GOD

According to a recent Gallup poll, 92 percent of Americans believe in the **existence of God.**¹ This is a staggering consensus—it is impossible to get so many people agreeing about almost any other topic. To provide some context, only 79 percent of Americans believe that the **Earth revolves around the Sun**,² a fact settled by Copernicus and Galileo over 300 years ago. Indeed, the number of people that believe that God is dead is about the same number that believe **Elvis is still alive**.³ Of all the topics in this book, the one you most likely already have some opinion about is whether God exists.

The matter of God is also unlike other philosophical topics in the level of passion it generates. Religious enthusiasm is responsible for some of the most magnificent and sublime art, architecture, and music the world has ever seen. The Parthenon in Athens,4 the Blue Mosque in Istanbul,5 the temples of Angkor Wat,⁶ Michelangelo's Pietà,⁷ the ceiling of the Sistine Chapel, 8 J. S. Bach's *Mass in B Minor*, 9 John Coltrane's *A Love Supreme*, 10 and George Harrison's My Sweet Lord¹¹ were all inspired by religious conviction. Very seldom do other philosophical ideas inspire such artistic achievements. (There are rare exceptions, such as Richard Strauss's tone poem Also Sprach Zarathustra, 12 inspired by the philosopher Friedrich Nietzsche's book of the same name, Raphael's School of Athens, 13 and Jacques-Louis David's painting The Death of Socrates. 14) On the other hand, no one launches a crusade or a jihad over epistemological skepticism, or uses professional torturers to convince others that libertarianism is the correct account of free will, or shuns their neighbors because they are utilitarians. But people have done all those things and more in the name











God God

of religion. Why this one topic stirs such strong emotions is an important issue for psychologists and sociologists to sort out. As philosophers, however, what we want to know is whether, and which, religious claims are true.

Faith

Faith as confidence

3.3 If you believe in God, you may well cite *faith* as the explanation of your belief. In one sense, "faith" means confidence. Suppose your friend Scott tells you that he has faith in the Washington Redskins this year. Surely Scott is not informing you that he believes in the existence of the Redskins, which would be a very odd thing to say, and would elicit some strange looks. Rather, he *presupposes* that the Redskins exist, and his faith in them is simply his confidence that the Redskins are going to have a good season. Similarly, you could have confidence in God, that he will do certain things, or help you in various ways, or whatever. But if that describes your faith in God, then it presupposes that God exists (just as Scott's faith in the Redskins presupposed their existence), and doesn't really say why you think God exists.

Faith as belief without reason

- In another sense, "faith" means believing without evidence or reasons. If that is the sort of faith in God that you have, then it still doesn't do much to justify your belief. In fact it does nothing other than admit that there is no rational basis for your belief in God at all. In other contexts, believing without evidence is a terrible plan. If you're in Las Vegas, plunking down a piece of change on the roulette wheel because of your faith that this time it's going to hit on red 32, well, get ready for the poorhouse. Faith is more like wishful thinking than a path to knowledge. Choosing to believe things when there is no reason to do so is a swift path to being suckered by all sorts of swindlers, con artists, bullshitters, and snake oil salesmen. Chapter 7 on knowledge addresses this problem in much more detail, and explains why evidence matters when deciding what to believe.
- Perhaps religious belief is different. Maybe when it comes to religious matters, faith—belief without reason—is the appropriate way to believe

that there is a God. The idea that faith and reason are at odds with each other has a long standing in Christian thought. The third-century theologian Tertullian reputedly declared "credo, qua absurdum est"; I believe because it is absurd. 15 Even if reason showed his religious beliefs to be absurd, that didn't bother Tertullian in the least. Similarly, Martin Luther¹⁶ thought that reason was a fine thing "in comparison with other things of this life, the best and something divine" (Disputatio de Homine (1536), section 4), but that it was useless in theological matters. Later he offered the opinions that Aristotle, who represented the pinnacle of philosophical reason for Luther, knows nothing about "theological man" and that it is impious and in opposition to theology to suppose that reason can aspire to the knowledge of God. Luther even embraced the Tertullian enthusiasm for absurdity and contradiction. In responding to an argument that Christ could not be eternal because he was born, and hence had a beginning, Luther wrote, "In philosophy this is true, but not in theology. The Son is born eternal from eternity; this is something incomprehensible. But this belongs to theology" (Disputation on the Divinity and Humanity of *Christ*, section VI).¹⁷



One may certainly argue that there are limits to human understanding, or that there are truths beyond our capacity to know them. However, it's a bit peculiar to argue that there are matters beyond the reach of reason and then turn around and claim to know the truth about these very matters. Here's an analogy from a different branch of inquiry. In the 1930s the logician Kurt Gödel proved that there are mathematical facts that are eternally beyond the power of logic to establish as either true or false. More exactly, Gödel proved that there must be mathematical propositions that could not be derived from any logical system with a finite number of mutually consistent axioms. Gödel's finding revolutionized mathematical logic. While Gödel showed that there had to be such unprovable propositions, he never claimed to know exactly what they were, or whether they were true or false. In fact, one way to understand his results is that since there are unprovable mathematical facts, there are logical limits in one area of human knowledge. For believers like Tertullian and Luther, we can know things like "Christ is born eternal from eternity," despite a lack of reasons, despite conceding that it is incomprehensible, by faith alone. Believing it anyway, in the teeth of rational evidence, is supposed to amount to knowledge.

If faith is no more than belief without reasons or evidence, then it is by 3.7 that very fact not within the domain of philosophy (which Luther, for example, would be quick to endorse). Philosophy is very keen on supplying



good reasons to believe things. There is a long tradition within philosophy, however, of using reason to evaluate claims of the divine. This practice is known as *natural theology*. ¹⁸ The existence of God is of course one topic in natural theology, but not the only one. The divinity of other religious figures (Jesus, Buddha, Krishna, etc.), the existence of angels or demons, the reality of Heaven, Hell, or any sort of afterlife, the possibility of resurrection or reincarnation, whether there is a day of judgment, the coherence of the Trinity, and whether there have been genuine miracles have been thoroughly debated by philosophers. Those issues are all beyond the scope of the present chapter (although *This Is Philosophy of Religion: An Introduction* (Manson, forthcoming) provides a much more comprehensive treatment). The remainder of the present chapter will look at one topic within natural theology, namely, the reasons for and against believing that God exists.

The Attributes of God



3.9

3.8 Before we can begin examining whether there is a God, we must first have some conception of what God is. If we have no idea who or what God could be, then we'll have no idea if we actually run across him, her, or it. The quest for God would be no more than a **snipe hunt**. ¹⁹ Whether God truly exists is independent from the issue of what God's qualities or properties are. Let's say we're looking for unicorns.

Maybe you think they are mythological, maybe you think that they are real. Either way we have to know what unicorns are supposed to be before we can effectively look for them. Suppose we decide that whatever else unicorns are, at the very least they are horses that have a single horn on their heads. If we find a horse with a horn, we can reasonably claim to have located a unicorn. If we scour the Earth and find no such animal, then we can conclude that there are no unicorns. If we further find no unicorns in the fossil record, no transitional forms, and no suitably empty slots in equine taxonomy, then we can reasonably conclude that there never have been unicorns. A lack of unicorns did not mean that the concept of "unicorn" was empty, though, or that we didn't know what we were searching for.

What, then, are the attributes of God, so we can start looking around? Loads of qualities have been assigned to God, not all of them consistent with each other. God is reputed to be perfectly just (=always giving people

what they deserve) yet also perfectly merciful (=always letting people off the hook). He's supposed to be loving but also vengeful, the lord of peace but still a **bloodthirsty conqueror**.²⁰ God is said to be omnipresent (=everywhere at once), yet is an immaterial spirit with no spatial location. He is supposed to exist eternally (=present at every moment) while also existing outside of time. Some claim God is infinite, but that alone doesn't mean very much. Is he infinite in quantity? Infinitely large? Infinitely puny? Infinite in duration? Infinitely fat? Infinitely jolly? The historical traditions are convoluted, to say the least.



In the classical tradition of natural theology, God is assumed to have the 3.11 following three properties:

Omnipotence: being all powerful Omniscience: being all knowing

Omnibenevolence: being morally perfect, or perfectly good

If there is a God, then of course he will have more than just these three properties, just as unicorns, were they real, would have more qualities than just "horse with a horn." The idea is that if we can demonstrate the existence of any being that is omnipotent, omniscient, and omnibenevolent, then we have proven the existence of God. If we are able to show that there is no being that has those three attributes, then we have proven that God does not exist. The remainder of this chapter will be divided into two halves. The first half will present and critique the arguments in favor of God's existence. The second half will present and critique the arguments against God's existence.

Why There Is a God

The argument from scripture

Many people defend their religious beliefs on the grounds that they come 3.12 from some book that they regard as completely accurate, and this book makes religious claims. So you might say that you believe that God exists because it says so in the Bible. It's important to keep in mind from the outset that there are many different religious scriptures, they each promote different deities, and offer only occasionally overlapping religious stories. **The Rig-Veda** is one of the sacred texts of Hinduism,²¹ and consists of a

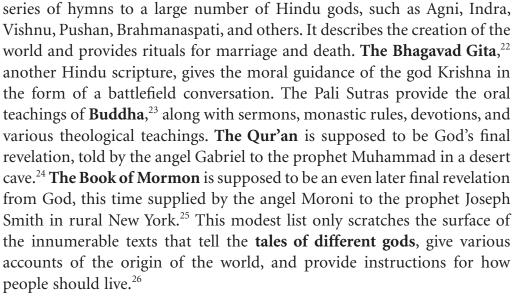












There are two ways to treat religious scriptures. One is to assume that they are divinely inspired, and so everything they contain is sacred, infallible, and any apparent errors are to be explained away by whatever means available. If your preferred holy book was dictated by flawless holy beings, then it may contain poetry, prayers, or hymns, but it certainly does not contain falsehoods. The problem is that, as a reason to believe in the existence of God, assuming the divine inspiration of scripture is not a good argument. It is essentially this argument:

- 1. Assume that the Bible (or whatever holy book you prefer) is the divinely inspired word of God.
- 2. God doesn't lie.
- 3. The Bible says God exists.
- 4. Therefore, God exists.

The first premise implicitly assumes that there is a God, namely the very individual who inspired the Bible. In other words, the argument proceeds from assuming that God exists, to the conclusion that God exists. Unfortunately, this assumes the very thing to be proven, and the premises are thereby no more plausible than the conclusion is. Logicians call this "circular reasoning" or "begging the question." So if we treat the Bible as divinely inspired, it cannot serve as evidence that God exists, on the grounds that assuming divine inspiration already presupposes that God exists.



The other way to treat religious texts is to hold them to the same historical standards that we do other old books and documents. Ancient

historians like Herodotus, Thucydides, Josephus, and Suetonius are not taken at face value, but their accounts are closely examined in light of other evidence we have about the past. For example, we have imperial and court records, and the writings of other historians of the time. There are also archaeological finds that provide physical evidence about migratory patterns, battles, populations, architecture, kings, and settlements. Moreover, we import what we know about human nature to ask whether an ancient writer is trying to flatter the rulers, curry favor with religious authorities, demonize their enemies, or just write a fabulous tale. All of these things are the raw materials out of which contemporary scholars try to reconstruct the past in the most accurate way they can.

One of the problems with investigating the historical claims made in a book like the Bible is that the investigators usually have strong religious convictions which bias their scholarship. It wasn't until the nineteenth century that Biblical scholars treated archaeological digs in the Holy Land as anything more than a means of vindicating what they already believed by faith. Needless to say, such prior convictions colored their interpretations of what they found. If all you have is a hammer, everything looks like a nail. A discussion of what contemporary historians think about the historical accuracy of the **Bible** is a tale best told by them.²⁸ It's worth noting, however, that mainstream historians tend not to regard the Bible as especially more reliable than other ancient sources. But let's assume that it is—suppose that the Bible's account of ancient history is extremely good. What could be inferred about the existence of God? Here's an argument:



- 1. Most of the historical claims in the Bible can be proven to be true by modern archaeology and historical study.
- 2. If the historical claims (dates, places, battles, kings, cities) are true, then the religious claims (gods, demons, spirits, miracles, afterlife) are probably true.
- 3. Therefore the religious claims are probably true.

The logic of the argument is flawless; if the two premises are true, then the conclusion is most definitely true. Let's even grant the first premise for the sake of argument. The controversial assumption is in premise (2). The problem is that there is no particular reason to think that an accurate account of historical events supports any sort of religious interpretation of those events.



3.16

Consider a nonscriptural historical account that, like religious texts, is chockablock with the doings of divine beings, namely, the *Iliad*²⁹ and the Odyssey30 by Homer. Homer was an eighth-century BCE Greek poet who chronicled the war between Greece and Troy. For millennia after Homer, Troy was thought to be a mythological city, and the war no more than Homer's imagination. Modern historians now think that Troy was a real city and the war described by Homer has at least a core of truth in Bronze Age Greek warfare. Let's take this further. Suppose for the sake of argument that Homer's tale was 100 percent accurate—the beautiful Helen, wife of King Menelaus, was kidnapped and taken to Troy, and to avenge the kidnapping her brother-in-law, Agamemnon, laid siege to Troy for a decade. In fact, let's imagine that Homer was totally precise in his description of the heroes Achilles, Ajax, Odysseus, and Hector, and that we have even found physical remains of the famous wooden Trojan Horse. Let's even assume that there is excellent empirical evidence that Homer was right about the number and composition of the Greek fleet, the commanders and allies, and so on.

