# **Theistic Critiques Of Atheism**

William Lane Craig

Used by permission of In *The Cambridge Companion to Atheism*, pp. 69-85. Ed. M. Martin. Cambridge Companions to Philosophy. Cambridge University Press, 2007.

#### **SUMMARY**

An account of the resurgence of philosophical theism in our time, including a brief survey of prominent anti-theistic arguments such as the presumption of atheism, the incoherence of theism, and the problem of evil, along with a defense of theistic arguments like the contingency argument, the cosmological argument, the teleological argument, and the moral argument.

## THEISTIC CRITIQUES OF ATHEISM

#### Introduction

The last half-century has witnessed a veritable revolution in Anglo-American philosophy. In a recent retrospective, the eminent Princeton philosopher Paul Benacerraf recalls what it was like doing philosophy at Princeton during the 1950s and '60s. The overwhelmingly dominant mode of thinking was scientific naturalism. Metaphysics had been vanquished, expelled from philosophy like an unclean leper. Any problem that could not be addressed by science was simply dismissed as a pseudo-problem. Verificationism reigned triumphantly over the emerging science of philosophy. "This new enlightenment would put the old metaphysical views and attitudes to rest and replace them with the new mode of doing philosophy." [1]

The collapse of the Verificationism was undoubtedly the most important philosophical event of the twentieth century. Its demise meant a resurgence of metaphysics, along with other traditional problems of philosophy which Verificationism had suppressed. Accompanying this resurgence has come something new and altogether unanticipated: a renaissance in Christian philosophy.

The face of Anglo-American philosophy has been transformed as a result. Theism is on the rise; atheism is on the decline. [2] Atheism, though perhaps still the dominant viewpoint at the American university, is a philosophy in retreat. In a recent article in the secularist journal *Philo* Quentin Smith laments what he calls "the desecularization of academia that evolved in philosophy departments since the late 1960s." He complains,

Naturalists passively watched as realist versions of theism. . . began to sweep through the philosophical community, until today perhaps one-quarter or one-third of philosophy professors are theists, with most being orthodox Christians . . . . in philosophy, it became, almost overnight, 'academically respectable' to argue for theism, making philosophy a favored field of entry for the

most intelligent and talented theists entering academia today. [3]

Smith concludes, "God is not 'dead' in academia; he returned to life in the late 1960s and is now alive and well in his last academic stronghold, philosophy departments." [4]

As vanguards of a new philosophical paradigm, theistic philosophers have freely issued various critiques of atheism. In so short a space as this entry it is impossible to do little more than sketch some of them and to provide direction for further reading. These critiques could be grouped under two basic heads: (1) There are no cogent arguments on behalf of atheism, and (2) There are cogent arguments on behalf of theism.

No Cogent Arguments on behalf of Atheism

Presumption of Atheism. Theists have complained that the usual arguments against God's existence do not pass philosophical muster. One of the most commonly proffered justifications of atheism has been the so-called presumption of atheism. At face value, this is the claim that in the absence of evidence for the existence of God, we should presume that God does not exist. So understood, such an alleged presumption seems to conflate atheism with agnosticism. When one looks more closely at how protagonists of the presumption of atheism use the term "atheist," however, one discovers that they are sometimes re-defining the word to indicate merely the absence of belief in God. Such a re-definition trivializes the claim of the presumption of atheism, for on this definition atheism ceases to be a view, and even infants count as atheists. One would still require justification in order to know either that God exists or that He does not exist.

Other advocates of the presumption of atheism use the word in the standard way but insist that it is precisely the absence of evidence for theism that justifies their claim that God does not exist. The problem with such a position is captured neatly by the aphorism, beloved of forensic scientists, that "Absence of evidence is not evidence of absence." The absence of evidence is evidence of absence only in cases in which, were the postulated entity to exist, we should expect to have more evidence of its existence than we do. With respect to God's existence, it is incumbent on the atheist to prove that if God existed, He would provide more evidence of His existence than what we have. This is an enormously heavy burden of proof for the atheist to bear, for two reasons: (1) On at least Christian theism the primary way in which we come to know God is not through evidence but through the inner work of His Holy Spirit, which is effectual in bringing persons into relation with God wholly apart from evidence. [5] (2) On Christian theism God has provided the

stupendous miracles of the creation of the universe from nothing and the resurrection of Jesus from the dead, for which events there is good scientific and historical evidence—not to mention all the other arguments of natural theology. [6] In this light, the presumption of atheism seems presumptuous, indeed!

The debate among contemporary philosophers has therefore moved beyond the facile presumption of atheism to a discussion of the so-called "Hiddenness of God" —in effect, a discussion of the probability or expectation that God, if He existed, would leave more evidence of His existence than what we have. Unsatisfied with the evidence we have, some atheists have argued that God, if He existed, would have prevented the world's unbelief by making His existence starkly apparent. But why should God want to do such a thing? On the Christian view it is actually a matter of relative indifference to God whether people believe that He exists or not. For what God is interested in is building a love relationship with us, not just getting us to believe that He exists. There is no reason at all to think that if God were to make His existence more manifest, more people would come into a saving relationship with Him. In fact, we have no way of knowing that in a world of free persons in which God's existence is as obvious as the nose on one's face that more people would come to love Him and know His salvation than in the actual world. But then the claim that if God existed, He would make His existence more evident than it is has little or no warrant, thereby undermining the claim that the absence of such evidence is itself positive evidence that God does not exist. Worse, if God is endowed with middle knowledge, so that He knows how any free person would act under any circumstances in which God might place him, then God can have so providentially ordered the actual world as to provide just those evidences and gifts of the Holy Spirit which He knew would be adequate for bringing those with an open heart and mind to saving faith. Thus, the evidence is as adequate as needs be.

