

AN EXAMINATION OF THEISTIC AND SCIENTIFIC COSMOLOGICAL ARGUMENTS: A COMPARATIVE

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Abstract: This paper explores the perennial debate concerning the existence of God through an analysis of two classical theistic arguments—the Design Argument and the Cosmological Argument—and their contemporary scientific counterparts, namely the Big Bang theory and the theory of Evolution. While the former rely on metaphysical reasoning and inferential logic, the latter are grounded in empirical observation and theoretical modelling. Through a structured comparison, this paper assesses the epistemological foundations, explanatory scope, and philosophical implications of each approach. It concludes that while scientific theories offer robust and testable explanations for cosmic and biological origins, the theistic arguments retain persuasive force in addressing questions of ultimate causation and intentionality, highlighting the complementary rather than contradictory nature of these frameworks in certain philosophical contexts.

Keywords: Existence of god; Design argument; Cosmological argument; Big Bang theory; Theory of evolution; Philosophy of religion; Science and religion

1 INTRODUCTION

Today I'd like to welcome you to a journey through one of humanity's most enduring and profound questions: whether God exists. This topic has stirred debate across cultures, disciplines, and centuries, inviting perspectives that are not only intellectual but often deeply personal. It is, undeniably, a subject that can elicit strong and sometimes opposing views. For that reason, I would like to begin by acknowledging the potential sensitivity of this discussion. If anything shared today resonates in a way that feels challenging or uncomfortable to you as a listener, please accept my sincere and wholehearted apologies. My intention is not to persuade or provoke, but to open a space for thoughtful reflection.

In the spirit of structured dialogue, this paper—or perhaps more fittingly, this audio-led exploration—will lay out key arguments on both sides. On one hand, we will engage with classical philosophical frameworks that support divine existence, including the Divine Architect Argument—also known as the Teleological or Design Argument—and the Causation Argument, often referred to as the First Cause or Cosmological Argument. On the other hand, we will examine influential scientific models that propose alternative explanations for the origins of the universe and life itself, with particular attention to the Big Bang theory and the Theory of Evolution by Natural Selection.

By placing these perspectives side by side, I aim not only to inform but to create a narrative that is both intellectually engaging and emotionally resonant. Whether you approach this question from a place of faith, skepticism, curiosity, or something in between, I hope our discussion will serve as an invitation to reflect—to weigh ideas, to ask questions, and perhaps even to sit with uncertainty. After all, it is in the space between knowing and wondering that some of our most meaningful conversations begin.

2 METHODOLOGICAL NOTE

This essay is intentionally composed in an informal and expository style. Its structure and tone are deliberately modelled after that of a narrative podcast script, an approach chosen to make the complex and often abstract ideas surrounding the existence of God more accessible and engaging to a general audience. The primary aim here is not to break new scholarly ground or to adjudicate definitively between competing worldviews. Rather, it is to synthesize and clearly present a selection of foundational arguments from both philosophy and science [1].

To achieve this, the essay draws upon well-established classical sources, such as the teleological reasoning of William Paley and the cosmological arguments of Thomas Aquinas. On the scientific front, it relies on the widely accepted explanatory frameworks of the Big Bang theory and Darwinian evolution. The discussion deliberately refrains from delving into highly specialized or technical philosophical critiques or the most recent developments in theoretical cosmology and evolutionary biology [2]. This choice is not a dismissal of their importance, but a strategic limitation of scope to maintain clarity and focus on the core ideas.

Consequently, the analysis does not purport to offer original philosophical arguments or an exhaustive technical dissection of the evidence. Instead, it functions as a curated introductory overview—a springboard for further thought and inquiry. By framing the debate in a conversational manner, the essay hopes to lower the barrier to entry for readers, inviting them to consider the logical structure, key evidence, and enduring human significance of these perennial questions.

3 LITERATURE REVIEW

The long-standing debate concerning the existence of God has been profoundly influenced by a series of pivotal thinkers whose arguments continue to structure contemporary discourse. Among them, William Paley (1743–1805) stands out for

his formulation of the Watchmaker Analogy, which posits that the intricate order and complexity observed in nature—like that of a watch—implied the existence of an intelligent designer. Similarly foundational is the contribution of Thomas Aquinas (1225–1274), whose First Cause argument—rooted in Aristotelian metaphysics—argues that everything in motion or existence must ultimately trace back to an uncaused, necessary first cause, which Aquinas identified as God.