The *Iliad* and the *Odyssey* are woven through with the stories and doings of the Greek gods. The Trojan War had at its root a quarrel among the goddesses Athena, Aphrodite, and Hera about who is the fairest. After Paris judged Aphrodite to be the fairest, she made Helen the most beautiful woman. The god Apollo caused a plague among the Greeks; Helen's father was the god Zeus; and Achilles's mother (a nymph) attempted to make him immortal by dipping him into the river Styx. On his way home from the war Odysseus encountered the witch-goddess Circe, was captured by a Cyclops, was lured by magical Sirens, narrowly avoided the monster Scylla, and managed to tick off the god Helios. There are numerous other encounters and stories of assorted divine beings in Homer as well.

Here is the question: even if we stipulate the excellence of Homer's history, are you prepared to admit the existence of all the Greek gods and demigods? The question is not whether you agree that *Homer* believed in all those gods, but whether *you* do. If you think that no, Athena, Circe, and all the rest were just fanciful myths that embellished Homer's historical narrative, then you reject premise (2) in the argument above. It is not the case that if the historical claims (dates, places, battles, kings, cities) are true, then the religious claims (gods, demons, spirits, miracles, afterlife) are probably true. Even if we found Noah's Ark on Mount Ararat, we would have no reason at all to believe that God told him to build it. Even if we could DNA-test Jesus's blood from a piece of the cross, that would

give no more credence to the claim that he was the son of God than finding the bones of Achilles is evidence that his nymph-mother dunked him in the River Styx to secure a magical protection.

In sum, the argument from scripture faces a dilemma. Assuming that a 3.19 religious scripture is divinely inspired presupposes that God exists. Presupposing that God exists is not a very convincing, or logically cogent, way to argue that he does. Not assuming that a religious scripture is divinely inspired means that its accuracy is to be assessed in the same way any ancient tale is evaluated, namely by the best techniques of modern historiography that we possess. Yet the best those techniques could yield is a vindication of the properly historical claims of scripture, not its particularly religious claims. The conclusion is that appeal to scripture does not seem to be a very promising way to prove God's existence.

The ontological argument

The argument from scripture tries to show that God exists because it says 3.20 so in a special book. The argument to be discussed presently, the **ontological argument**,³¹ goes in the complete opposite direction. It attempts to show that God's existence can be demonstrated by pure abstract reason alone. St Anselm of Canterbury, a medieval monk, first devised The ontological argument and presented it in his book *Proslogion* in the year 1078. The basic idea of the argument is that existence is part of the very nature of what it is to be God, and to conceive of God at all is to realize that he must exist. It is a very clever argument, and has captured the attention of philosophers and logicians for nearly 1000 years. Here is a version.



- 1. The concept of God is that of the most perfect being imaginable.
- 2. Either God is purely imaginary or God is real.
- 3. It is more perfect to exist than not to exist.
- 4. Therefore a purely imaginary God is less perfect than a real God.
- 5. Therefore a purely imaginary God does not correspond to the concept of God, which is that of the *most* perfect being.
- 6. Therefore God is real.

Anselm rightly notes that even nonbelievers will grant that the concept of God is of a most perfect being. While nonbelievers just deny that there is such a being, it looks like they will accept the first premise. The second premise is also hard to deny: either God's real or he isn't. What about the

third premise? It certainly has some initial plausibility, anyway—a real, flesh-and-blood rich and handsome boyfriend is better than an imaginary one. The real one is a more perfect boyfriend. So a real God is better and more perfect than a purely imaginary one. The remainder of the argument is supposed to be no more than the implications of the first three premises. There is something about the very concept of God that ensures his existence, and to grasp the idea of God at all is to recognize that he must exist.

3.21 Objection 1: The fool's response A contemporary of Anselm's, a monk named Gaunilo, raised the first objection to the ontological argument. Gaunilo raised his objection "on behalf of the fool." He meant that only a fool would doubt **God's existence**³² or the awesomeness of the ontological argument. Still, Gaunilo thought, some poor misguided soul might argue like this. Let imagine an island, call it the Lost Island, which is the most perfect island imaginable. It is lush with palm trees and tropical flowers, laden with pineapples and breadfruits, it has wide, white sand beaches and turquoise waters, and the weather is always ideal. We can prove that the

- 1. The concept of the Lost Island is that of the most perfect island imaginable.
- 2. Either the Lost Island is purely imaginary or the Lost Island is real.
- 3. It is more perfect to exist than not to exist.

Lost Island exists using the ontological argument:

- 4. Therefore a purely imaginary Lost Island is less perfect than a real Lost Island.
- 5. Therefore a purely imaginary Lost Island does not correspond to the concept of the Lost Island, which is that of the *most* perfect island.
- 6. Therefore the Lost Island is real.

If the ontological argument can prove that the Lost Island is real, then it proves too much. Something has gone wrong somewhere.

One sort of reply to Gaunilo is to note that no matter how wonderful the description of the Lost Island, it could be even a little bit better—a little more scenic, a bit more colorful. In fact, wouldn't the island be even better if it could spontaneously produce lavish luau feasts every night? Or if it could heal any injuries one might suffer from falling coconuts? Really, the island could be further improved if it were a sentient being, one that wanted to help tourists, give them directions, and so on. Of course, a morally perfect, helpful island would be improved if it knew exactly how



to improve the lives of its visitors. The more it knows, the better. You may notice that the description of the island is on its way to being all knowing, all powerful, and perfectly good. In short, if the Lost Island were *truly* perfect in every way, it would be God. Which just means that the ontological argument works after all—it shows the reality of the only perfect thing, which is God.

You might be inclined to rejoin that God is not an island, not even a 3.23 perfect island. "Perfect" modifies all kinds of nouns, and just because a word has "perfect" in front of it, does not mean that the word is just code for "God." You can have a perfect spiral pass, perfect spheres, a perfect argument, a perfect cup of coffee, and a perfect island. Being perfect doesn't require being God, and so Gaunilo's original objection stands.

Objection 2: A reverse parody Another objection to the ontological argument is that its reasoning can be flipped on its head. A parody version tries to show that nonexistence is better and more perfect than existence, so God exists only in the imagination.

- 1. The concept of God is that of the most perfect being imaginable.
- 2. Either God is purely imaginary or God is real.
- 3. It is more perfect *not* to exist than to exist.
- 4. Therefore a purely imaginary God is *more* perfect than a real God.
- 5. Therefore a real God does not correspond to the concept of God, which is that of the *most* perfect being.
- 6. Therefore God is purely imaginary.

Why believe the new premise (3)? Here's why. Suppose you were to play tennis with #1 ranked **Rafa Nadal**. ³³ He will completely clobber you, because he is an incredible tennis player, and presently the best the world. No surprise there, and really, for him to beat you is not that impressive. But suppose we give him a handicap—instead of a tennis racquet, he has to use a whisk broom. Now when he beats you, that feat *is* rather impressive. The man was using a broom after all. Suppose we handicap him even more, and he has to play right-handed (Nadal is left-handed). Now beating you is even more impressive, right? Now let's make him play while hopping on one leg. If Nadal keeps winning while playing right-handed with a whisk broom and hopping on one leg, the more amazing he is. That is, the more we handicap Nadal, the more awe-inspiring it is when he continues to beat you at tennis. Clearly, the most incredible feat that he could pull off is



3.25

beating you when he doesn't even exist. Nonexistence is the greatest possible handicap, and if he can still win then, well, he truly is a tennis icon.

Likewise, God is that much more impressive if he can do everything he is supposed to have done while laboring under a handicap. The greatest conceivable handicap—and thus the one that would make God as awesome as possible—is nonexistence. So the most perfect imaginable being is one that can do anything while not even bothering to exist. A purely imaginary God is therefore more perfect than a real God. Therefore, God only exists in the imagination.

At this point you may suspect that there is something screwy with how existence and nonexistence are being treated in these ontological-style arguments. Playing tennis with a whisk broom is a hindrance, but nonexistence isn't just some obstacle to performance. Without existence, there's no one to do any performing at all.

Objection 3: Existence is not a property Perhaps the most compelling objection to the ontological argument has to do with the way in which the argument treats existence. Immanuel Kant complained that the ontological argument uses existence as a property that things might or might not have. So God could have the property of existing, or he might lack it. The problem, as Kant saw it, is that existence is not a property at all. To see his point, imagine that your friend Jakwon comes up to you and starts telling you all about his new girlfriend. She's tall, has curly dark hair, hazel eyes, skin like café au lait, a swimmer's body . . . he goes on and on about how wonderful she is. You tell Jakwon how much you look forward to meeting her. He says that he would love to introduce you to her, because she's terrific, but she does have one unfortunate quality—she doesn't exist.

What makes that conversation sound so odd is that existence isn't a property. Jakwon's girlfriend doesn't have a bunch of great qualities (except existence), because there is no girlfriend. Since she doesn't exist, she doesn't have any properties at all. The problem in the ontological argument is in premise (3), which states that it is more perfect to exist than not to exist. Existence isn't a perfection because it isn't a property at all, much less one that comes in degrees or in optimal quantities.

In modern logic existence is treated as a quantifier: you have to specify what exists first, before you can start saying what properties things have. Otherwise you can wind up in some very strange places.

"What's behind that tree?"

"Nothing."

"Tell me about the nothing. What is it like? Does it noth?"

Nothing isn't a thing, and shouldn't be treated as a noun. The denial of 3.30 existence (there is not a thing such that . . .) is a quantifier just as much as the assertion of existence (there is a thing such that . . .). Trying to build existence into a property like *being perfect*, as the ontological argument does, makes no logical sense.

The cosmological argument

The ontological argument tried to prove God's existence from pure rational 3.31 intellection alone. The argument to be discussed now is empirical at heart. It tries to demonstrate there must be a God because of what we observe, namely the existence of the world around us.

You may believe that God exists because the universe had to come from 3.32 somewhere, and this somewhere is a someone, namely God. This is the idea of God as creator, and is at the heart of what is known as the cosmological argument. The argument goes back to the ancients, particularly Aristotle, who gives versions of it in book VIII of his *Physics* and book XII of the *Metaphysics*. The cosmological argument was popular in the Middle Ages, both in Christianity and in **Islam**. The best-known medieval defense was by the Catholic theologian and saint Thomas Aquinas in *Summa Theologica*. The cosmological argument is more than a mere hypothesis that a divine power created everything. Aristotle and Aquinas provide an intriguing argument to support a creator God.

For Aristotle and Aquinas, the argument part comes from the observation that everything seems to have a cause. There is a reason for everything that happens—not necessarily "a reason" in the sense of "there's a purpose" or "it's reasonable," but a reason in the sense that something was the cause. So if there is thunder, there is a reason for it. There is a reason at least in the sense that there is a cause for the thunder, namely lightning. Since there's a cause for everything, there is a cause for the lightning too: water droplets and ice crystals in clouds collide in the turbulent air and build up an electrical field which at a certain strength discharges a spark known as lightning. The tale doesn't stop there. There are causes for the presence of water vapor, why some is frozen into ice crystals, why there are atmospheric convection currents, and so on. Then there are causes for there being an atmosphere around Earth at all instead of none. The existence of the Earth, too, has a cause, presumably in terms of gravity and space dust.



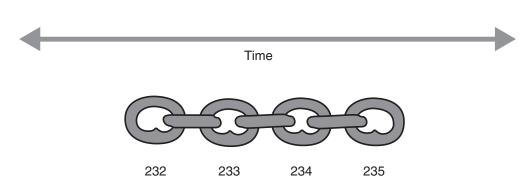


Figure 3.1 The causal chain

All of these events or facts are (1) caused by something else, and (2) that something else was earlier in time. You might imagine an endless chain, where each link in the chain is an event. The link immediately preceding any given link is its cause, and the link right after is the effect it causes. Granted, the chain image is an oversimplification, since events tend to have complex, multiple causes that work conjointly to produce an effect. There are also complications in understanding exactly what causation is, and how we can isolate "the" cause of an event. But set all that aside. Look at Figure 3.1.

Consider event 235. Our task is to explain what caused that event. Fortunately, in this simple model we have an answer ready to hand: it's event 234. Now is event 234 also an effect of some kind, or it is uncaused? Well, it too has a cause, namely event 233. We can then raise the same question all over again: what is the cause of 233? Each time we ask for a cause, we move back another link in the chain. So long as every proposed answer to "What is the cause of this event?" is itself an effect of a further prior cause, we are faced with an infinite regress of causes and effects, going back forever in time. Why is this so bad? It's unacceptable because it is a *vicious regress*, meaning that when we try to solve the problem of "What is the cause of this event?" the same problem crops up again in the proposed solution. The identical question arises at each link in the chain, ad infinitum. Therefore no caused event could serve as a satisfactorily general explanation of caused events.

To solve the vicious regress problem, the cosmological argument posits that there had to have been an event 1, the first thing, an ultimate cause that is the first link in the chain. The chain cannot be infinite both forwards and backwards in time. To get the chain of causation started, there must have been a first cause, or, in Aristotle's terminology, a prime mover. There must be something that shoved everything into motion. Since this first event was itself uncaused, the question "What is the cause of this

event?" does not arise, and the vicious regress is escaped. What exactly is the first cause, the prime mover, the big shover? What else could it be but God?

Here is the argument in outline form.

3.37

- 1. Everything is caused by something prior in the causal chain.
- 2. It is absurd to think that the chain of causation can go back infinitely.
- 3. Thus there had to be some uncaused thing at the beginning that started the whole chain of causation.
- 4. This uncaused thing is God.