(In)coherence of Theism. One of the central concerns of contemporary Philosophy of Religion is the coherence of theism. During the previous generation the concept of God was often regarded as fertile ground for anti-theistic arguments. The difficulty with theism, it was said, was not merely that there are no good arguments for the existence of God, but, more fundamentally, that the notion of God is incoherent.

This anti-theistic critique has evoked a prodigious literature devoted to the philosophical analysis of the concept of God. Two controls have tended to guide this inquiry into the divine nature: Scripture and Perfect Being theology. For thinkers in the Judaeo-Christian tradition, the Anselmian conception of God as the greatest conceivable being or most perfect being has guided philosophical speculation on the raw data of Scripture, so that God's biblical attributes are to be conceived in ways that would serve to exalt God's greatness. Since the concept of God is underdetermined by the biblical data and since what constitutes a "great-making" property is to

some degree debatable, philosophers working within the Judaeo-Christian tradition enjoy considerable latitude in formulating a philosophically coherent and biblically faithful doctrine of God. Theists thus find that anti-theistic critiques of certain conceptions of God can actually be quite helpful in formulating a more adequate conception.

For example, most Christian philosophers of religion today are quite happy to deny that God is simple or impassible or immutable in any unrestricted sense, even though medieval theologians affirmed such divine attributes, since these attributes are not ascribed to God in the Bible (and seem even to be incompatible with the biblical descriptions of God) and are not clearly great-making. Should it turn out that certain notions like omnipotence or omniscience are inherently paradoxical under certain definitions, that no being could have all powers, say, or know all truths, this conclusion, while of considerable academic interest, would in the end be of little theological significance, since what God cannot do or know on such accounts is so recondite that no incompatibility is thereby demonstrated with the God described in the Bible.

In fact, however, a coherent doctrine of God's attributes can be formulated. Take omnipotence, for example. This attribute stubbornly resisted adequate formulation until Flint and Freddoso's analysis published in 1983. A key insight into the concept of omnipotence is that it should be defined in terms of the ability to actualize certain states of affairs, rather than in terms of raw power. Thus, omnipotence should not be understood as power which is unlimited in its quantity or variety. If we understand omnipotence in terms of ability to actualize states of affairs, then it is no attenuation of God's omnipotence that He cannot make a stone too heavy for Him to lift, for, given that God is essentially omnipotent, "a stone too heavy for God to lift" describes as logically impossible a state of affairs as does "a square triangle" and thus describes nothing at all.

Shall we say, then, that an agent *S* is omnipotent if and only if *S* can actualize any state of affairs which is broadly logically possible? No, for certain states of affairs may be logically possible but due to the passage of time may no longer be possible to actualize. Let us call past states of affairs which are not indirectly actualizable by someone later in time the "hard" past. Shall we say, then, that an agent *S* is omnipotent at a time *t* if and only if *S* can at *t* actualize any state of affairs which is broadly logically possible for someone sharing the same hard past with *S* to actualize at *t*? It seems not. For counterfactuals about free actions raise a further problem. One has control over counterfactuals about one's own free decisions but not over counterfactuals about the free decisions of others. That implies that an adequate definition of omnipotence cannot require *S* to be able to actualize states of affairs described by counterfactuals about the free decisions of other agents, for that would be to demand the logically impossible of *S*. Shall we say, then, that *S* is omnipotent at a time *t* if and only if *S* can at *t* actualize any state of affairs which is broadly logically possible for *S* to actualize, given the same hard past at *t* and the same true counterfactuals about

free acts of others? This seems almost right. But it is open to the complaint that if *S* is essentially incapable of any particular action, no matter how trivial, than *S*'s inability to perform that action does not count against his omnipotence. Therefore we need to broaden the definition so as to require *S* to perform any action which any agent in his situation could perform. The following analysis would seem satisfactory: *S* is omnipotent at a time *t* if and only if *S* can at *t* actualize any state of affairs which is not described by counterfactuals about the free acts of others and which is broadly logically possible for someone to actualize, given the same hard past at *t* and the same true counterfactuals about free acts of others. Such an analysis successfully sets the parameters of God's omnipotence without imposing any non-logical limit on His power.

Or consider omniscience. On the standard account of omniscience, for any person S, S is omniscient if and only if S knows every true proposition and believes no false proposition. On this account God's cognitive excellence is defined in terms of his propositional knowledge. Some persons have charged that omniscience so-defined is an inherently paradoxical notion, like the set of all truths. But the standard definition does not commit us to any sort of totality of all truths but merely to universal quantification with respect to truths: God knows every truth. Moreover, the standard definition does not purport to give us the *mode* of God's knowledge but merely its scope and accuracy. Christian theologians have not typically thought of God's knowledge as propositional in nature but as an undivided intuition of reality, which we finite knowers represent to ourselves in terms of propositions. We express propositionally what God knows non-propositionally. On this view there do not actually exist an infinite number of propositions but only as many propositions as human beings have cognized. Indeed, if one is a fictionalist with respect to abstract objects like propositions, then propositions are just useful fictions which we employ to describe people's belief states, and the ground is swept from beneath any objections formulated on the basis of Platonistic assumptions concerning the reality of propositions. Finally, adequate definitions of divine omniscience are possible which make no mention of propositions at all. Charles Taliaferro proposes, for example, that omniscience be understood in terms of maximal cognitive power, towit, a person S is omniscient iff it is metaphysically impossible for there to be a being with greater cognitive power than S and this power is fully exercised.

Thus, far from undermining theism, the anti-theistic critiques of theism's coherence have served mainly to refine and strengthen theistic belief.

**Problem of Evil.** Undoubtedly the greatest obstacle to belief in God is the so-called problem of evil. During the last quarter century or so, an enormous amount of philosophical analysis has been poured into this problem, with the result that genuine philosophical progress on the age-old question has been made.

Most broadly speaking, we must distinguish between the intellectual problem of evil and the emotional problem of evil. The intellectual problem of evil concerns how to give a rational explanation of the co-existence of God and evil. The emotional problem of evil concerns how to comfort those who are suffering and how to dissolve the emotional dislike people have of a God who would permit such evil.