On the scientific front, explanatory frameworks emerged that offered naturalistic accounts for phenomena traditionally attributed to divine agency [3]. The Big Bang theory, which describes the universe's origin from an initial singularity, gained substantial empirical support through the work of astronomers such as Edwin Hubble, whose observations of galactic redshift provided compelling evidence for an expanding cosmos. In the realm of biology, Charles Darwin's theory of evolution by natural selection revolutionized understanding of life's diversity, proposing a mechanism that did not require intentional design, thereby challenging teleological interpretations of the natural world.

In more recent decades, the conversation has evolved into a dynamic interdisciplinary exchange occurring at the intersection of philosophy, theology, and cosmology. This ongoing dialogue is exemplified by thinkers such as Richard Dawkins, whose work emphasizes scientific materialism and critiques religious belief as incompatible with evolutionary biology, and Alvin Plantinga, a philosopher of religion who has developed sophisticated epistemological defenses of theism, notably through his concept of "warranted Christian belief." Their opposing views illustrate not only the persistent divide between naturalistic and theistic worldviews but also the deepening engagement between empirical inquiry and philosophical reflection in addressing one of humanity's most enduring questions.

4 ARGUMENTS FOR THE EXISTENCE OF GOD

4.1 The Divine Architect (Design) Argument

Have you ever thought about how complex the world is? And have you ever considered that someone might have designed it? The Design Argument was famously proposed by William Paley. He argued that a watch, with its intricate mechanisms, requires a designer [4]. The universe is far more complex than a watch; therefore, its designer must be supremely capable—namely, God. This argument draws support from phenomena such as the complexity of DNA, the apparent progression from simple primates to humans, and the breathtaking beauty of nature, all of which seem unlikely to arise without intentional design.

4.2 The Causation (First Cause) Argument

Also known as the Uncaused Cause argument, this line of reasoning was developed by Thomas Aquinas, a Catholic priest and philosopher. He held that every effect must have a cause—for example, if I push a door, it opens because I caused it to open. Applying this logic backward through time leads to the idea of a first cause that initiated the universe. This first cause must itself be uncaused, eternal, and uncreated. In Christian tradition, this is identified as God.

5 ARGUMENTS AGAINST THE EXISTENCE OF GOD

5.1 The Big Bang Theory

According to scientific consensus, approximately 13.8 billion years ago, an extremely dense and hot singularity—sometimes described as a "super force"—expanded rapidly in an event known as the Big Bang. Over billions of years, matter cooled and coalesced into galaxies, stars, and planets, including Earth [5]. Evidence for this includes the observed redshift of light from distant galaxies, which indicates that the universe is still expanding uniformly from an initial point.

5.2 The Theory of Evolution

Evolution explains how organisms change over time through natural selection: those better adapted to their environment survive and reproduce, while others die out. Evidence comes from fossil records showing transitions between species, as well as genetic research revealing shared ancestry among living beings. This process accounts for the diversity of life without requiring divine intervention.

6 DISCUSSION AND SYNTHESIS

There is no definitive, black-and-white evidence proving whether God exists or whether the Big Bang alone explains cosmic origins. After all, humans were not present 15 billion years ago to observe the universe's beginning—so it remains possible that God was the first cause [6]. However, the Big Bang and evolution are supported by observable evidence: redshift data, fossil records, and genetic similarities. The design and causation arguments, while logically compelling to many, rely ultimately on philosophical reasoning and personal belief—they are difficult to disprove, but also difficult to empirically verify.

7 CONCLUSION

In summary, the question of God's existence invites us to stand at a crossroads of human understanding—one path shaped by philosophy and meaning, the other illuminated by scientific observation and evidence. Both perspectives offer valuable,

though fundamentally different, kinds of insight. Theistic arguments, such as the Divine Architect and First Cause, appeal to our intuition for design, purpose, and ultimate origins. They operate in the realm of logic, metaphysics, and what might be called “reasons of the heart.” Science, by contrast, grounds its explanations in the observable, the testable, and the physically verifiable, offering accounts like the Big Bang and evolution that describe how things may have come to be, without necessarily addressing why [7].