There are several objections to the cosmological argument. Here are the more prominent concerns.

Objection 1: Inconsistency The first premise states that everything is 3.38 caused by something prior in the causal chain. This assumption is a key motivating factor in the cosmological argument, since if some things come into existence for no reason at all (they are uncaused) then there is no especial reason to think that the universe was caused to begin. That is, the beginning of the universe might have been *random*, just a mere cosmic fluke or accident. A random beginning doesn't demand that there be a God to start things off, since literally nothing started things off. So universal causation is an essential element of the argument.

Unfortunately, premise (3) states that there is some uncaused thing at 3.39 the beginning, which is in direct contradiction with (1). Either something is uncaused or nothing is—the argument can't have it both ways. Inconsistent premises are a serious logical problem. If you assume a contradiction, you can prove anything whatsoever. So in one sense the existence of God follows validly from the premises. But, then again, so does everything else, including the proposition that there is no God, which is clearly not a happy result for a theist. Rewriting premise (1) so that it is consistent with (3) would yield: some things are caused by something prior in the causal chain. As noted in the preceding paragraph, that's too weak to motivate much of anything beyond a yawn. If some things are caused and some are not, what's the motivation to suppose there must be a first cause?

Objection 2: Problem of the attributes Let's set aside the inconsistency 3.40 issue, and assume that the argument is good up to premise (3): there had

to be some uncaused thing at the beginning that started the whole chain of causation. Why should we leap to the conclusion that this uncaused thing is God? Remember, we have assumed that whatever else God is, he has at least these three qualities: omniscience, omnipotence, and omnibenevolence. The problem of the attributes objection is that the cosmological argument provides no reasons to think that the first cause has even one of these attributes.

You might be inclined to argue that God is omnipotent—a great power to have if you're in the business of universe-creating. Therefore if there's something that started off the universe, it must be an omnipotent being like God. Unfortunately, that's to reason exactly backwards. The cosmological argument is attempting to use the existence of our causally structured universe to infer the existence of God. You can't go the other way and assume that since there's an omnipotent God, he could have created the universe. That strategy assumes, and does not demonstrate or give evidence for, God's existence.

Perhaps you can't think of another explanation of what could possibly be the first cause if it isn't God. It doesn't really matter, though. Failure of imagination to think of an alternative to God as the first cause does not show that the step from (3) to (4) is a legitimate move. Even if there is a first cause, the cosmological argument provides no reason to suppose that the first cause is conscious, or a being of any sort. The first cause, for all we know to the contrary, was just some mindless random event. In fact, that is just what contemporary scientists think about the origin of the universe. About 100 years ago scientists were able to develop an alternative explanation to God, one grounded in observations of the universe and tied together by Einstein's Theory of General Relativity.

3.43 Objection 3: Alternative scientific explanations Contemporary science agrees with Aristotle, Aquinas, and the other ancient and medieval defenders of the cosmological argument on one very crucial point: the universe does have an origin, and is not eternal. It is no slight on Aquinas and the others that they could not imagine a first cause other than God. Nevertheless, physics gives very different reasons to think that there is a beginning to the universe, and what that beginning consists in. The standard model of cosmology in contemporary physics is the **Big Bang model**. According to this theory, the entire universe was once infinitely dense and very tiny; then it rapidly expanded, and eventually turned into everything there is.



Physicists aren't just making this stuff up; there's very compelling and fascinating empirical evidence for the Big Bang.

Back in the 1920s, astronomers like Edwin Hubble discovered a surpris- 3.44 ing fact: everything in the universe is moving away from every other thing at a high rate of speed. The universe is like a loaf of raisin bread; as the bread rises in the oven, the raisins all move further away from each other. Another analogy is that polka dots on a balloon uniformly separate from each other as the balloon is inflated. The stars, galaxies, and other celestial bodies are like the raisins or polka dots. Well, once it was realized that the universe is expanding, it didn't take much insight to figure out if you ran the film backwards that in the past things were closer together. Go further and further into the past and the universe is smaller, more compact, denser, until . . . stop: 13.7 billion years ago the entire universe and all its contents were jammed into something smaller than a pinhead. This wasn't some pinhead hanging out in space, that was the whole universe, space and all. Since it was infinitely dense and hot, it was not a very stable setup and instantly expanded at a colossal rate. The universe is still expanding—indeed, its expansion is accelerating.

There are several other physical reasons to accept the Big Bang, but since 3.45 this is not a physics primer,³⁷ I'll just mention one more. Space is cold, but it is not completely cold. Everywhere in the universe radiates heat at just under 3° Kelvin. This radiation is in the microwave part of the electromagnetic spectrum and is invisible to the naked eye, like X-rays, or ultraviolet light. If this heat radiation were visible, the entire universe would softly glow uniformly in every direction. It is known as the cosmic microwave background. There are two reasons that the existence of the cosmic microwave background is evidence for the Big Bang. The first is that its uniformity cannot be explained by local heat sources. Stars, for example, are localized hot spots in the universe, but don't produce the pervasive background heat that is everywhere. The second reason is that the Big Bang does explain the cosmic microwave background, and the mathematics of the theory predict the exact temperature scientists find experimentally. The cosmic microwave background is the residual leftover heat of the Big Bang.

What all this means for the cosmological argument is that, as far as the 3.46 origin of the universe is concerned, God isn't the only game in town. There's also a sophisticated, evidence-based competing scientific explanation, which means that some strong reasons will be needed to prefer the God explanation to the scientific one.



You might be tempted to insist that the Big Bang didn't just come from nowhere—there had to be something that caused it, and *that's* God. Well, fine. But then you're on the hook to explain what caused God. The view of physicists is that there is nothing that caused the Big Bang. If you're dissatisfied with an uncaused Big Bang, why are you more satisfied with an uncaused God? What makes him a better explanation? The German philosopher **Arthur Schopenhauer** wrote that in the cosmological argument the principle of universal causation is "used like a hired cab, which we dismiss when we have reached our destination." The destination in the cosmological argument is God; once we've gotten there, everyone out of the cab. We don't need to press on to ask about where God came from, in classic **pay-no-attention-to-that-man-behind-the-curtain** fashion. Yet it's no more than special pleading to reject an uncaused Big Bang as insufferably bizarre but then turn around and embrace an uncaused God as a completely reasonable alternative.

3.48 It is worth mentioning that the second premise of the cosmological argument declares that an infinite chain of causes is absurd, but the solution to the problem is an infinitely existing God. That's not flatly contradictory, but, like Schopenhauer's cab, it's arbitrary. In short: if eternal existence is ridiculous, then it applies to God too. If everything needs a beginning, then so does God. The cosmological argument is an attempt to offer God as an explanation of the origins of the universe, but it isn't going to work if it only replaces one mystery with something more mysterious.

The teleological argument or the argument from design

The teleological argument for God's existence, more commonly known as the argument from design, or intelligent design, has enjoyed a recent resurgence of popularity outside of professional philosophy. But it is not a new argument at all—Thomas Aquinas gave a short version of it in over 700 years ago in his *Summa Theologica*. The reasoning of the cosmological argument was that the mere existence of the universe meant that there had to be a creator God. The design argument, on the other hand, notes that the universe has certain features, and infers that these features can only be explained by a designer God.

The nineteenth-century theologian William Paley gave the most famous version of the design argument. Paley presents the argument in the form of a very intriguing analogy. Suppose you are walking through the woods, and stub your toe on a rock. You might pick the rock up and ask, "What's





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this rock doing here?" Of course, it's the woods, and there are rocks. So a perfectly respectable answer is "well, it's just always been here." Fine. You move on. Now suppose that instead of a rock you stumble across a watch. Maybe you've never seen a watch before and have no idea what it is for. Nevertheless, you pick it up and ask the same question as before: hello, what's all this, then? Now it doesn't seem nearly as sensible to say that maybe the watch has always been there. Why not? Well, you can see from looking closely at the watch that it is assembled from an intricate mesh of tiny gears, 40 all interlocking, moving together, and turning tiny hands on the face at different speeds. Whatever the point of the watch it is clear that should even one of those little parts be disturbed, the entire mechanism would seize up. The watch is phenomenally complicated, and stands in sharp contrast to the plain, natural background of the woods. Paley says that you would naturally conclude that someone designed and made the watch, and they either dropped it by accident or left it in the forest on purpose. You can just see that the watch was designed, and that there was intelligence behind its manufacture.



Paley claims that the entire universe is analogous to the watch. When we 3.51 look around the universe, we see incredible complexity and orderliness. Consider the human eye, for example. The cornea focuses light rays on the retina, which contains three different sorts of cellular cones that respond to different light wavelengths and are the basis for color vision. There are other photoreceptor cells called rods that are sensitive to low light and responsible for night vision. The cells of the retina send information to the brain along the optical nerve, and the brain reconstructs this information into visual sensations about the world. The entire process is as intricate and precise as any watch. Or think about the march of the planets around the sun. Planetary orbits follow completely predictable ellipses around our star, and never fly off in all directions or radically change their paths. Everything, from the operations of the subatomic particles to the metabolisms of living creatures, to the interplay of celestial bodies, marches to the orders of the laws of nature. Paley's conclusion is that any explanation of such a complex world demands a designer every bit as much as the watch. Here's a schematic version of the design argument.

- 1. Everything in the universe is organized, detailed, complex, and precise.
- 2. Nothing explains this complexity and order except intelligent design.
- 3. If it is the result of design, then there must be a designer.
- 4. This designer is God.

3.52 Objection 1: Weaknesses in the watch analogy Paley's watch analogy is clever, but suffers from three weaknesses which undermine its claim to be a good enough reason to accept that the universe must be designed.

of place against the plain background of the forest floor. There is no denying that in comparison the watch is astonishingly intricate and seems to cry out for an explanation in terms of design. However, the analogy is watch is to forest as universe is to . . . ? To what? The universe is everything, so against what background should we compare it to conclude that it is particularly orderly or complex?

The issue of what sort of things requires explanation is deep and subtle. 3.54 On the one hand you could argue that since there is no background for the universe it is the natural state and exhibits exactly the level of complexity that we should naturally expect. In which case there's nothing to explain, much as Paley thinks that the complexity of the forest needs no explanation. On the other hand, there are various features of our universe, such as the laws of nature and the basic physical constants, which might have been quite different from what they are. In fact, if some of these parameters had been even slightly different, life could have never have arisen. For example, if the matter/energy in the very early universe had been smoothly and evenly distributed, then gravity would have never clumped it up into stars, planets, and such, and life could never have arisen. Likewise, if the matter/ energy in the very early universe had been much clumpier than it in fact was, then gravity would have concentrated practically everything into giant black holes. The Oxford mathematician Roger Penrose has calculated that if the features of our universe were picked just by chance, then the probability is 1 in $10^{10^{123}}$ that the early universe would have just the moderately chunky structure it did. Hitting the sweet spot was stupendously unlikely, and a defender of the design argument might well argue that this shows that a designer fine-tuned the universe for life.

Of course, any specific structure of the early universe is fantastically unlikely, if we assume that all possible configurations of matter/energy were equally probable at the beginning. That alone does not cry out for an explanation. If you roll a die, each number that might come up is unlikely (1/6), but *some* number must come up. If the number you really want for whatever reason is 6, and you roll a 6, you needn't suppose that you have a magic touch, or God answered your prayers and nudged the rolling die. Some number or other had to come up and you merely got lucky. There may be no deeper explanation to why our universe turned out the way it did

beyond "we just got lucky." Nevertheless, there is the feeling that given all the ways that the universe might have been configured, it seems sensible to ask why did it turn out the way that it did? It is beyond the scope of this book to work out exactly which events require an explanation and which are part of the assumed background. Here we note only this: Paley's views about which things need explanation and which do not are rather questionable.

Objection 1b. The next objection to the watch analogy is that, according to 3.56 the design argument, the background conditions themselves are designed. That is, the forest, the trees, the rocks, are all designed by God. So there is no reason for the watch to have stood out at all. Paley might just as well have picked up a rock and said "Lo! Design!" But he didn't—in fact he explicitly claims that it would be perfectly reasonable to judge that the rock had always been there. But the intricacy of the watch *does* need explanation. Yet if everything's designed, then everything should stand out as needing an explanation, and the watch is nothing special or unusual. Paley needs the watch to be unusual, though, to get his appeal to design up and running. The upshot is that if everything is designed, then it undermines the force of the original analogy.

Objection 1c. The last problem is that surely it would be a mistake to pick 3.57 up the watch, note its complexity, and promptly judge that God must have made it. That would be a hasty and mistaken inference, so why not think that the inference that God was the designer of the universe equally hasty and mistaken? A humorous example of this point is in the cult film The Gods Must Be Crazy. 41 In the film, an empty Coke bottle is thrown out of a passing airplane over the Kalahari Desert in Africa. It is found by the Bushmen, a stone-age tribe indigenous to the Kalahari. The tribe naturally concludes that the bottle, which was spectacularly unlike anything they had ever seen, must have been given to them by the gods.⁴² The Bushmen's reasoning is exactly like Paley's: an inexplicable object exhibiting an order and form unlike the environment is evidence of the divine. If you think that the Bushmen were wrong because of their ignorance about how the world really works, you ought to think that Paley's reasoning is equally faulty and based on ignorance.