Contemporary thinkers recognize that there are significantly different versions of the intellectual problem of evil and have assigned various labels to them, such as "deductive," "inductive," "logical," "probabilistic," evidential," and so on. It may be most helpful to distinguish two ways in which the intellectual problem of evil may be cast, either as an internal problem or as an external problem. That is to say, the problem may be presented in terms of premises to which the theist is or ought to be committed as a theist, so that the theistic worldview is somehow at odds with itself, or it may be presented in terms of premises to which the theist is not committed as a theist but which we nonetheless have good reason to regard as true.

It is worth noting that traditionally atheists have presented the problem of evil as an internal problem for theism. That is, atheists have claimed that the statements

A. An omnipotent, omnibenevolent God exists.

and

B. The quantity and kinds of suffering in the world exist.

are either logically inconsistent or improbable with respect to each other. As a result of the work of Christian philosophers like Alvin Plantinga, it is today widely recognized that the internal problem of evil is a failure as an argument for atheism. No one has ever been able to show that (A) and (B) are either logically incompatible with each other or improbable with respect to each other.

Having abandoned the internal problem, atheists have very recently taken to advocating the external problem, often called the evidential problem of evil. If we take God to be essentially omnipotent and omnibenevolent and call suffering which is not necessary to achieve some adequately compensating good "gratuitous evil," the argument can be simply summarized:

- 1. If God exists, gratuitous evil does not exist.
- 2. Gratuitous evil exists.
- 3. Therefore, God does not exist.

What makes this an external problem is that the theist is not committed by his worldview to the truth of (2). The Christian theist is committed to the truth that *Evil exists*, but not that *Gratuitous evil exists*. Thus the atheist claims that the apparently pointless and unnecessary suffering in the world constitutes *evidence* against God's existence.

Now the most controversial premiss in this argument is (2). Everybody admits that the world is filled with *apparently* gratuitous suffering. But that does not imply that these apparently gratuitous evils really *are* gratuitous. There are at least three reasons why the inference from apparently gratuitous evil to genuinely gratuitous evil is tenuous.

1. We are not in a good position to assess with confidence the probability that God lacks morally sufficient reasons for permitting the suffering in the world. Whether God's existence is improbable relative to the evil in the world depends on how probable it is that God has morally sufficient reasons for permitting the evil that occurs. What makes the probability here so difficult to assess is that we are not in a good epistemic position to make these kinds of probability judgements with any sort of confidence. Only an omniscient mind could grasp the complexities of providentially directing a world of free creatures toward one's pre-visioned goals. One has only to think of the innumerable, incalculable contingencies involved in arriving at a single historical event, say, the enactment of the Lend-Lease policy by the American Congress prior to the United States' entry into World War II. We have no idea of the natural and moral evils that might be involved in order for God to arrange the circumstances and free agents in them requisite to such an event. Certainly many evils seem pointless and unnecessary to us—but we are simply not in a position to judge. To say this is not to appeal to mystery, but rather to point to the inherent cognitive limitations that frustrate attempts to say that it is improbable that God has a morally sufficient reason for permitting some particular evil.

Ironically, in other contexts atheists recognize these cognitive limitations. One of the most damaging objections to utilitarian ethical theory, for example, is that it is quite simply impossible for us to estimate which action that we might perform will ultimately lead to the greatest amount of happiness or pleasure in the world. Because of our cognitive limitations, actions which appear disastrous in the short term may redound to the greatest good, while some short term boon may issue in untold misery. Once we contemplate God's providence over the whole of history, then it becomes evident how hopeless it is for limited observers to speculate on the probability that some evil we see is ultimately gratuitous. Our failure to discern the morally justifying reason for the occurrence of various evils gives very little ground for thinking that God—especially a God equipped with middle knowledge—does not have morally sufficient reasons for permitting the evils we observe in the world.

2. Christian theism entails doctrines that increase the probability of the co-existence of God and evil. The atheist maintains that if God exists, then it is improbable that the world would contain the evils it does. Now what the Christian theist can do in response to such an assertion is to offer various hypotheses that would tend to raise the probability of evil given God's existence: Pr (Evil/God&Hypotheses) > Pr (Evil/God). The Christian can try to show that if God exists and these hypotheses are true, then it is not so surprising that evil exists. This in turn reduces any improbability which evil might be thought to throw upon God. These hypotheses are various Christian doctrines, so that the Christian's claim is that the observed evil in the world is more probable on Christian theism than it is on mere theism (or, alternatively, that these doctrines should lead us to revise upward Pr (Evil/God) in light of the realization that Pr (Evil/Christian God) is not so low after all). Four Christian doctrines come to mind in this connection.

First, the chief purpose of life is not happiness, but the knowledge of God. One reason that the problem of evil seems so intractable is that people tend naturally to assume that if God exists, then His purpose for human life is happiness in this world. God's role is to provide a comfortable environment for His human pets. But on the Christian view, this is false. We are not God's pets, and the goal of human life is not happiness *per se*, but the knowledge of God—which in the end will bring true and everlasting human fulfillment. Many evils occur in life which may be utterly pointless with respect to the goal of producing human happiness; but they may not be pointless with respect to producing a deeper, saving knowledge of God. To carry his argument, the atheist must show that it is feasible for God to create a world in which the same amount of the knowledge of God is achieved, but with less evil—which is sheer speculation.

Second, mankind has been accorded significant moral freedom to rebel against God and His purpose. Rather than submit to and worship God, people have freely rebelled against God and go their own way and so find themselves alienated from God, morally guilty before Him, and groping in spiritual darkness, pursuing false gods of their own making. The horrendous moral evils in the world are testimony to man's depravity in this state of spiritual alienation from God. The Christian is thus not surprised at the moral evil in the world; on the contrary he *expects* it.