7.1 The Crossroads Image

Human self-understanding is permanently forked: one signpost reads “Meaning & Purpose,” the other “Evidence & Experiment.”

This is not a temporary traffic detour; every generation re-encounters the same intersection, just with updated roadmaps (e.g., medieval scholastics, Enlightenment deists, 21st-century cosmologists).

Choosing one path does not make the other disappear; it simply determines which questions you will prioritize for the rest of the journey [8].

7.2 Two Currencies of Explanation

Theistic language trades in intentionality, teleology, and axiological ultimates (“Why is there something rather than nothing worthy of love?”).

Scientific language trades in mechanisms, probabilities, and predictive models (“Under these initial conditions, what will the cosmic microwave-background quadrupole moment be?”).

Neither vocabulary is intrinsically “wrong”; they are like euros and yen—spendable only in their respective economies.

7.3 Classical Theistic Arguments—Updated Examples

Divine Architect: the 3-kg parameter space of cosmological constants that allows carbon synthesis is 10^{-229} wide; winning that lottery feels like design to many.

First Cause: even if quantum tunneling can spawn a universe from “nothing,” the meta-question migrates upward: why does the quantum regime itself exist and obey wave equations?

Moral argument: cross-cultural datasets (e.g., Hauser’s Moral Sense Test) show the same five prohibitions—harm, fairness, loyalty, authority, purity—emerging despite divergent religions, suggesting to some a single transcendent moral lawgiver.

7.4 Science’s Counter-Account—Also Updated

Big Bang nucleosynthesis predicts a 24% helium mass fraction; observations give $24\% \pm 1\%$. The match is a public, checkable reason to trust the story back to $t = 3$ min.

Evolutionary convergence (camera eyes in octopi and vertebrates) shows how blind algorithmic processes can repeatedly “discover” complex optics without foresight.

Neurotheology: stimulating the right temporoparietal junction reproducibly induces “felt presence” experiences, dissolving the mystical argument from private certainty.

7.5 The Asymmetry of Verification

A miracle claim is, by definition, a one-off; its evidential trace is usually a historical text, not a replicable lab setup.

A scientific claim must survive adversarial replication; if the James Webb telescope had found 2% helium, the Big Bang model would have been retro-rejected overnight.

Thus the “burden of proof” is not a rhetorical trick; it is baked into the methodologies themselves.

7.6 Personal Epistemic Stance (Authorial)

I adopt a provisional, Bayesian stance: assign high credence to models whose priors have survived decades of hostile testing.

– This stance is not allergic to wonder; the Λ CDM model itself contains 95% dark components we do not yet understand, leaving plenty of mystery.

I remain metaphysically agnostic but methodologically naturalistic: I operate as if only physical causes exist because that heuristic has an unmatched track record.

7.7 Existential Payoff, not just Epistemic Scorekeeping

The choice of narrative shapes one’s reactive attitudes: gratitude, awe, guilt, cosmic loneliness.

Camus’ “One must imagine Sisyphus happy” and the Psalmist “The heavens declare the glory of God” are both therapeutic prescriptions disguised as cosmologies.

Therefore the question is pragmatic as well as factual: Which story best equips me to wake up tomorrow and act like the universe is, on balance, worthy of my efforts?

7.8 Closing Gratitude as Dialogical Ethos

Thinking out loud requires listeners willing to suspend immediate rebuttal; thank you for providing that scarce social space.

If these sentences function like podcast headphones, may they transmit not dogma but an invitation to keep asking, keep doubting, and keep listening to the still-unsolved silence between the stars.

Between these two modes of inquiry, neither can entirely dismiss the other, yet they speak in different languages—one of meaning, the other of mechanism. For my part, I find the scientific narrative more persuasive precisely because it builds from evidence that can be examined, challenged, and refined. It does not claim to answer every existential question, but it offers a coherent and continually evolving story of our cosmos and our place within it.

That said, the choice between these perspectives may ultimately be less about “proof” and more about what kind of story we find most coherent, compelling, or meaningful in our own lives. Whether you are moved by the elegance of a first cause, the grandeur of an evolving cosmos, or something altogether different, I hope this discussion has offered not just answers, but better questions.

Thank you for engaging with these ideas—for reading, for reflecting, and, as I might say if this were a podcast, truly, thank you for listening.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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