Objection 2: Alternative scientific explanations Just as the cosmological 3.58 argument faced the objection that modern science has an alternative, evidence-based account of the origin of the universe, so too the design argument faces the objection that modern science has an alternative,



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evidence-based account of complexity and order. In fact, there are several such interlocking explanations. First, here is an easy example of how considerable order can be generated by a dumb, mechanical process.

Suppose that you want to get rich. In fact, you want to get rich by ripping people off as efficiently as you can. So here's what you do. Day one. Send a spam email to 10,000 people telling them that you would like them to invest their money in your stock-picking service. To prove to them what a great stock-picker you are, you will predict what tomorrow's stock market will do: 5000 people get an email saying that the Dow Jones Industrial Average will go up, and the other 5000 get an email saying it will go down. Now, either the market will go up or it will go down, right?

Day two. Suppose that the market went up. Forget about the 5000 people you told that the market would go down. They never hear from you again. Send out another email, with another prediction, this time about what the following day's stock market will do: 2500 people get an email saying it will go up, and the other 2500 get an email saying it will go down.

Day three. Suppose this time the market goes down. Forget about the 2500 people you told that the market would go up. They never hear from you again. Send out another email, with another prediction, this time about what the following day's stock market will do: 1250 people get an email saying it will go up, and the other 1250 get an email saying it will go down. You see how this goes. By the time you have winnowed it down to 10 people, those 10 have had 10 correct predictions in a row. Then you email them claiming that you have proven what a stock-picking genius you are, and get them to invest their money with you.

The incredibly simple selection procedure of "if and only if last prediction was correct, send email" did not require a great intelligence, and in fact could be easily programmed to run unsupervised on an iPhone. Yet it produced a very surprising order, namely 10 correct predictions of the stock market in a row, something that would be extremely unlikely to achieve by chance guessing alone. The string of correct predictions wasn't random, and it wasn't the work of a brilliant stock analyst. It was no more than a purely mechanical operation that winnowed out the losers (=recipients of an incorrect prediction) and promoted the winners (=recipients of a correct prediction).

The way in which order is produced in the stock-picking scam is the root idea in evolution by natural selection. Evolution explains the diversity of life, speciation, and extinction as the blind following of a relentless rule that winnows out the genetic losers and promotes the winners. The losers

are those who fail to survive until they reproduce, and the winners are those who succeed in reproduction. That's it.

For example, finches with small, skinny beaks are able to eat small seeds and insects, but if competition from other species for the seeds grows too fierce, or if a disease wipes out the little insects, then the **finches starve**. Only finches with somewhat larger than normal beaks can survive, as they are able to crack open large nuts and seeds for food. The finches with bigger and stronger beaks then pass on those traits to their young. In this way finches change over time. Physical attributes can develop more or less out of nothing, just as order arose in the stock scam. **Eyes**, for instance, started out as no more than the chance mutation of chemically-sensitive cells into molecularly similar light-sensitive cells. Light sensitivity gave those organisms a mild survival advantage over the competition, and so the trait was preserved and refined. Modern eyes are amazingly sophisticated little devices, but they have been molded and developed by natural selection for at least 540 million years. After a couple of billion generations even a dumb mechanical process can produce something quite complex.

Evolution isn't the only scientific account of order and complexity. A 3.65 very recent theory develops the idea that there are self-organizing systems that spontaneously generate order. For example, a drop of oil in water is a sphere, and snowflakes have a **six-fold symmetry**. Drops of oil and symmetrical snowflakes did not evolve, nor do we need to suppose that they were each designed by a micromanaging deity. With self-organizing systems, once they reach a critical level of complexity, order can arise as an emergent property. That sounds a bit complicated, but the idea of an emergent property isn't that alien. Consider a rubber band. The individual molecules that compose the rubber band are not themselves stretchy, or snap back when pulled. But if you string enough of them together, at some point the property of elasticity emerges and you get a little piece of stretchy material. In these examples, you get order for free—it arises like a phase transition between **states of matter** (like when liquid water freezes into solid ice). Order can just happen.

In the end, design is not the only way to explain complexity, as premise 3.66 (2) of the design argument maintains. There are other well-developed, evidence-based scientific theories that show how order can arise without a designer. The challenge for a defender of the argument is to show how those other explanations are flawed and why design hypothesis is a superior alternative. Even if that challenge could be met, the move from there being a designer to the conclusion that the designer must be God is big step indeed.









3.67 Objection 3: Problem of the attributes Just as in the cosmological argument, the design argument faces the problem of the attributes. Let's grant for the sake of argument that the order and complexity of the universe is the result of design. The question is how to get from that point to the designer's being God. Remember, we're looking for an omnipotent, omniscient, omnibenevolent being. The design argument provides no reasons whatsoever to believe that the designer has even one of these attributes. Indeed, the argument provides no reasons to think that the designer, whomever or whatever it may be, is still alive.

You might be inclined to argue that God is omniscient—a great power to have if you're in the business of universe-designing. Therefore if there's something that designed the universe, it must be an omniscient being like God. Unfortunately, that's to reason exactly backwards. The design argument is attempting to use the complexity and order of our universe to infer the existence of God. You can't go the other way and assume that since there's an omniscient God, he could have designed this complex universe. That strategy assumes, and does not demonstrate or give evidence for, God's existence.

3.69 A related objection is the problem of uniqueness.

3.70 Objection 4: Problem of uniqueness The design argument concludes that there is a designer. That is, there must be at least one designer who drew the blueprints for the universe. Yet there are no reasons offered for thinking that there is only one designer. After all, designing the universe is quite a big job, and perhaps a team, or a committee, put together the plans, rather like in Douglas Adams's novel The Hitchhiker's Guide to the Galaxy. In the novel (and film version), the Earth is in fact designed—it was purpose built for hyperdimensional extraterrestrials who in our dimension look like mice. An enormous crew was behind the design, with one character, Slartibartfast, winning an award for his design of Norwegian fjords. For all the design argument is able to show, perhaps this is what we should think. The argument offers no resources to conclude that a unique God is correct designer.



3.71 Objection 5: Explaining the complexity of God The final objection is that the design argument is supposed to explain all order and complexity as the handiwork of God. But what about God himself? Presumably God too is a complex thing. One would think that his thoughts are orderly, coherent, and intricate. His actions are not chaotic or random, but are the conse-

quences of his desires. God has reasons for what he does, and those actions conform to the logic of his mind. God is, by definition, omniscient, which means not only that he possesses all facts, but also that his beliefs form an intricate, mutually supporting web appropriately tethered to reality. Surely God's mind is more complicated than human minds, indeed, infinitely more so.

The problem is that if God is complex, then he cannot explain all complexity. According to the design argument, the orderly structure of reality can be explained only by postulating a designer God. But surely God did not **design himself**. Therefore we are left without an explanation of his complexity. Therefore the design argument is unable to give a fully general account of complexity. The present objection is similar to the Schopenhauer complaint about the cosmological argument. the cosmological argument wanted to insist that everything had a cause (except God), and the design argument attempts to explain all order and complexity (except God's).

There is a tradition, going back to Thomas Aquinas, in which God is ^{3.73} considered "simple." A simple is an object that has no parts, for example, an electron. If God is partless, then his composition cannot be like that of an intricate watch. The watch has many tiny parts cleverly fitted together, but God has no parts at all, and so there is no need to explain the complexity of God—indeed there is nothing to explain. Thus God is suitable to the explain complexity of everything, being simple himself.

One problem with this attempt to escape Objection 5 is that, even if God 3.74 has no parts, that does not show that he is simple in all relevant ways. For instance, God's mind, even if indivisible, is still rationally structured and complicated in all the ways just listed above. If one wants to argue that God's mind has no structure, that his thoughts are not even rationally or logically connected to one another, or deny that there are distinctions to be made among his thoughts, then there is no credible sense in which God does thinking or deciding. God is not a mind nor does he have one. Moreover, if God is without parts, and without discernible ideas or separable thoughts, then it is quite puzzling why we should think of God as any kind of being at all. That is a large price to pay to escape the complexity objection.

The ontological, cosmological, and design arguments are the three tra- 3.75 ditional philosophical attempts to prove the existence of God. There are other modern attempts, such as treating revelation as a legitimate method of gaining noninferential beliefs, that require more philosophical



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background and sophistication than can be presented in an introductory book such as this one. The interested reader is encouraged to examine the annotated bibliography. However, the pro-God arguments are not yet over. There is one more argument to consider on God's behalf, one that takes a very different and intriguing approach.

Pascal's wager



3.76 In the seventeenth century, Blaise Pascal argued that it was in your rational self-interest to believe that **God exists**. ⁴⁹ Pascal explicitly did *not* argue that God exists. Wait, you surely cry, how can it be possible for it to be rational to believe that God exists without having any sort of argument for God's existence? Therein lies the genius of Pascal's reasoning. As a young man, Pascal inherited a bit of money from his father, and devoted most of his twenties to partying, in particular, gambling. His wayward youth turned out to be a great thing for mathematics and philosophy. As the result of trying to solve gambling puzzles, Pascal made considerable contributions to probability theory and more or less invented decision theory. In his book *Pensées*, Pascal applied the logic of gambling to the problem of God. Believing in God, Pascal thought, is your best bet.

Pascal begins his famous wager argument by asserting that everyone has to make a choice about God's existence. We're all at the gaming table and have to lay our money down. So how will we bet? Well, before you decide, you'll probably want to know the odds. Pascal is well aware of that, and conveniently provides them. Either God exists or he does not, Pascal plausibly notes. The inference he makes is that the whole matter is just a coin toss—heads God exists, tails he doesn't. Since Pascal explicitly claims that the odds for God's existence are 50–50, it is clear that he does not think that evidence demonstrates God exists in any traditional sense. If we lack any reason to believe in God's existence, and the chance that he exists is no more than a coin toss, how does that motivate belief?

The answer, Pascal says, lies in the possible payoffs. There are four options:

- 1. You bet that there is a God, and he really does exist. You win.
- 2. You bet that there is a God, and he does not exist. You lose.
- 3. You bet against God's existence, there is no God. You win.
- 4. You bet against God's existence and there is a God after all. You lose your wager.

So what's at stake in God's casino? According to Pascal, if God really does exist, then you'd better believe in him. God will reward believers with eternal life, paradise, Heaven, harps, wings, and the whole shebang. Nonbelievers, on the other hand, not only miss out on the victory prize, but also lose huge. They face an afterlife of separation from God, Hell, torment, punishment, lakes of fire, and so on. Well, what if it comes up tails, and there is no God? Then, claims Pascal, it doesn't matter what you bet. In that scenario there's really nothing to win or to lose either way. Overall, wagering that God exists is the smart money. If you're right, you win big, but if you're wrong you lose nothing. If you bet against God, you have nothing to gain and everything to lose. Pascal's wager can be summarized in this way:

- 1. You must make a decision as to whether God exists.
- 2. The odds for his existence are 50–50.
- 3. If God exists and you believe, then you win big by believing.
- 4. If God exists and you do not believe, then you lose big by not believing.
- 5. If God does not exist and you believe, then you lose nothing by believing.
- 6. If God does not exist and you do not believe, then you gain nothing by not believing.
- 7. Therefore, it is in your rational self interest to wager that God exists.

The logic of the argument is compelling. The premises seem to make the conclusion very reasonable to believe. But what of the premises? Are there good reasons to accept them? Let's look at the premises one at a time.

Objection 1: Unforced wagering In the first premise, Pascal claims that we are all forced to make a choice about God's existence, that we are all compelled to place our bets. However, it is hard to see why this is true. For one, there may be people who have no idea of God, or only vaguely have some notion of who or what he might be. Suppose you walk into a Vegas casino and someone invites you play a game of Pai Gow, a Chinese dominoes game that you've never heard of before. Are you compelled to play? Presumably not. Or even in the case of existence claims, it is very peculiar to insist that everyone has to decide whether the **Higgs boson particle** exists, 50 or whether there are still **ivory-billed woodpeckers**. To be sure, physicists are very keen on finding Higgs bosons, and ornithologists are interested in



rare woodpeckers. But unless those are your interests, why should you care? Pascal might claim that lack of belief in God will send you to Hell just as quickly as disbelief in God does (assuming God exists). Of course, Pascal will have to give an argument for that claim; perhaps God has no stake in those who refuse to bet. Premise (1) may not be that essential to his argument, though. Pascal could easily reply that *if* you want to have a view about God, then, given the rest of his argument, you should bet that he exists. Let's look at some of the other premises.

Objection 2: The odds of God Pascal rightly observes that either God exists or he does not. Yet that fact does not mean that the odds of his existence are 50–50. Not every yes/no question is 50–50; in fact, very few are. Consider: suppose you were to fight martial arts expert **Jet Li.**⁵² Either you would win or you would lose, right? Therefore your odds of winning are 50 percent! Probably not . . . Imagine that your high school junior varsity football team were going to play the Dallas Cowboys. Do you think the Vegas bookies are going to say that Cowboys are just as likely to lose, as they are to win? Obviously not. So why should we think that the chance God exists is 50 percent?

Pascal might rejoin that in the case of God that we have no credible evidence of his existence, and no decent evidence of his nonexistence. In modern probability theory there is something called the principle of indifference, which states that if you know nothing more than there are N mutually exclusive outcomes, then the chance of each outcome is 1/N. For example, suppose that you are rolling a six-sided die. You know nothing more about the dice rolling—for example, you don't know whether the die is unequally weighted, what its spin is, or anything else that would favor one outcome over another. In this case, as far as you are concerned, each face of the die is just as likely as any other to come up. There is a 1/6 chance of the dice roll coming up 1, a 1/6 chance it comes up 2, a 1/6 chance it comes up 3, and so on. If we have no evidence about God, and there are only two possible outcomes (he exists/he doesn't exist), then by the principle of indifference the chance of each outcome is ½.