Third, God's purpose spills over into eternal life. In the Christian view, this earthly life is but a momentary preparation for immortal life. In the afterlife God will give those who have trusted Him for salvation an eternal life of unspeakable joy. Given the prospect of eternal life, we should not expect to see in this life God's compensation for every evil we experience. Some may be justified only in light of eternity.

Fourth, the knowledge of God is an incommensurable good. To know God, the locus of infinite goodness and love, is an incomparable good, the fulfillment of human existence. The sufferings of

this life cannot even be compared to it. Thus, the person who knows God, no matter what he suffers, no matter how awful his pain, can still truly say, "God is good to me!", simply in virtue of the fact that he knows God.

These four Christian doctrines increase the probability of the co-existence of God and the evils in the world. They thereby serve to decrease any improbability which these evils might seem to cast upon the existence of God. In order to sustain his argument the atheist will have to show that these doctrines are themselves improbable.

- 3. There is better warrant for believing that God exists than that the evil in the world is really gratuitous. It has been said that one man's modus ponens is another man's modus tollens. The atheist's own argument may thus be turned against him:
- 1. If God exists, gratuitous evil does not exist.
- 2\*. God exists.
- 3\*. Therefore, gratuitous evil does not exist.

Thus, if God exists, then the evil in the world is not really gratuitous.

So the issue comes down to which is true: (2) or (2\*)? In order to prove that God does not exist, atheists would have to show that (2) is significantly more probable than (2\*). As Daniel Howard-Snyder points out in his book *The Evidential Problem of Evil*, an argument from evil is a problem only for the person "who finds all its premises and inferences compelling and who has lousy grounds for believing theism." [7] But if one has better reasons for believing that God exists, then evil "is not a problem." [8] The Christian theist might maintain that when we take into account the full scope of the evidence, then the existence of God becomes quite probable, even if the problem of evil, taken in isolation, does make God's existence improbable.

Cogent Arguments on behalf of Theism

The renaissance of Christian philosophy over the last half century has been accompanied by a reappreciation of the traditional arguments for the existence of God. Limitations of space permit mention of only four such arguments here.

**Contingency Argument.** A simple statement of the argument might run:

- 1. Anything that exists has an explanation of its existence (either in the necessity of its own nature or in an external cause).
- 2. If the universe has an explanation of its existence, that explanation is God.
- 3. The universe exists.
- 4. Therefore the explanation of the existence of the universe is God.

Premiss (1) is a modest version of the Principle of Sufficient Reason. It circumvents the typical atheist objections to strong versions of that principle. For (1) merely requires any existing *thing* to have an explanation of its existence. This premise is compatible with there being brute *facts* about the world. What it precludes is that there could exist things which just exist inexplicably. This principle seems quite plausible, at least more so than its contradictory. One thinks of Richard Taylor's illustration of finding a translucent ball while walking in the woods. One would find the claim quite bizarre that the ball just exists inexplicably; and increasing the size of the ball, even until it becomes co-extensive with the cosmos, would do nothing to obviate the need for an explanation of its existence.

Premiss (2) is, in effect, the contrapositive of the typical atheist retort that on the atheistic worldview the universe simply exists as a brute contingent thing. Moreover, (2) seems quite plausible in its own right. For if the universe, by definition, includes all of physical reality, then the cause of the universe must (at least causally prior to the universe's existence) transcend space and time and therefore cannot be temporal or material. But there are only two kinds of things that could fall under such a description: either an abstract object or else a mind. But abstract objects do not stand in causal relations. Therefore it follows that the explanation of the existence of the universe is an external, transcendent, personal cause—which is one meaning of "God."

Finally, (3) states the obvious, that there is a universe. It follows that God exists.

It is open to the atheist to retort that while the universe has an explanation of its existence, that explanation lies not in an external ground but in the necessity of its own nature; in other words, (2) is false. This is, however, an extremely bold suggestion which atheists have not been eager to embrace. We have, one can safely say, a strong intuition of the universe's contingency. A possible world in which no concrete objects exist certainly seems conceivable. We generally trust our modal intuitions on other familiar matters; if we are to do otherwise with respect to the universe's contingency, then the atheist needs to provide some reason for such scepticism other than his desire to avoid theism. Moreover, as we shall see below, we have good reason to think that the universe does not exist by a necessity of its own nature.

# Cosmological Argument. A simple version of this argument might go:

- 1. Whatever begins to exist has a cause.
- 2. The universe began to exist.
- 3. Therefore, the universe has a cause.

Conceptual analysis of what it means to be a cause of the universe then helps to establish some of the theologically significant properties of this being.

Premiss (1) seems obviously true—at the least, more so than its negation. It is rooted in the metaphysical intuition that something cannot come into being from nothing. If things could really come into being uncaused out of nothing, then it becomes inexplicable why just anything and everything do not come into existence uncaused from nothing. Moreover, the conviction that an origin of the universe requires a causal explanation seems quite reasonable, for on the atheistic view, if the universe began at the Big Bang, there was not even the *potentiality* of the universe's existence prior to the Big Bang, since nothing is prior to the Big Bang. But then how could the universe become actual if there was not even the potentiality of its existence? It makes much more sense to say that the potentiality of the universe lay in the power of God to create it. Finally, the first premiss is constantly confirmed in our experience. Atheists who are scientific naturalists thus have the strongest of motivations to accept it.

