniscience, omnipresence, and omnipotence. If an island possessed those things, *it* would be God! The objection thus supports the very idea it seeks to undo and brings us back to square one.

Anselm's Second Argument

A second form of the argument was discovered in Anselm's writings by Norman Malcolm (see Norman Malcolm, *Knowledge and Certainty*). It focuses on God as a *necessary* being. The form of the argument looks like this:

1. God is defined as a maximally great or Perfect Being.
2. The existence of a Perfect Being is impossible or necessary (since it cannot be contingent).
3. The concept of a Perfect Being is not impossible, since it is neither nonsensical nor self-contradictory.
4. Therefore (a) a Perfect Being is necessary.
5. Therefore (b) a Perfect Being exists (Douglas Groothuis, *Christian Apologetics*, 191).

Take note of the second premise. It represents an exclusive disjunction (a perfect being is either impossible *or* necessary—not *neither* and not *both*). Impossible or necessary exhaust the options. If the existence of a perfect being is impossible, it's contradictory to the very idea of a perfect being.

Some attack the third premise, claiming the concept of a perfect being is contradictory. For example, atheist Michael Martin claims that because God is noncorporeal, he can't know the sensations of the human body. He does not possess knowledge by *acquaintance*, so he cannot know everything. This, Martin claims, makes God self-contradictory and argues against his very existence (see Michael Martin, *Atheism*, 287-97).

Martin's attempt to dislodge the third premise falls short. First, it misunderstands omniscience. The classical understanding of this attribute is that it refers to God's all-inclusive knowledge of propositional truth. That is, God knows what is true and what is false.

Second, it misunderstands how God's attributes work together. Because God is both omniscient and omnipresent, he can know the inner world of his creation. He can take on a mental state without participating in its action. He can thus know what Dr. Pepper tastes like, even though he's never had it.

Third, it ignores the fact of the Incarnation. Jesus Christ, the second coeternal person of the triune Godhead, took on human flesh and walked among us. God thus has firsthand, experiential knowledge of subjective human states (minus sin, of course).

If attempts to dislodge the third premise fall flat, the premises lead to the conclusion with deductive certainty. A perfect being, therefore, necessarily exists.

This argument is *not* saying that if you can think of God he must exist. It's saying that you can't think of a maximally great being as not existing. That would be a contradiction, like thinking of a square circle.

Put another way, if you're thinking about the greatest being while also thinking that that greatest being doesn't exist, then you're not actually thinking about the greatest being.

Alvin Plantinga's Argument

Let's consider one more formulation of the ontological argument, this one by Alvin Plantinga. Plantinga's version plays on the concept of "possible worlds."

This simply refers to ways God could have made the world. For instance, it is logically possible that God could have made a world in which unicorns exist. There's nothing self-contradictory about a horse with a spiraled horn on its head.

However, God couldn't have made a world containing square circles. That would be self-contradictory. And there are no possible worlds containing logical contradictions.

With this idea of "possible worlds" in mind, consider Groothuis' presentation of Plantinga's argument:

1. It is possible that a maximally great being exists. (By this he means what we have described as a Perfect Being or greatest conceivable being.)
2. If it is possible that a maximally great being exists, then a maximally great being exists in some possible world. That is, God's existence is not impossible (logically contradictory), so we can conceive of a world in which God does exist.
3. If a maximally great being exists in some possible world, then it exists in every possible world. (Otherwise, it would not be maximally great.)
4. If a maximally great being exists in every possible world, then it exists in the actual world (Douglas Groothuis, *Christian Apologetics*, 195).

If the concept of God is not impossible (that is, there's nothing contradictory about the idea of God), then God must exist in at least one possible world. God is necessary in that possible world. As its maximally great being, he can't not exist. And if God necessarily exists in one possible world, then he exists in all possible worlds. That includes our actual world.

The only way to defeat this argument philosophically is to prove that God's existence is impossible. And the only way to do that philosophically is to show a contradiction in the very idea of God. This has not been done.

We might ask, then, *Is the biblical God a maximally great, and thus necessary, being?* Jesus says so in John 5:26 (the Father and Son have life in themselves) and Paul confirms this in Acts 17:24-25 (God depends on no created thing). Scripture thus affirms that everything depends on God and God depends on nothing. He is self-existent. In other words, he is maximally great and therefore *necessary*.

Further, the Trinity adds weight to the argument for a necessary being. Since God has revealed himself as perfect love, fellowship, and community between the Father, Son and Spirit, he shows himself to be maximally great. Douglas Groothuis points out that a personal being is greater than an impersonal being, so likewise a triune being is greater than a unitarian being. After all, which is the greater being? A being that eternally exists as love, or a being who must create objects of affection in order to express love (Douglas Groothuis, *Christian Apologetics*, 198-99)?

In the end, there is no contradiction in the logic of various forms of the ontological argument, even though its ultimate persuasiveness is fiercely contested (even among theists). Modern scholars like Norman Malcolm, Charles Hartshorne, Alvin Plantinga, and Douglas Groothuis have vigorously contended for its soundness in various forms. Atheistic philosophers must thus contend with it.