For Pascal to rely on the principle of indifference as just sketched, he would have make out the case that we have no evidence about God's existence at all. Few people are likely to accept that. Believers in the proofs of God we have discussed so far will think that they make the chance of God's existence greater than 50 percent, and atheists convinced by the arguments against God (to be discussed later in this chapter) may think that the chance

of God existing is zero. But perhaps fixing the odds of God's existence isn't that vital to Pascal's argument. If the rest of the argument goes through, the odds may not matter.

Objection 3: Assumes loads of Christian theology without argument One of the most serious defects in Pascal's wager is that premises (3) and (4) assume all kinds of controversial and unsupported Christian theology. Remember, Pascal is hoping to persuade unbelievers—people who aren't already convinced that everything in the Bible is true. Like Anselm, Aquinas, and Paley, he thinks that reason alone will show the virtue of believing in God. What, then, is the reason for accepting the claim in premise (3) that if God exists and you believe, then you win big by believing? If someone asks you to bet your life savings on something, and promises you a possible payout of a billion dollars, at the very least you are going to tell them to show you the money. Has Pascal shown you the money? No. All he has done is *claim* that there is this wonderful payout for believing in God. He hasn't given any evidence of such a prize. Nor has he shown that God cares a whit if you believe he exists. Premises (3) and (4) are true only if these presuppositions are true:



- God cares whether you believe he exists.
- God cares so much that he will reward you for belief and punish you for nonbelief.
- God will judge you.
- There is an afterlife.
- There is a good afterlife and a bad one.
- The good afterlife is colossally, perhaps infinitely, preferable to the bad afterlife.

Now imagine that Pascal is trying to persuade you to believe in God with his wager argument. That is, suppose you don't already believe in God, and you're not already religious in any way. Then all those bulleted points look rather ridiculous, just myths about living after death and some kind of judgmental superbeing. Without reasons to believe all those things, reasons that Pascal fails to provide, premises (3) and (4) are unacceptable. It's worth noting that Pascal can't offer up the Bible to support his presuppositions—that's to give up the game entirely. He might as well just tell people to believe that God exists because the Bible says so and not bother with the wager argument.

3.84 Objection 4: The value of your life Premises (5) and (6) assume that there is no God, and then follow out the consequences of belief and disbelief in God. According to Pascal, if there is no God, then it doesn't matter what you believe—you gain nothing by being right and lose nothing by being wrong. What makes this hard to believe is that genuine belief affects your actions; belief isn't just some harmless, abstract add-on to your life. For example, suppose that the way you really want to live your life is to pursue mindless hedonism. If it were entirely up to you, you'd pass your days smoking dope, having casual sex, and playing video games. But instead you've decided to believe in God. You take this belief seriously, and have come to the conclusion that God doesn't approve of hedonism. Instead you become a monk, wear a coarse woolen cloak, and spend your days in ascetic devotion.⁵⁴ If there is no God, isn't there a clear sense in which you wasted your entire life? You spent it denying and rejecting what you truly wanted to do, so you could devote yourself to the nonexistent. Maybe you'll never find out that you were wrong. Yet objectively you squandered everything you had—your whole life—for nothing. Nevertheless, Pascal thinks that you didn't lose anything at all by making a losing bet on God.

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Premise (6) states that if there is no God, then you gain nothing by not believing. Again, it is hard to see the force of this claim. At a minimum you gain the truth, something that most think has intrinsic value (see Chapter 7 on knowledge). Even more, there is a sense in which you gain control over your own life; you gain the liberty to decide how you want to live, without being in thrall to some nonexistent God. By possessing the truth that there is no God, you can shake off the chains of religious superstition and live free. That seems like a great deal more to gain than the "nothing" Pascal thinks the nonbeliever stands to win.

Objection 5: An alternate ending Imagine the following scenario. Suppose that, sometime in the future, you die. Well, so far this story will definitely happen. Now imagine that after your death you find yourself dressed in a flowing white robe and standing in a very long line behind similarly dressed people. You seem to be standing on a cloud. Your spirits brighten immediately. Up ahead you can see towering pearly gates, and the line of people is going through it. You pass through the gates and now ahead you can see that there is an enormous golden throne ahead, with a white-bearded, berobed giant sitting on it. Light seems to be radiating from the giant, and people in the line are pausing to speak with him before moving on.

You are exultant! It is obviously God on his throne, passing judgment, 3.87 and you can't wait to get to the front of the line. Eventually you do, and finally you are standing before God.

"Lord," you begin, "I just want you to know that I've always believed in you, so I'm ready to head on into Heaven."

"Ah, well," rumbles God, "why have you believed in me?"

"Pascal's wager, my Lord. I read his argument as a youth and knew right away that believing in you was the best bet. And now I'm here to cash in my chips and get the payoff."

"So let me get this straight. You believed in me out of *greed*? That's the reason?"

"Yep, greed. Now, where's my wings?"

Let's just pause here for a moment. You might be a bit doubtful that God 3.88 thinks **greed is good**,⁵⁵ and can't wait to reward it, or that clever gambling is the right way into his good graces. Yet that's the very essence of Pascal's wager. Let's modify the exchange a little and spin the tale in a different direction.



"Ah, well," rumbles God, "why have you believed in me?"

"Faith, my Lord. Always believed in you on faith."

"So what you mean is that you didn't have a good argument or credible evidence of my existence, but you believed in me anyway?"

"Of course! Blessed are those who have not seen and yet believe."

God chuckles. "Let me fill you in on a little secret. The greatest gift I gave 3.89 human beings was the gift of reason, which you have obviously failed to use. I made sure that there was no good evidence of my existence when I set up the universe. If you had used your reason, you would have come to the conclusion that I do not exist. Now I'm rewarding only those who used my greatest gift, and not those who squandered it. It is only the atheists who get into Heaven. Everyone else is sentenced to Hell."

How do you know that this isn't how things will go? Pascal certainly gives 3.90 no reasons to think otherwise. Maybe you don't believe it because it's not what the Bible says. Appealing to the Bible isn't available to Pascal, however, since he is attempting to give a rational argument for belief to people who don't already accept the Bible. If you believe the Bible on faith, well, you'd better hope you never hear God's little speech above!

Objection 6: The problem of other gods Pascal is trying to motivate belief 3.91 in the Christian God. However, there is nothing in his argument that singles out any particular god as the one deserving of your bet. His wager will work

just as well with any god anyone has ever believed in. You must make a decision as to whether Odin exists. The odds for Odin's existence are 50–50. If Odin exists and you believe he does, then you will be rewarded with eternal combat and endless mead in the golden halls of Valhalla. Just plug in any god. You must make a decision about Allah, the odds of whose existence are 50–50. If Allah exists and you believe that he does, then you will be rewarded with 72 virgins in paradise. And so on. If Pascal's wager works for the Christian God, then it works for any deity. In short, if it works it proves way too much—can you really believe in the thousands of gods that have been worshiped throughout the **ages**? What paradise will you expect? Which punishments will you fear? And if you decide to just believe in one God on the basis of the wager, what if you choose the wrong one? You'd hate to pick the Christian God and then find a disappointed Krishna judging you in the afterlife.

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3.92 Objection 7: The involuntarism of belief and self-deception The final objection to Pascal's wager has to do with the involuntary nature of belief. The wager argument recommends that you up and start believing in God because it is your best interest to do so. But can you really do that so easily? Suppose that your philosophy professor walked into the room pulling a large suitcase. She plops it on the desk and tells you that there's \$2 million inside the suitcase, and it's all yours if you start believing that she is Wonder Woman, and that she has bracelets that can stop bullets and a magic golden lasso. Unlike Pascal, your professor shows you the money. She pops the top on the suitcase and shows you that it's packed with bundles of \$100 bills. Do you think you could do it? You could believe that she's Wonder Woman? Not whether you can act as if she's Wonder Woman, or pretend to believe it for the money. The question is whether you can really start believing something so silly just because it is manifestly in your self-interest to do so. It's not easy to accomplish.

The point is that wagering God exists is not the same as believing that he exists. Even if the wager convinces you, you may be psychologically unable to up and believe in God. To his credit, Pascal is quite aware of the fact that our beliefs are in some way involuntary and that we do not have complete command over what we believe. Pascal offers an astonishing solution to the problem: he says that you should just hang around with the Christians, go to mass, take the sacraments, and eventually you'll come around. No one starts off believing in God, Pascal says, they just go to church and act like they do, and then one day find that they really do

believe. You should just fake it until you make it. Is that a logical, rational solution to the problem of the involuntariness of belief, or a sort of self-deception and brainwashing? You decide.

So far in this chapter we have been examining arguments that try to show that God exists (the argument from scripture, the ontological argument, the cosmological argument, the design argument) or that it is rational to believe that God exists (Pascal's wager). The remainder of the chapter will review arguments that God does not exist. It is worth noting that nothing said so far offers a reason to deny that God exists. Even if you think that the pro-God arguments all fall to the objections we've considered, that will not be enough to reject the existence of God. At most it will motivate agnosticism.

- Theism: judging that there is a God
- Agnosticism: withholding judgment about the existence of God
- Atheism: judging that there is no God

An agnostic may not have enough information about the existence of God to have an informed judgment and so refuse to believe there is a God and also refuse to believe that there isn't one. Analogously, someone who doesn't follow baseball may refuse to have an opinion on whether the Phillies will win the World Series this year. Or an agnostic may think that the matter of God's existence is unprovable either way and so refuse to have an opinion about whether God exists. Analogously, you may decline to believe that the number of stars in the universe is odd and also reject the claim that the number is even, on the grounds that it is impossible to prove one way or another. Atheists go further—they actively deny that there is a God. Let's proceed to examine the reasons to accept atheism.

Why There Is No God

Atheists are widely disliked and distrusted. There is essentially no chance 3.95 that an atheist could be elected to the presidency of the United States, no matter what their qualifications. Irrespective of their ethnicity or gender, Americans would prefer to vote for Jews, African Americans, women, senior citizens, and even homosexuals before they would vote for an **atheist**. Atheists are more frightening than Muslims for most Americans. They would rather that their children marry not only Muslims, but also Jews,







African Americans, Hispanics, and every other group studied before they marry an **atheist**. ⁵⁸ Recent research even indicates that atheists are distrusted as much as **rapists**. ⁵⁹ On the totem pole of marginalized groups, atheists are at the very bottom. Against these powerful social forces it is striking that nearly three quarters of professional philosophers are **atheists**, ⁶⁰ and 93 percent of the members of the ultra exclusive National Academy of Sciences are either atheists or **agnostics**. ⁶¹ So what puts them at odds with popular belief? What arguments are there for concluding that God does not exist?

Proving a negative

3.96 There is a surprisingly widespread belief that it is impossible to prove that something does not exist, often phrased as "you can't prove a negative." The idea is that you may be able to prove that something does exist, but cannot prove that it does not. If that's right, then it is impossible to prove that God does not exist, and the atheist is stopped in his tracks. Even **Richard Dawkins**⁶²—a famous atheist—apparently concedes, writing that "you cannot prove God's non-existence is accepted and trivial, if only in the sense that we can never absolutely prove the non-existence of anything" (Dawkins, 2006, p. 54). According to Dawkins and many others, it is impossible to prove that God, Santa Claus, unicorns, the **Loch Ness Monster**, ⁶³ aliens in Roswell, pink elephants, ghosts, and Bigfoot don't exist.



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Logicians universally reject the notion that you can't prove a negative. There are many ways to demonstrate that a negative claim is true. Here are a few examples. Can you prove that your wallet contains no money? Sure; just open it and look. Now you've proven that something does not exist (namely, money in your wallet). Too easy. How about a more general claim? Can we prove that there are no gases that fail to decrease in volume when they increase in pressure without changing the temperature? Again, the answer is yes. **Boyle's Law** states that the pressure and volume of a gas are inversely proportional (when one goes down, the other goes up). All gases in a closed system at a fixed temperature decrease in volume when the pressure goes up = there are no gases that fail to decrease in volume when they increase in pressure without changing the temperature. This is a basic law of nature that holds everywhere in the universe, and can be formulated as a negative claim about what does not exist.

Another way of putting the point is that all the evidence we have for the positive claim that gases in a closed system at a fixed temperature decrease

in volume when the pressure goes up also counts as evidence in favor of the negative claim that there are no gases that fail to decrease in volume when they increase in pressure without changing the temperature. There could not possibly be a gas that expands when its pressure increases (without changing the temperature). That is a negative existence claim we know to be true because it is not physically possible for it to be true.

Other things can be shown not to exist because their existence is logically 3.99 impossible. Here's an example. Suppose there is a village barber who shaves customers who don't shave themselves. He lathers their faces and gives them a nice hot shave. If someone shaves at home, then they don't need to go to the barber, so the barber shaves only those who don't shave themselves. Does he also shave everyone who doesn't shave himself? The answer is no. Think about the barber—does he shave himself? If he does, then he doesn't need to go to the barber for a shave. Therefore he is not shaved by the barber, and must be unshaved since he himself is the barber. But if he doesn't shave himself, then the barber has to do it for him, in which case he does shave himself! Therefore it is logically impossible that a barber exists who shaves all and only those who do not shave themselves.