Premiss (2), the more controversial premiss, may be supported by both deductive, philosophical arguments and inductive, scientific arguments. Classical proponents of the argument contended that an infinite temporal regress of events cannot exist, since the existence of an actually infinite, as opposed to merely potentially infinite, number of things leads to intolerable absurdities. The best way to support this claim is still by way of thought experiments, like the famous Hilbert's Hotel [9], which illustrate the various absurdities that would result if an actual infinite were to be instantiated in the real world. It is usually alleged that this sort of argument has been invalidated by Georg Cantor's work on the actual infinite. But Cantorian set theory may be taken to be simply a universe of discourse, a mathematical system based on certain adopted axioms and conventions. The argument's defender may hold that while the actual infinite may be a fruitful and consistent concept within the postulated universe of discourse, it cannot be transposed into the spatio-temporal world, for this would involve counter-intuitive absurdities. He is at liberty to reject Platonistic views of mathematical objects in favor of non-Platonist views such as fictionalism or divine conceptualism combined with the simplicity of God's cognition.

A second argument for the beginning of the universe offered by classical proponents is that the

temporal series of past events cannot be an actual infinite because a collection formed by successive addition cannot be actually infinite. Sometimes the problem was described as the impossibility of traversing the infinite. In order for us to have "arrived" at today, temporal existence has, so to speak, traversed an infinite number of prior events. But before the present event could arrive, the event immediately prior to it would have to arrive; and before that event could arrive, the event immediately prior to it would have to arrive; and so on *ad infinitum*. No event could ever arrive, since before it could elapse there will always be one more event that will had to have happened first. Thus, if the series of past events were beginningless, the present event could not have arrived, which is absurd.

It is frequently objected that this sort of argument illicitly presupposes an infinitely distant starting point in the past and then pronounces it impossible to travel from that point to today, whereas in fact from any given point in the past, there is only a finite distance to the present, which is easily traversed. But proponents of the argument have not in fact assumed that there was an infinitely distant starting point in the past. To traverse a distance is to cross every proper part of it. As such, traversal does not entail that the distance traversed has a beginning or ending point or a first or last part. The fact that there is *no beginning* at all, not even an infinitely distant one, seems only to make the problem worse, not better. To say that the infinite past could have been formed by successive addition is like saying that someone has just succeeded in writing down all the negative numbers, ending at - 1. And, we may ask, how is the claim that from any given moment in the past there is only a finite distance to the present even relevant to the issue? For the question is how the whole series can be formed, not a finite portion of it. To think that because every finite segment of the series can be formed by successive addition the whole infinite series can as well is to commit the fallacy of composition.

A third argument for the universe's beginning is an inductive argument based on contemporary evidence for the expansion of the universe. The standard Big Bang model does not describe the expansion of the material content of the universe into a pre-existing, empty space, but rather the expansion of space itself. This has the astonishing implication that as one extrapolates back in time, space-time curvature becomes progressively greater until one arrives at a singularity, at which space-time curvature becomes infinite. It therefore constitutes an edge or boundary to space-time itself.

The history of twentieth century cosmology has, in one sense, been a series of failed attempts to craft acceptable non-standard models of the expanding universe in order to avert the absolute beginning predicted by the standard model. While such theories are possible, it has been the overwhelming verdict of the scientific community than none of them is more probable than the Big Bang theory. There is no mathematically consistent model which has been so successful in its

predictions or as corroborated by the evidence as the traditional Big Bang theory. For example, some theories, like the Oscillating Universe (which expands and re-contracts forever) or the Chaotic Inflationary Universe (which continually spawns new universes), do have a potentially infinite future but turn out to have only a finite past. Vacuum Fluctuation Universe theories (which postulate an eternal vacuum out of which our universe is born) cannot explain why, if the vacuum was eternal, we do not observe an infinitely old universe. The No-Boundary Universe proposal of Hartle and Hawking, if interpreted realistically, still involves an absolute origin of the universe even if the universe does not begin in a singularity, as it does in the standard Big Bang theory. Recently proposed Ekpyrotic Cyclic Universe scenarios based on string theory or M-theory have also been shown, not only to be riddled with problems, but, most significantly, to imply the very origin of the universe which its proponents sought to avoid. Of course, scientific results are always provisional, but there is no doubt that one rests comfortably within the scientific mainstream in asserting the truth of premiss (2).

A fourth argument for the finitude of the past is also an inductive argument, appealing to thermodynamic properties of the universe. According to the Second Law of Thermodynamics, processes taking place in a closed system tend toward states of higher entropy, as their energy is used up. Already in the nineteenth century scientists realized that the application of the Law to the universe as a whole (which, on naturalistic assumptions, is a gigantic closed system, since it is all there is) implied a grim eschatological conclusion: given sufficient time, the universe would eventually come to a state of equilibrium and suffer heat death. But this apparently firm projection raised an even deeper question: if, given sufficient time, the universe will suffer heat death, then why, if it has existed forever, is it not now in a state of heat death? The advent of relativity theory altered the shape of the eschatological scenario predicted on the basis of the Second Law but did not materially affect this fundamental question. Astrophysical evidence indicates overwhelmingly that the universe will expand forever. As it does, it will become increasingly cold, dark, dilute, and dead. Eventually the entire mass of the universe will be nothing but a cold, thin gas of elementary particles and radiation, growing ever more dilute as it expands into the infinite darkness, a universe in ruins.

But this raises the question: if in a finite amount of time the universe *will* achieve a cold, dark, dilute, and lifeless state, then why, if it has existed for *infinite time*, is it not *now* in a such a state? If one is to avoid the conclusion that the universe has not in fact existed forever, then one must find some scientifically plausible way to overturn the findings of physical cosmology so as to permit the universe to return to its youthful condition. But no realistic and plausible scenario is forthcoming. [10] Most cosmologists agree with physicist P. C. W. Davies that whether we like it or not we seemed forced to conclude that the universe's low entropy condition was simply "put in" as

an initial condition at the moment of creation. [11]

We thus have good philosophical and scientific grounds for affirming the second premiss of the cosmological argument. It is noteworthy that this premiss is a religiously neutral statement which can be found in any textbook on astrophysical cosmology, so that facile accusations of "God-of-the gaps" theology find no purchase. Moreover, since a being which exists by a necessity of its own nature must exist either timelessly or sempiternally (otherwise its coming into being or ceasing to be would make it evident that its existence is not necessary), it follows that the universe cannot be metaphysically necessary, which fact closes the final loophole in the contingency argument above.

It follows logically that the universe has a cause. Conceptual analysis of what properties must be possessed by such an ultra-mundane cause enables us to recover a striking number of the traditional divine attributes, revealing that if the universe has a cause, then an uncaused, personal Creator of the universe exists, who sans the universe is beginningless, changeless, immaterial, timeless, spaceless, and enormously powerful. [12]

# **Teleological Argument.** We may formulate a design argument as follows:

- 1. The fine-tuning of the universe is due to either physical necessity, chance, or design.
- 2. It is not due to physical necessity or chance.
- 3. Therefore, it is due to design.

What is meant by "fine-tuning"? The physical laws of nature, when given mathematical expression, contain various constants, such as the gravitational constant, whose values are independent of the laws themselves; moreover, there are certain arbitrary quantities which are simply put in as boundary conditions on which the laws of nature operate, for example, the initial low entropy condition of the universe. By "fine-tuning" one means that the actual values assumed by the constants and quantities in question are such that small deviations from those values would render the universe life-prohibiting or, alternatively, that the range of life-permitting values is exquisitely narrow in comparison with the range of assumable values.

Laypeople might think that if the constants and quantities had assumed different values, then other forms of life might well have evolved. But this is not the case. By "life" scientists mean that property of organisms to take in food, extract energy from it, grow, adapt to their environment, and reproduce. The point is that in order for the universe to permit life so-defined, whatever form organisms might take, the constants and quantities have to be incomprehensibly fine-tuned. In the absence of fine-tuning, not even matter or chemistry would exist, not to speak of planets where life

might evolve.

It has been objected that in universes governed by different laws of nature, such deleterious consequences might not result from varying the values of the constants and quantities. The teleologist need not deny the possibility, for such universes are irrelevant to his argument. All he needs to show is that among possible universes governed by the same laws (but having different values of the constants and quantities) as the actual universe, life-permitting universes are extraordinarily improbable.

Now premiss (1) states the three alternatives in the pool of live options for explaining cosmic finetuning. The question is which is the best explanation.

Now on the face of it the alternative of physical necessity seems extraordinarily implausible. As we have seen, the values of the physical constants and quantities are independent of the laws of nature. If the primordial matter and anti-matter had been differently proportioned, if the universe had expanded just a little more slowly, if the entropy of the universe were marginally greater, any of these adjustments and more would have prevented a life-permitting universe, yet all seem perfectly possible physically. The person who maintains that the universe must be life-permitting is taking a radical line which requires strong proof. But as yet there is none; this alternative is put forward as a bare possibility.

Sometimes physicists do speak of a yet to be discovered Theory of Everything (T.O.E.), but such nomenclature is, like so many of the colorful names given to scientific theories, quite misleading. A T.O.E. actually has the limited goal of providing a unified theory of the four fundamental forces of nature, but it will not even attempt to explain literally everything. For example, in the most promising candidates for a T.O.E. to date, super-string theory or M-Theory, the physical universe must be 11-dimensional, but why the universe should possess just that number of dimensions is not addressed by the theory. M-Theory simply substitutes geometrical fine-tuning for fine-tuning of forces.

Furthermore, it seems likely that any attempt to significantly reduce fine-tuning will itself turn out to involve fine-tuning. This has certainly been the pattern in the past. In light of the specificity and number of instances of fine-tuning, it is unlikely to disappear with the further advance of physical theory.

What, then, of the alternative of chance? Teleologists seek to eliminate this hypothesis either by appealing to the specified complexity of cosmic fine-tuning (a statistical approach to design inference) or by arguing that the fine-tuning is significantly more probable on design (theism) than on the chance hypothesis (atheism) (a Bayesian approach). Common to both approaches is the

claim that the universe's being life-permitting is highly improbable.

In order to save the hypothesis of chance, defenders of that alternative have increasingly recurred to the Many Worlds Hypothesis, according to which a World Ensemble of concrete universes exists, thereby multiplying one's probabilistic resources. In order to guarantee that by chance alone a universe like ours will appear somewhere in the Ensemble, an actually infinite number of such universes is usually postulated. But that is not enough; one must also stipulate that these worlds are randomly ordered with respect to the values of their constants and quantities, lest they be of insufficient variety to include a life-permitting universe.

Is the Many Worlds Hypothesis as good an explanation as the Design Hypothesis?

It seems doubtful. In the first place, as a metaphysical hypothesis, the Many Worlds Hypothesis is arguably inferior to the Design Hypothesis because the latter is simpler. According to Ockham's Razor, we should not multiply causes beyond what is necessary to explain the effect. But it is simpler to postulate one Cosmic Designer to explain our universe than to postulate the infinitely bloated and contrived ontology of the Many Worlds Hypothesis. Only if the Many Worlds theorist could show that there exists a single, comparably simple mechanism for generating a World Ensemble of randomly varied universes would he be able to elude this difficulty.

Second, there is no known way of generating a World Ensemble. No one has been able to explain how or why such a collection of varied universes should exist. Some proposals, like Lee Smolin's cosmic evolutionary scenario, actually served to weed out life-permitting universes, while others, like Andre Linde's chaotic inflationary scenario, turned out to require fine-tuning themselves.

Third, there is no evidence for the existence of a World Ensemble apart from the fine-tuning itself. But the fine-tuning is equally evidence for a Cosmic Designer. Indeed, the hypothesis of a Cosmic Designer is again the better explanation because we have independent evidence of the existence of such a being in the other theistic arguments.