The upshot is that we can have evidence that a thing does not exist in 3.100 the same way that we can have evidence that something does exist. We could be mistaken in our conclusions about what the world contains, of course, but all we can do is reason our way to what there is and what there is not. Evidence against God's existence can be provided—in principle no less than evidence in favor of God's existence.

The argument from religious pluralism

One sort of argument that motivates skepticism about God is the observation that there have been thousands of gods believed in by human societies all over the world. If you believe in a Judeo-Christian style God, that's no more than an accident of your birth. If you had been born in Indochina, you'd be Buddhist. If you were born in Saudi Arabia, you'd be Muslim, bow to Mecca and praise Allah. If you had been born in Israel, then you would be Jewish, read the Torah in Hebrew, and worship הוה.65 If in India, then you would most likely be Hindu, if you had been born in the sixteenthcentury Aztec Empire, you would worship Huitzilopochtli (among the other 100 Aztec gods), and so on. Yet you think all of those other gods are just mythological. Jupiter and Hera are part of Roman mythology, right? They aren't out there in reality. Baal, Zeus, Horus, Loki, Bacchus, and Isis



are all phony, false gods. In other words, you are *already* 99 percent an atheist—you think that nearly all of the gods ever believed in are myths, superstitions, and nonexistent. So just go one step further and realize that *all* gods are just fantasies that people in different societies are raised to believe in. Let's formulate the argument as follows.

If you had been born and raised in a different culture, then you would have different religious beliefs from what you presently have. If you had been born in ancient Rome you would be completely convinced that Sol Invictus, Minerva, and the other state gods are absolutely real and that upstart Jesus cult is ridiculous heresy. You have no more reason to accept your god than those others; ancient Romans relied on faith, or their sacred scriptures, or the priests and church authority, or the cosmological argument, no less than you. It is inconsistent to believe that all these thousands of gods are fake and your god alone is real, when the evidence for any of these gods is the same. Since you have no reason to believe that any particular god is real (and the others aren't), the best way to make your beliefs consistent is to reject them all as myths.

3.103 Objection This time it is the theist who can respond with a scientific analogy. If you had been born in thirteenth-century China, you would have believed that Earth is flat. If you had been a Greek citizen during the time of Hippocrates, you would have believed that diseases were the result of an imbalance among the four bodily humors of blood, black bile, yellow bile, and phlegm. There is no end of now-discredited scientific theories that you would have believed if you had been born in a different culture or at a different time—Newton's mechanics, a luminiferous ether, the phlogiston theory of combustion, the caloric theory of heat, the geocentric model of the universe, etcetera. 66 All of those theories were once the best that science had to offer, and all have since been pitched into the dustbin of history.

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Yet if we were to apply the same reasoning here as in the religious pluralism case, then it is inconsistent to believe that current science is right and all those other scientific views are wrong. We have the same reasons to accept what scientists tell us now that our ancestors had to believe the scientists of their time. Therefore we need to reject all scientific claims as myths. Obviously that is a big mistake; we *should* believe that contemporary science has hold of the truth and that those old discredited theories really are false. So something went wrong somewhere with the argument from religious pluralism, and it does not provide a good reason to be an atheist. There's no inconsistency involved in accepting one god and rejecting the

others, any more than there is a problem with accepting one scientific theory and rejecting its predecessors.

Response The problem with the theist's objection is that there is a crucial 3.105 disanalogy between the plurality of scientific theories and the variety of religious belief. The disanalogy is this: there is publicly available, widely accepted evidence that a replacement scientific theory really is superior to its predecessor. When physicists chucked out the idea that the universe was suffused with a luminiferous ether through which light moved in favor of Einstein's Theory of Relativity, they had convincing reasons to prefer relativity. When physicians accepted germ theory and gave up on the notion that sickness was the result of miasma, ⁶⁷ or "bad air," they had powerful evidence in favor of germs. So what compelling evidence is there that your preferred god is the only real one and all those other gods are just mistakes?



At this point the theist will have to go back to the pro-God arguments 3.106 that were discussed earlier in this chapter and try to fix them up in response to the objections that were raised then. The atheist can only say: good luck with all that. In science there is a real sense of advancement, as flawed or incomplete theories are discarded and better theories of the world take their place. If we all still thought Newton's understanding of the laws of nature was as good as Einstein's, much of the modern world would be impossible (cell phone technology relies on understanding general relativity, 68 for example). In the case of religion there is no evidence-driven progress, just a great buffet of thousands of incompatible gods and theologies. You may put one on your plate and head to the cashier, but so long as your selection was based on faith, then it really is just arbitrary.



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Let's move on to examine another argument for atheism.

The problem of evil

The most famous argument against the existence of God attempts to show 3.108 that the nature of God is incompatible with how the world actually is, and so it is impossible for there to be a God. To get things started, let's review some facts about the world we live in. First off, your life is sweet. Merely by reading this book you are more educated than the vast majority of people who have ever lived. You will probably live longer than the vast majority of people in the world. You are also richer than nearly everyone who has ever lived. You'll probably balk at that, since we're all accustomed





to wealth-porn TV and therefore lament that we don't live in a megamansion like those rap stars. But you are rich—about two billion people live on less than \$1.25 per day.⁶⁹ It is extremely likely that you are a citizen of a wealthy first-world nation and enjoy a stable government, reliable prices, public education, and at least some social safety net. In comparison with most of your fellow human beings, your life is gravy. Now reflect on the amount of suffering that you personally have experienced. Have you been close to someone who died, or had cancer or Alzheimer's? Have you been affected by mental illness? Broken bones? Been terribly sick? Addicted? Suffered anguish, loss, fear, loneliness, grief, shame, terror, or regret? Been burned, cut, or bruised? Ever had a hangover?⁷⁰ Your life is about as easy as it gets, and even you have endured physical and emotional pain.



It is extremely difficult to appreciate the vast extent of the suffering and misery the world contains. An untold number of people are tortured, even to death, every year.⁷¹ Tens of millions have **died** in wars, genocides, and massacres, 72 hundreds of millions have died in plagues and pandemics, 73 and millions more have died in floods, earthquakes, tsunamis, famines, volcanoes, tornadoes, and hurricanes.⁷⁴ This brief review doesn't even touch on the rivers of blood spilled by nonhuman animals every year, 54 billion of whom we annually kill for food. To make a very long and gruesome story short, people's lives are marked by pain, from headaches to AIDS, and the world is soaked in gore and torment.

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What's all this have to do with God? The problem of evil is that the manifest existence of all the world's suffering shows that there cannot be an omnibenevolent, omniscient, and omnipotent God. If there's suffering (and there is!) then there cannot be a God. Here's the argument.

- Suppose that there is a God who is omnibenevolent, omniscient, and 1. omnipotent.
- The world is filled with suffering and misery.
- Since God is omniscient, he knows about human and animal suffering and misery.
- Since God is omnipotent, he could effortlessly prevent such suffering if he wanted to.
- Anyone who knows about suffering and could effortlessly prevent it, but doesn't do so, is not perfectly good.
- Therefore God is not perfectly good.
- This contradicts (1)—therefore there is no God.

Premise (1) is no more than the assumption that God exists, which the argument makes in order to derive a contradiction, in classic *reductio ad absurdum* form. A theist would be hard pressed to deny premises (3) and (4), as they are really just elaborations on what it is to know everything and be all powerful. Premise (5) is more of a lynchpin in the argument, and it is worth a brief pause to defend it.

In April 2010, Queens resident **Hugo Alfredo** Tale-Yax attempted to help a woman who was being attacked. In return he was stabbed to death by her assailant. While he bled to death on the sidewalk, two dozen people walked by and did nothing to help him. Even though video surveillance footage showed that one person snapped a cell phone picture of the dying man, and another shook him, no one could be bothered to call 911 or render first aid. Would you say that those bystanders are *perfectly* good? The absolute paragon of virtue and righteousness? No way. They're not even willing to push three numbers on their phones to save a man's life. Yet God's even worse than they are—he doesn't even have to dial 911. God's all powerful; it isn't heavy lifting for him to end suffering, indeed it literally is no effort at all. Yet, like pedestrians in Queens, he can't be bothered. That doesn't sound like the actions of a morally perfect, worshipful hero. Unless you think those passersby deserve a medal for ignoring Hugo Tale-Yax, the obvious inference is that God is not perfectly good either.

Objection 1: Just give up an attribute One response to the problem of 3.112 evil is to just give up one of God's attributes. For example, suppose that God is all knowing and perfectly good, so that he knows about all the suffering in the world, and he wants to do something about it, but he just doesn't have enough power to stop it. God's kind of a wimp. Or we could give up omniscience. God is both perfectly good and all powerful, and he would eliminate suffering if he only knew about it. But he's kind of a dope and just doesn't have a clue. Or we abandon the attribute of omnibenevolence: God's all powerful and all knowing, but he's a malicious bastard, or a bloodthirsty tyrant. He knows about the world's suffering, all right, but like a Roman emperor at the Colosseum, he enjoys the screaming and the blood. One wag has suggested that given the way the world is, the best inference is that God is 100 percent malicious but only 80 percent effective.

It is certainly true that God can keep any two out of the three traditional 3.113 attributes and escape the problem of evil. The problem with this approach is that it is really just a way of conceding to the atheist. The atheist is





arguing that there is no God, where God is understood as a being that is omnipotent, omniscient, and omnibenevolent. Giving up one of the attributes is admitting defeat—it's conceding that there is no God with all three of the classical attributes. The atheist will say "Mission accomplished!" and have a cup of tea. You may want to argue that your conception of God is of a being that has only two of the three traditional attributes, and you believe *that* God is real. Unfortunately, such a reply is really to throw in the towel. The atheist will simply scratch one god off the list and move on to the next.

Objection 2: It's all part of God's greater plan The fundamental idea behind the God's greater plan objection is that our suffering is all part of God's grand plan for our happiness and flourishing. God's wisdom is beyond the wisdom of the world; his designs are subtle and mysterious. There is no denying that we suffer in this world and do not know why, but that does not mean that there is no God; it only shows that we fail to fathom the reason that we need to suffer. Perhaps our suffering in this world is a test, a way to prove our faith in God and demonstrate our worthiness for the afterlife. Or maybe without enduring pain in this life we will never be able to appreciate or comprehend the glories of the next. Whatever God's plan may be, we can rest assured that he has one, and that our earthly, temporal sufferings are but a drop in the bucket of eternity.

The "God's greater plan" proposal is often taken to refute what is called the logical problem of evil, namely the idea that the existence of suffering shows that it is logically impossible for there to be a God. God *might* have some good reasons as to why suffering is necessary, and instrumental to our greater happiness. Since he might, it is not downright impossible for God and evil to coexist. Of course, the possibility of God's existence isn't nearly as desirable as his actual existence. Will the "God's greater plan" idea show that it is really is reasonable to continue to believe in God, given the vast suffering in the world?

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One response to the greater plan idea, as skillfully presented by **David Hume**,⁷⁷ is to object that it is nothing but pure, unprovable conjecture to suppose that there really is such a plan. At best it is a *possible* way out, not a genuine way out. Suffering is evident and manifest, and the plan is nothing but unfounded speculation. Even if the problem of evil is not conclusive, doesn't it show a superb reason to deny that there is a God? The idea of a greater plan is a *possible* solution, but not an *actual* one until we have reason to believe (1) that there really is such a "greater plan," (2) this

plan could not be accomplished without suffering, or at least, (3) this plan could not be accomplished without as much suffering as there actually is.

Compare: suppose that your philosophy professor walked out into class 3.117 and just started slapping you.⁷⁸ Would you turn the other cheek, or would you at least say, "Whoa, what's up with the face-slapping?" Imagine he tells you, "it's all part of my greater plan for your education." What would your response be then? "Oh, well, in that case, slap away!" Or would you say, "Hold on, at least tell me what the plan is." Probably you'll want some serious details on the plan before you submit to another round of beatings. Would you be satisfied with "Oh, don't worry, I have your best interests at heart and know what I'm doing."? Rather doubtful. But this is exactly what the theist is telling you to do: let God slap you around and just trust that he's doing it because he really loves you. Why do you think that he has some glorious plan? It can't be because you assume that God is perfectly good that's the very attribute that is under criticism here. The "greater plan" idea sounds more like an excuse for domestic violence. You deserve God's beatings, which he's only doing because he truly loves you. Just trust in his love! We could imagine that God has some unknown and mysterious plan, but, as Hume writes, these are "arbitrary suppositions" built "entirely in the air; and the utmost we ever attain by these conjectures and fictions is to show that [God's having a greater plan that explains away evil] is *possible*; we can never in this way establish that it is *true*" (**Hume**, 1779, pt 10).⁷⁹

Whatever the greater plan is supposed to be, it is rather hard to imagine 3.118 that it must include the murder and torture of innocents, babies, and those who have never heard of God. Such a plan is seriously the best one that an all-knowing God could think up? It's reminiscent of the **Vietnam War-era idea** of destroying a village in order to save it. 80 An often-floated hypothesis is that the sufferings of the world are a test for the faithful to demonstrate their worthiness. Apart from the complete lack of evidence for this conjecture, it is extremely puzzling as to why an all-knowing God would need to administer any sort of a test. He would already know in advance who will pass and who will fail; he could peer directly into a person's mind (or metaphorical heart) without any need for some pointless test. It is irrational for God to test on the face of it.