Fourth, if our universe is but one member of an infinite World Ensemble of randomly varying universes, then it is overwhelmingly more probable that we should be observing a much different universe than that which we in fact observe. Roger Penrose calculates that the odds of our universe's low entropy condition obtaining by chance alone are on the order of 1:1010(123), an inconceivable number. By contrast, the odds of our solar system's being formed instantly by random collisions of particles is, according to Penrose, about 1:1010(60), a vast number, but inconceivably smaller than 1010(123). If our universe were but one member of a collection of randomly ordered worlds, then it is vastly more probable that we should be observing a much smaller universe. Adopting the Many Worlds Hypothesis to explain away fine-tuning would thus

result in a bizarre illusionism: it is far more probable that all our astronomical, geological, and biological estimates of age are wrong and that the appearance of our large and old universe is a massive illusion. Or again, if our universe is but one member of a World Ensemble, then we ought to be observing highly extraordinary events, like horses' popping into and out of existence by random collisions, or perpetual motion machines, since these are vastly more probable than all of nature's constants and quantities falling by chance into the virtually infinitesimal life-permitting range. Observable universes like those are much more plenteous in the ensemble of universes than worlds like ours and, therefore, ought to be observed by us if the universe were but one member of an ensemble of worlds. Since we do not have such observations, that fact strongly disconfirms the multiverse hypothesis. On atheism, at least, it is therefore highly probable that there is no World Ensemble. Penrose concludes that anthropic explanations are so "impotent" that it is actually "misconceived" to appeal to them to explain the special features of the universe.[13] Thus, the Many Worlds Hypothesis fails as a plausible explanation of cosmic fine-tuning.

It therefore seems that the fine-tuning of the universe is plausibly due neither to physical necessity nor to chance. Unless the design hypothesis can be shown to be even more implausible that its competitors, it follows that the fine-tuning is due to design.

**Moral Argument**. Theists have presented a wide variety of moral justifications for belief in a Deity. One such argument may be formulated as follows:

- 1. If God does not exist, objective moral values and duties do not exist.
- 2. Objective moral values and duties do exist.
- 3. Therefore, God exists.

Consider premiss (1). To speak of objective moral values and duties is to say that moral distinctions between what is good/bad or right/wrong hold independently of whether any human being holds to such distinctions. Many theists and atheists alike agree that if God does not exist, then moral values and duties are not objective in this sense.

For if God does not exist, then what is the foundation for moral values? More particularly, what is the basis for the value of human beings? If God does not exist, then it is difficult to see any reason to think that human beings are special or that their morality is objectively valid. Moreover, why think that we have any moral obligations to do anything? Who or what imposes any moral duties upon us? As a result of socio-biological pressures, there has evolved among *homo sapiens* a sort of "herd morality" which functions well in the perpetuation of our species in the struggle for survival.

But there does not seem to be anything about *homo sapiens* that makes this morality objectively binding. If the film of evolutionary history were rewound and shot anew, very different creatures with a very different set of values might well have evolved. By what right do we regard our morality as objective rather than theirs? As the humanist philosopher Paul Kurtz puts it, "The central question about moral and ethical principles concerns this ontological foundation. If they are neither derived from God nor anchored in some transcendent ground, are they purely ephemeral?" [14]

Some philosophers, equally averse to transcendently existing moral values as to theism, try to maintain the existence of objective moral principles or supervenient moral properties in the context of a naturalistic worldview. But the advocates of such theories are typically at a loss to justify their starting point. If there is no God, then it is hard to see any ground for thinking that the herd morality evolved by *homo sapiens* is objectively true or moral goodness supervenes on certain natural states of such creatures. Crudely put, on the atheistic view humans are just animals; and animals are not moral agents.

If our approach to meta-ethical theory is to be serious metaphysics rather than just a "shopping list" approach, whereby one simply helps oneself to the supervenient moral properties or principles needed to do the job, then some sort of explanation is required for why moral properties supervene on certain natural states or why such principles are true. [15] It is insufficient for the naturalist to point out that we do, in fact, apprehend the goodness of some feature of human existence, for that only goes to establish the objectivity of moral values and duties, which just is premiss (2) of the moral argument.

We therefore need to ask whether moral values and duties can be plausibly anchored in some transcendent, non-theistic ground. Let us call this view Atheistic Moral Realism. Atheistic moral realists affirm that objective moral values and duties do exist and are not dependent upon evolution or human opinion, but they insist that they are not grounded in God. Indeed, moral values have no further foundation. They just exist.

It is difficult, however, even to comprehend this view. What does it mean to say, for example, that the moral value *Justice* just exists? It is hard to know what to make of this. It is clear what is meant when it is said that a person is just; but it is bewildering when it is said that in the absence of any people, *Justice* itself exists.

Second, the nature of moral obligation seems incompatible with Atheistic Moral Realism. Suppose that values like *Mercy*, *Justice*, *Forbearance*, and the like just exist. How does that result in any moral obligations for me? Why would I have a moral duty, say, to be merciful? Who or what lays such an obligation on me? On this view moral vices such as *Greed*, *Hatred*, and *Selfishness* also

presumably exist as abstract objects, too. Why am I obligated to align my life with one set of these abstractly existing objects rather than any other? In contrast with the atheist, the theist can make sense of moral obligation because God's commands can be viewed as constitutive of our moral duties.

Thirdly, it is fantastically improbable that just that sort of creatures would emerge from the blind evolutionary process who correspond to the abstractly existing realm of moral values. This seems to be an utterly incredible coincidence when one thinks about it. It is almost as though the moral realm *knew* that we were coming. It is far more plausible to regard both the natural realm and the moral realm as under the hegemony of a divine Creator and Lawgiver than to think that these two entirely independent orders of reality just happened to mesh.

Although theistic meta-ethics assumes a rich variety of forms, there has been in recent years a resurgence of interest in Divine Command Morality, which understands our moral duties as our obligations to God in light of His moral commands, for example, "You shall love your neighbor as yourself," and so on. Our moral duties are constituted by the commands of an impartial and loving God. For any action *A* and moral agent *S*, we can explicate the notions of moral requirement, permission, and forbiddenness of *A* for *S*:

A is required of S iff an impartial and loving God commands S to do A.