In fact, rejoins the atheist, if God really does have some sort of greater 3.119 plan, then why isn't he really a sort of terrorist? God intentionally created everything, including diseases, floods, famines, earthquakes, tornadoes, hurricanes. It's not just the wicked who suffer from these things; **God** sends the rain on the just and the unjust alike.⁸¹ Suppose God does have a plan









for all this indiscriminate killing—it's to teach us a lesson, to punish us, revenge, get us to change our ways, test our faith, or something like that. How is that any different from what Osama bin Laden did? Osama, too, was out to teach the West a lesson, punish us for our various sins, get us to change our ways, and so on. In fact, God is a much, much worse terrorist than Osama—God's death toll is in the billions. Whether God really loves you is frankly irrelevant to the conclusion that he is a terrorist. Perhaps you sympathize with Osama's view that Western nations are filled with materialistic infidels, just as one may agree with God that we are all wicked sinners. They are terrorists either way. The atheist concludes that not only do we have no reason at all to suppose that there really is some greater plan that justifies our massive suffering, but even if there is one, all that really shows is that God is a terrorist.

3.120 Objection 3: Free will The most famous and popular response to the problem of evil is known as the free will defense, which goes like this. The atheist rightly observes all the suffering, pain, and misery in the world, but then makes the mistake of blaming God for it. Suffering is not God's fault, it is our fault. We are the ones who have freely chosen to disobey God and ignore his rules and commandments. When we sin, yes, it leads to suffering; that should be no surprise. Yet God is not to blame for the stupid and wicked deeds that we perform, any more than a father who has done his best to instruct his children is at fault when those children go astray. To be sure, there is suffering in the world, but God is not on the hook for it—we are. God made us free to choose how to live our lives, but the consequence of his gift is that he allowed us to create a world with substantial evil in it.

Response 1: Moral vs. natural evil

3.121 There are two kinds of evils in the world, moral evil and natural evil.

- Moral evils: murder, war, rape, torture, theft, deception, assault, etc.
- Natural evils: diseases, floods, famines, earthquakes, tornadoes, hurricanes, volcanoes, etc.

Even if the free will defense absolves God of the suffering caused by moral evil, that doesn't touch the suffering caused by natural evil. Far more people have been killed by cancer, smallpox, and bubonic plague than by war. Humans do terrible things to each other, granted. But they cannot compare to the suffering imposed by famines and floods. Those things are all on God—an omnipotent, omniscient being could surely have designed the world so that it didn't have the flu (which killed over 40 million people in

just two years: 1918-1919).82 The physician Sir William Osler wrote, "Humanity has but three great enemies: fever, famine, and war; of these by far the greatest, by far the most terrible, is fever." Osler died of pneumonia in 1919.



It would take extremely tortuous reasoning to try to blame natural evils 3.122 on human beings; a clear case of blaming the victim. God's the one dishing out cancer, he's the one we should blame. Wars and murder may be our fault, but smallpox and earthquakes are God's fault.

Response 2: What's the value of free will?

At the heart of the free will defense is the idea that having free will is incred-3.123 ibly valuable; indeed it is so valuable that possessing it is worth all the suffering in the world. But what makes it so wonderful? That notion needs some defense. Since the reason we suffer is supposedly our free will, God might have made the world so that no one had any free will but we were all perpetually happy. What makes free will + massive suffering better than having no free will + universal happiness? It sounds rather implausible. Even now we limit people's behavior (through laws) precisely to prevent them from freely performing evil. So we do think it is better to limit people's freedom than to allow them to do whatever they want. Why not take that reasoning to the logical limit: God, in his infinite knowledge and compassion, should create a world in which no one is able to perform evil acts and all live in bliss and harmony. Or he might have made the world so that everyone *could* perform evil acts if they wanted to, but no one ever had the desire to do so. There's a name for such a world: Heaven. Sounds better than this place, right? Wouldn't you rather be there? Maybe having free will is not all it's cracked up to be.

Response 3: The irresponsible owner

Imagine a dog owner who trains his pit bull to be a ferocious killing 3.124 machine. The dog has a bad attitude, strong teeth, and jaw muscles that can tear the tires off a Honda. Imagine the dog owner takes Cujo⁸³ down to the town park and lets him off the leash. After the dog savagely mauls some innocent by standers at the park, the owner is arrested. His defense to the judge is this: "Your honor, I didn't tell Cujo to attack anyone. The dog has his own free will and freely chose to chomp those people. I yelled at him and told him to stop, but Cujo's not such a good listener. It's not my fault and I can't be held accountable for what Cujo does."

Do you figure that the dog owner is complete absolved of responsibility? 3.125 The owner knowingly trained Cujo to be a killer and intentionally set him



loose in the park. Surely the owner had a good idea of what the likely consequences were going to be, and at the very least is criminally negligent, regardless of Cujo's free will. God is in exactly the same situation as the dog owner. Presumably God intentionally created people with their own drives and motivations, each with their own character and nature. Some people are pacifists, some are violent—we're not all stamped from the same cookie cutter. Yet God knew perfectly well which people were the wolves and which the sheep and went ahead and set the wolves loose. God may have yelled at the wolves and told them to stop, but they're not such good listeners. Just like the dog owner, God is still at fault for moral evil, free will notwithstanding.

Response 4: Why doesn't God intervene?

3.126 Here's one last criticism of the free will defense. One kind of morally good action is to prevent suffering, or to intervene in the wicked actions of others. In January, 2007, Wesley Autrey was waiting for a subway train in New York City. A nearby man, Cameron Hollopeter, suffered a seizure, which caused him to stumble off the subway platform and into the path of an incoming train. Without hesitation, Mr Autrey leapt onto the tracks and pulled Hollopeter into a foot-deep drainage trench between the tracks, covering Hollopeter's body with his own. The train roared overhead, passing inches from their heads, but both men survived with only minor scrapes. There can be little doubt about **Autrey**'s heroic and admirable behavior; few people would have risked their own lives so spectacularly to save the life of a stranger.⁸⁴ Afterwards, Autrey was awarded the **Bronze Medallion**, New York City's highest award for exceptional citizenship and outstanding achievement.⁸⁵

Or consider the anonymous bystanders who foiled a robbery in New Hampshire. In October, 2010, Sean Cullen entered a Manchester, NH convenience store, handed the clerk a threatening note, and told her, "Give me your money, or you're going to die." One store patron saw what was happening and tackled Cullen, while another bashed him over the head with a large squash. Surely these bystanders were the proverbial Good Samaritans, helping others in time of need. Sean Cullen was acting out of his own free will, but nevertheless the morally right thing to do was to stop him from **causing harm.** ⁸⁶

If Wesley Autrey had stood by and let Cameron Hollopeter be killed, or had the New Hampshire bystanders done nothing and let Sean Cullen rob the store, they would have been less morally praiseworthy. The morally best

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thing to do in both cases was to intervene and prevent harm, even when it meant interfering with someone's free action. Having free will does not mean getting a free pass. Thus if God does not intervene when he can stop the bullet, cure Grandma's cancer, prevent the Holocaust—he is morally inferior to mere mortals wielding squash. God can't hide behind an excuse of free will, pretending that justifies his hands-off policy.

It is true that if God steps up Superman-style and flies to the rescue every 3,129 time then that will prevent human beings from developing or exercising such virtues as self-sacrifice, helping, and bravery. A theist might argue that allowing moral evil is justified because the world is better off if we have genocide and war, but we also have courage and selflessness. In essence, God allows suffering because it builds character. Still, replies the atheist, it is difficult to see that such a view will be convincing to the parents of the children murdered in Rwanda, who would much prefer their children to live than enjoy whatever character-building they supposedly received because their children were slaughtered.

Finally, you may wish to consider how convincing the free will defense 3.130 really is after you read the chapter in this book on free will. There are reasons to believe that we don't even have free will in the sense of being able to make undetermined choices. If you are skeptical about the existence of free will at all, it won't serve as a legitimate way to escape the problem of evil.

Conclusion

While the pros and cons of the most prominent arguments concerning the 3.131 existence of God have been discussed in the present chapter, there are still many theistic and atheistic arguments out there. Unexamined are pro-God arguments based upon reports of miracles or on personal religious experience. One of the most sophisticated contemporary theistic strategies is to treat divine revelations as basic sources of knowledge, akin to perception. That too is beyond the reach of the present chapter. Likewise unaddressed are anti-God arguments based on Ockham's razor,87 which argue that positing a God has no explanatory value and should be avoided. Beyond the issue of God's existence are defenses of religion that find value in rituals and community building, even while not believing in a God. Buddhism and Unitarianism are examples of such religions. Whether God exists is a vital issue to decide in order to have a comprehensive view of the



contents of reality. All major philosophers have staked out a position on this topic, and now that you have an introduction to their arguments, it is up to you to decide which ones you find the most compelling.

Annotated Bibliography

- Anselm of Canterbury (1078) *Proslogion*, full text available at www.ccel.org/ccel/anselm/basic_works.iii.iii.html, accessed May 15, 2012. In Chapter 2 Anselm gives his ingenious ontological argument.
- Aquinas, Thomas (c. 1270) "The Five Ways," full text available at www.ccel.org/ccel/aquinas/summa.FP_Q2_A3.html, accessed May 15, 2012, in *Summa Theologica*. Aquinas is the preeminent Catholic theologian, known as The Angelic Doctor. *Summa Theologica* is Aquinas's masterwork, and in it he presents five arguments to prove God's existence, including versions of the cosmological argument and the design argument.
- Bostrom, Nick (2009) "Pascal's Mugging," *Analysis* 69:3, 443–445. A short and wickedly funny take-down of Pascal's wager.
- Dawkins, Richard (2006) *The God Delusion* (New York: Houghton Mifflin). A muscular defense of atheism written for a popular audience. The book is a bit uneven, but Dawkins is at his strongest when discussing the design argument, as his area of expertise is evolutionary explanations of complexity.
- Dawkins, Richard (2009) *The Greatest Show on Earth: The Evidence for Evolution* (New York: Free Press). Dawkins, a well-known evolutionary biologist at Oxford, reviews the empirical evidence for evolution by natural selection in a comprehensive but accessible volume.
- Dennett, Daniel C. (2007) *Breaking the Spell: Religion as a Natural Phenomenon* (New York: Penguin). Dennett investigates the nature and persistence of religious belief, drawing on anthropology, psychology, and evolutionary biology. He treats the study of religion with the same sort of skeptical approach typically brought to other areas of inquiry.
- Descartes, René (1641) *Meditations on First Philosophy*, full text available at www.earlymoderntexts.com/pdfbits/dm3.pdf, accessed May 15, 2012. In his Fifth Meditation, Descartes defends a version of the ontological argument. Descartes's presentation is heavily dependent on other aspects of his philosophy, such as clear and distinct perception and innate ideas, and is thus more theory laden than Anselm's original version.
- Gaunilo of Marmoutier (c. 1079) *In Behalf of the Fool*, full text available at www.ccel.org/ccel/anselm/basic_works.v.i.html, accessed May 15, 2012. Gaunilo, a contemporary of St Anselm, gives his "lost island" objection to the ontological argument.
- Hume, David (1779) *Dialogues Concerning Natural Religion*, full text available at www.gutenberg.org/ebooks/4583, accessed May 15, 2012. The preeminent

- work of natural theology in English. The arguments for God's existence are pursued and critiqued by characters in a dialogue format. Hume thought this book so radical that he forbade its publication during his lifetime.
- Kant, Immanuel (1787) *The Critique of Pure Reason*, full text available at www.earlymoderntexts.com/pdfbits/kc24.pdf, accessed May 15, 2012. Kant's criticism of the ontological argument begins at section 620, and his complaint that existence is not a property is at section 626.
- Kauffman, Stuart (1995) At Home in the Universe: The Search for the Laws of Self-Organization and Complexity (Oxford: Oxford University Press). A polymath and iconoclast, Kauffman here presents his theory of how order can spontaneously arise in complex systems. He argues that his ideas complement the evolutionary explanation of life.
- Leibniz, Gottfried (1710) "Making the Case for God in terms of his Justice which is Reconciled with the rest of his Perfections and with all his Actions," full text available at www.earlymoderntexts.com/pdf/leibmaki.pdf, accessed May 24, 2012. Starting at section 41, Leibniz attempts to solve the problem of evil by arguing that ours is the best of all possible worlds.
- Manson, Neil (forthcoming) *This Is Philosophy of Religion: An Introduction* (Oxford: Wiley-Blackwell). A comprehensive introduction to the philosophy of religion that discusses religious language, the nature of God, life after death, the role of faith, religious diversity, and delves more deeply into the arguments for and against God's existence. Manson also addresses some conundrums of the divine, such as the Paradox of the Stone.
- Mlodinow, Leonard (2008) *The Drunkard's Walk: How Randomness Rules Our Lives* (New York: Pantheon Books). A fascinating and readable discussion of randomness and probability, with applications to sports, gambling, stock markets, and more. There is a nice discussion of Pascal in Chapter 4.
- Paley, William (1802) *Natural Theology*, full text available at http://ocw.nd.edu/philosophy/introduction-to-philosophy-1/readings/paley-natural-theology-selections, accessed May 15, 2012. Paley's presentation of the design argument is one of the most influential and most carefully developed. Darwin specifically discusses Paley's reasoning in *The Origin of Species*.
- Pascal, Blaise (1660) "The Wager," full text available at www.ccel.org/ccel/pascal/pensees.iv.html, accessed May 15, 2012, in *Pensées*. Pascal gives his wager argument starting at section 233. It is a surprisingly short discussion, which has generated a tremendous literature.
- Plantinga, Alvin (2000) Warranted Christian Belief (Oxford: Oxford University Press). A sophisticated book meant for professionals, this book represents the state-of-the-art in Christian apologetics. Plantinga's hefty tome is devoted to defending the claim that if God exists, then Christian beliefs have warrant.
- Price, Huw (1996) Time's Arrow and Archimedes' Point: New Directions for the Physics of Time (Oxford: Oxford University Press). A technical book for

philosophers, included here because it is the source for Roger Penrose's calculation of the improbability of the conditions in the early universe (it is on p. 83).