A is permitted for S iff an impartial and loving God does not command S not to do A.

A is forbidden to S iff an impartial and loving God commands S not to do A.

Since our moral duties are grounded in the divine commands, they are not independent of God nor is God bound by moral duties, since He does not issue commands to Himself. Neither are God's commands arbitrary, since they are necessary expressions of His nature.

The question might be pressed as to why God's nature should be taken to be definitive of goodness. But unless we are nihilists, we have to recognize some ultimate standard of value, and God seems to be the least arbitrary stopping point. Moreover, God's nature is singularly appropriate to serve as such a standard. For by definition, God is the greatest conceivable being, and it is greater to be the paradigm of moral value than merely to conform to such a standard. More specifically, God is by definition a being *worthy of worship*. And only a being which is the locus and source of all value is worthy of worship.

Traditional arguments for God's existence such as the above, not to mention creative new arguments, are alive and well on the contemporary scene in Anglo-American philosophy. Together

with the failure of anti-theistic arguments, they help to explain the renaissance of interest in theism.

#### Footnotes

#### [1]

Paul Benacerraf, "What Mathematical Truth Could Not Be—I," in *Benacerraf and His Critics*, ed. Adam Morton and Stephen P. Stich (Oxford: Blackwell: 1996), p. 18.

# [2]

The change has not gone unnoticed even in popular culture. In 1980 *Time* magazine ran major story entitled "Modernizing the Case for God" in which it described the movement among contemporary philosophers to refurbish the traditional arguments for God's existence. *Time* marveled, "In a quiet revolution in thought and argument that hardly anybody could have foreseen only two decades ago, God is making a comeback. Most intriguingly, this is happening not among theologians or ordinary believers, but in the crisp intellectual circles of academic philosophers, where the consensus had long banished the Almighty from fruitful discourse" ("Modernizing the Case for God," *Time* [7 April 1980], pp. 65-66). The article cites the late Roderick Chisholm to the effect that the reason that atheism was so influential a generation ago is that the brightest philosophers were atheists; but today, in his opinion, many of the brightest philosophers are theists, using a tough-minded intellectualism in defense of that belief that was formerly lacking on their side of the debate.

#### [3]

Quentin Smith, "The Metaphilosophy of Naturalism" *Philo* 4/2(2001): 3-4. A sign of the times: *Philo* itself, unable to succeed as a secular organ, has now become a journal for general philosophy of religion.

# [4]

Ibid., p. 4.

## [5]

One of the most significant developments in contemporary Religious Epistemology has been so-called Reformed Epistemology, spearheaded and developed by Alvin Plantinga, which directly assaults the evidentialist construal of rationality. With respect to the belief that God exists, Plantinga holds that God has so constituted us that we naturally form this belief under certain circumstances; since the belief is thus formed by properly functioning cognitive faculties in an appropriate environment, it is warranted for us, and, insofar as our faculties are not disrupted by the noetic effects of sin, we shall believe this proposition deeply and firmly, so that we can be said, in virtue of the great warrant accruing to this belief for us, to know that God exists.

#### [6]

On Jesus' resurrection see N. T. Wright, Christian Origins and the Question of God, vol. 3: The Resurrection of the Son of God (Minneapolis: Fortress Press, 2003).

## [7]

Daniel Howard-Snyder, "Introduction," in *The Evidential Argument from Evil*, ed. Daniel Howard-Snyder (Bloomington, Ind.: Indiana University Press, 1996), p. xi.

#### [8]

Ibid. The Christian theist will therefore insist that in assessing the external problem of evil we consider, not just the evil in the world, but all the evidence relevant to God's existence, including the contingency argument for a Sufficient Reason why something exists rather than nothing, the cosmological argument for a Creator of the universe, the teleological argument for an intelligent Designer of the cosmos, the axiological argument for an ultimate, personally-embodied Good, the no-logical argument for an ultimate Mind, the epistemological argument for a Designer of our truth-directed cognitive faculties, the ontological argument for a Maximally Great Being, as well as evidence concerning the person of Christ, the historicity of the resurrection, the existence of miracles, and, in addition, existential and religious experience.

#### [9]

The story of Hilbert's Hotel is related in George Gamow, One, Two, Three, Infinity (London: Macmillan, 1946), 17.

#### [10]

See survey of options in my "Time, Eternity, and Eschatology," in *Oxford Handbook on Eschatology*, ed. J. Walls (Oxford: Oxford University Press, forthcoming).

#### [11]

P. C. W. Davies, The Physics of Time Asymmetry (London: Surrey University Press, 1974), p. 104.

## [12]

See argument in my "Naturalism and Cosmology," in *Analytic Philosophy without Naturalism*, ed. A. Corradini, S. Galvan, and J. Lowe (London: Routledge, 2005).

## [13]

Roger Penrose, The Road to Reality (New York: Alfred A. Knopf, 2005), pp. 762-5.

## [14]

Paul Kurtz, Forbidden Fruit (Buffalo, N.Y.: Prometheus Books, 1988), p. 65.

# [15]

Some philosophers seem to suppose that moral truths, being necessarily true, cannot have an explanation of their truth. The crucial presupposition that necessary truths cannot stand in relations of explanatory priority to one another is not merely not evidently true, but seems plainly false. For example, the proposition *A plurality of persons exists* is necessarily true (in a broadly logical sense) because *God exists* is necessarily true and God is essentially a Trinity. To give a non-theological example, on a non-fictionalist account 2+3=5 is necessarily true because thePeano axioms for standard arithmetic are necessarily true. Or again, *No event precedes itself* is necessarily true because *Temporal becoming is an essential and objective feature of time* is necessarily true. It would be utterly implausible to suggest that the relation of explanatory priority obtaining between the relevant propositions is symmetrical.