Smoot, George and Keay Davidson (2007) *Wrinkles in Time* (New York: Harper-Perennial). A beautifully written account of the standard model in cosmology. Smoot tells a thrilling story of his work on the experimental evidence for the Cosmic Microwave Background, for which he won the Nobel Prize in physics. Accessible to the educated lay audience.

Voltaire (the pen name of François-Marie Arouet) (1759) *Candide*, full text available at www.gutenberg.org/ebooks/19942, accessed May 15, 2012. An hilarious satire on Leibniz's view that this is the best of all possible worlds.



Online Resources

- The Gallup Poll's claim that "83% say there is a God who answers prayers, while 9% believe there is a God who does not answer prayers": www.gallup.com/poll/127721/Few-Americans-Oppose-National-Day-Prayer.aspx
- The Gallup Poll's evidence that 79 percent of Americans believe that the Earth revolves around the Sun: www.gallup.com/poll/3742/New-Poll-Gauges-Americans-General-Knowledge-Levels.aspx
- The Gallup Poll's evidence that 4 percent of Americans believed that Elvis was still alive almost a quarter century after his death: www.gallup.com/poll/2638/August-23rd-Anniversary-Elvis-Death-Americans-Still-Conside.aspx
- 4 The history of the temple of Athena known as the Parthenon: www.ancient-greece.org/architecture/parthenon.html
- 5 Facts about the exquisite Blue Mosque in Istanbul, Turkey: www.sacred-destinations.com/turkey/istanbul-blue-mosque
- The history of Angkor Wat, the largest Hindu temple complex in the world: http://en.wikipedia.org/wiki/Angkor_Wat
- 7 Information on Michelangelo Buonarroti's 1499 sculpture of the Virgin Mary holding the body of her son Jesus Christ after his death: http://saintpetersbasilica.org/Altars/Pieta/Pieta.htm
- 8 A discussion of Michelangelo's famous painting on the ceiling and walls of the Sistine Chapel in the Vatican: www.sacred-destinations.com/italy/rome-sistine-chapel
- 9 An excerpt from Johann Sebastian Bach's *Mass in B Minor*: www.youtube.com/watch?v=tdLCcQixNvg
- The first part of John Coltrane's *A Love Supreme*: www.youtube.com/watch?v=558bTG0D-xg
- 11 George Harrison performs "My Sweet Lord": www.youtube.com/watch? v=wynYMJwEPH8

- 12 The iconic beginning of Strauss's *Also Sprach Zarathustra*: www.youtube.com/watch?v=lyJwbwWg8uc
- 13 A dicussion of Raphael's fresco *The School of Athens*, another treasure of the Vatican: http://en.wikipedia.org/wiki/The_School_of_Athens
- 14 The Metropolitan Museum of Art's entry on Jacques Louis-David's painting *The Death of Socrates*: www.metmuseum.org/Collections/search-the-collections/110000543
- 15 The definition and history of the view that faith and reason are in conflict with each other, a position traditionally attributed to Tertullian: http://plato.stanford.edu/entries/fideism/
- 16 A biography of Martin Luther, along with a discussion of his theological views: www.iep.utm.edu/luther/
- 17 Luther's 1540 treatise *Disputation on the Divinity and Humanity of Christ*: www.iclnet.org/pub/resources/text/wittenberg/luther-luther-divinity.txt
- 18 A brief discussion of natural theology: www.giffordlectures.org/theology.asp
- 19 An entertaining list of fool's errands and practical jokes: http://en.wikipedia.org/wiki/Snipe_hunt
- 20 A few of God's killings, as attested in the Bible: http://drunkwithblood.com/index.html
- 21 The sacred Hindu text *The Rig-Veda*: www.sacred-texts.com/hin/rigveda/index.htm
- 22 The sacred Hindu text *The Bhagavad Gita*: www.sacred-texts.com/hin/gita/agsgita.htm
- 23 The Buddhist holy scripture *Pali Canon*: www.palicanon.org/
- 24 The Islamic holy scripture *The Qur'an*: http://quran.com/
- 25 *The Book of Mormon*, sacred to members of The Church of Jesus Christ of Latter-Day Saints: www.lds.org/scriptures/bofm?lang=eng
- The most comprehensive online source for the sacred texts of religions from all over the world: www.sacred-texts.com/
- 27 A discussion of the logical fallacy of begging the question: www.fallacyfiles.org/begquest.html
- 28 A journalist's summary of recent critical scholarship concerning the historical claims of the Torah: www.worldagesarchive.com/Reference_Links/False_Testament_(Harpers).htm
- 29 The full text of Homer's *Iliad*: http://classics.mit.edu/Homer/iliad.html
- 30 The full text of Homer's *Odyssey*: http://classics.mit.edu/Homer/odyssey. html
- An in-depth discussion of various versions of the ontological argument: http://plato.stanford.edu/entries/ontological-arguments/
- 32 Psalms 14:1, "The fool has said in his heart, "There is no God.": http://bible.cc/psalms/14-1.htm
- 33 The website for professional tennis player Rafa Nadal: www.rafaelnadal.com/

- 34 The cosmological argument in classical Islam: www.muslimphilosophy.com/ip/pg1.htm
- The life, philosophy, and theology of Thomas Aquinas, the greatest of Catholic theologians: http://plato.stanford.edu/entries/aquinas/
- 36 An introduction to cosmology from NASA: http://map.gsfc.nasa.gov/universe/
- A fine, detailed primer on cosmology from NASA: http://map.gsfc.nasa.gov/universe/WMAP_Universe.pdf
- The full text of Schopenhauer's book *On the Fourfold Root of the Principle of Sufficient Reason*, the source of his line that the cosmological argument uses the principle of universal causation like a "hired cab": http://openlibrary.org/books/OL7040205M/On_the_fourfold_root_of_the_principle_of_sufficient_reason
- 39 "Pay no attention to that man behind the curtain" scene from *The Wizard of Oz*: www.youtube.com/watch?v=YWyCCJ6B2WE
- 40 The Calibre 89 by Patek Philippe, the most complex pocketwatch ever made: http://stylefrizz.com/200803/the-worlds-most-complicated-pocket-watch-patek-philippe/
- 41 Allmovie's synopsis of *The Gods Must Be Crazy*: www.allmovie.com/movie/the-gods-must-be-crazy-v20084
- 42 The opening scenes of *The Gods Must Be Crazy* when the Bushmen of the Kalahari encounter a Coke bottle that fell from the sky: www.youtube.com/watch?v=gCQIGiXf0JA
- 43 The finches of the Galapagos Islands, and their role in helping Darwin formulate the theory of evolution by natural selection: http://en.wikipedia.org/wiki/Darwin's_finches
- 44 Details on how eyes evolved: http://en.wikipedia.org/wiki/Evolution_of_ the_eye
- 45 A discussion of snowflakes, crystals, and six-fold symmetry by a Caltech scientist: www.its.caltech.edu/~atomic/snowcrystals/faqs/faqs.htm
- A fun kitchen experiment that instantaneously changes beer from liquid to solid: www.youtube.com/watch?v=n_H5ZIoZSBo
- The creation of the Earth scene from *The Hitchhiker's Guide to the Galaxy*: www.youtube.com/watch?v=MbNtlS69HhU
- 48 M. C. Escher's drawing of self-creating hands: http://en.wikipedia.org/wiki/ Drawing_Hands
- 49 An in-depth discussion of Pascal's wager: http://plato.stanford.edu/entries/pascalwager/
- The nature of the Higgs Boson particle and why it matters to physics: http://en.wikipedia.org/wiki/Higgs_boson
- 51 Facts about the rare ivory-billed woodpecker: http://web4.audubon.org/bird/ivory/ivory.php
- 52 The fighting talents of Jet Li: www.youtube.com/watch?v=2SK9kFyQxNw

- The "show me the money" sequence from the film *Jerry Maguire*: www. youtube.com/watch?v=Lnrb8HnQvfU&feature=related
- 54 Ascetic monks in *Monty Python and the Holy Grail* chant "Pie Jesu Domine, dona eis requiem": www.youtube.com/watch?v=YgYEuJ5u1K0
- 55 Gordon Gekko's speech that greed is good, from the film *Wall Street*: www.youtube.com/watch?v=Muz1OcEzJOs&feature=related
- A guide to over 3000 deities, demons, and spirits from around the world: www.godchecker.com/
- A Gallup Poll showing that Americans would rather vote for someone Jewish, Catholic, Mormon, a woman, black, Hispanic, homosexual, 72 years of age, or someone married for the third time before they voted for an atheist: www.gallup.com/poll/26611/Some-Americans-Reluctant-Vote-Mormon-72YearOld-Presidential-Candidates.aspx
- Sociological research that shows Americans would rather their children marry someone from every other marginalized group studied before marrying an atheist: https://www.soc.umn.edu/~hartmann/files/atheist%20as%20the%20 other.pdf
- A report on research showing that atheists are distrusted as much as rapists: http://digitaljournal.com/article/315425
- 60 Survey evidence about the beliefs of professional philosophers over a wide variety of topics, including God: http://philpapers.org/surveys/results.pl
- A survey of what the members of the National Academy of Sciences believe about God and personal immortality: www.stephenjaygould.org/ctrl/news/file002.html
- 62 A discussion of the life and work of biologist Richard Dawkins: http://en.wikipedia.org/wiki/Richard_Dawkins
- 63 The self-described "ultimate and official Loch Ness Monster site": www. nessie.co.uk/
- The history and definition of Boyle's gas law: http://en.wikipedia.org/wiki/Boyle's_law
- 65 The history of the god Yahweh: http://en.wikipedia.org/wiki/Yahweh
- A list of superseded, obsolete scientific theories: http://en.wikipedia.org/wiki/ Obsolete_scientific_theory
- 67 A discussion of the discarded view that disease is caused by "bad air" instead of contagion: http://en.wikipedia.org/wiki/Miasma_theory_of_disease
- An article that explains why the global positioning system (GPS) depends upon the truth of general relativity: www.metaresearch.org/cosmology/gps-relativity.asp
- 69 The World Bank's poverty statistics and indicators: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/0,,contentMDK:22569498~pagePK:148956~piPK:216618~theSitePK:336992,00.html

- 70 Allmovie's synopsis of *The Hangover*: www.allmovie.com/movie/the-hangover-v420157
- 71 Information on torture from Amnesty International: www.amnestyusa.org/our-work/campaigns/security-with-human-rights?id=1031032
- A sobering death toll of wars, genocides, and other anthropogenic causes: http://en.wikipedia.org/wiki/List_of_wars_and_disasters_by_death_toll
- The death toll of diseases and natural disasters: http://en.wikipedia.org/wiki/ List_of_natural_disasters_by_death_toll#Contractible_diseases
- A list of natural disasters by death toll: http://en.wikipedia.org/wiki/List_of_natural_disasters_by_death_toll
- A news report on the murder of Hugo Alfredo Tale-Yax and the indifferent passers-by:http://gawker.com/5523739/more-than-20-people-passed-as-homeless-new-york-man-bled-to-death
- The history and description of the Flavian Amphitheater, better known as the Colosseum of Rome: http://en.wikipedia.org/wiki/Colosseum
- A detailed discussion of David Hume's writings on the philosophy of religion: http://plato.stanford.edu/entries/hume-religion/
- 78 A faceslap in super slow motion: www.youtube.com/watch?v=3BRw_ihZRJI
- 79 The complete text of David Hume's *Dialogues Concerning Natural Religion*: www.earlymoderntexts.com/pdfbits/hd3.pdf
- The money quote: "Writing about the provincial capital, Bến Tre, on 7 February 1968, [AP correspondent Peter] Arnett cited an unidentified US military official as follows: 'It became necessary to destroy the town to save it', a United States major said today. He was talking about the decision by allied commanders to bomb and shell the town regardless of civilian casualties, to rout the Vietcong.": http://en.wikipedia.org/wiki/B%E1%BA%BFn_Tre
- 81 Matthew 5:45: God sends the rain on the just and the unjust alike: http://bible.cc/matthew/5-45.htm
- 82 The history of the 1918–1919 flu pandemic: www.flu.gov/pandemic/history/1918/index.html
- 83 A synopsis of Stephen King's novel about a killer dog, *Cujo*: www. stephenking.com/library/novel/cujo.html
- The heroism of Wesley Autrey, who saved a stranger from being killed by a subway train: www.nytimes.com/2007/01/03/nyregion/03life.html?_r=3
- A photo of New York City mayor Bloomburg presenting Wesley Autrey with the Bronze Medallion, the City's highest award for exceptional citizenship and outstanding achievement: www.nyc.gov/portal/site/nycgov/menuitem. 1cac08e0805942f4f7393cd401c789a0/index.jsp?eid=11708&pc=1095
- The story of a would-be robber foiled by squash: www.wmur.com/r/25578010/detail.html
- A detailed discussion of theoretical parsimony, simplicity, and Ockham's razor: http://plato.stanford.edu/entries/simplicity/