

34 Unconvincing Arguments for God

by August Berkshire

Introduction - Atheism – the lack of belief in gods – is based upon a lack of evidence for gods, lack of a reason to believe in gods, and difficulties and contradictions that some god ideas lead to.

Nevertheless, atheism is a tentative state, subject to change if compelling theistic arguments are presented.

Following are some of the arguments that atheists have considered, along with some of the reasons these arguments have been rejected.

(1) God-of-the-Gaps (God as a “free lunch”) - Almost every “proof” for the existence of gods relies, at least in part, on a god-of-the gaps argument. This argument says that if we don’t know the answer to something, then “God did it.” “God” gets to win by default, without any positive evidence. But is saying “God did it” really an answer?

Intelligent design, god-advocate William Dembski has authored a book entitled *No Free Lunch*. However, “God” is the ultimate “free lunch.” Consider the following:

We don’t know *what* gods are composed of.

We don’t know *what* gods’ attributes are.

We don’t know how *many* gods there are.

We don’t know *where* gods are.

We don’t know *where* gods come from or, alternately, *how* it is possible for them to always exist.

We don’t know what *mechanisms* gods use to *create* or *change* anything.

We don’t know what the “*supernatural*” is, nor how it is capable of interacting with the *natural* world.

In other words, we know *absolutely nothing* about gods – yet at least one god is often given credit for many things. Thus, to say “God did it” is to answer a question with a question. It provides *no information* and only makes the original question more complex.

The god-of-the-gaps argument says that not only do we not have a naturalistic answer today, but we will *never* discover a naturalistic answer in the future because *no naturalistic answer is possible*. Thus, to rebut a god-of-the-gaps argument, we only have to show that a naturalistic answer is *possible*.

For example: We open the door to a room and observe a cat sleeping in a corner. We close the door, then open it again five minutes later. We observe that the cat is now sleeping in another corner. One person says “God did it by levitating the sleeping cat” (without offering any proof). Another person says “It’s quite possible that the cat woke up, wandered over to the other corner, and fell asleep again.” Thus, although no one saw what actually happened, the god-of-the-gaps argument has been rendered implausible by a possible naturalistic explanation.

(2) Leaps of Faith - The fact is, no one even knows if it’s *possible* for gods to exist. Just because we can imagine something doesn’t mean it’s possible. For example, we can all imagine ourselves walking through a solid wall, but that doesn’t mean it’s possible. So, just because we can imagine a god, doesn’t mean its existence is actually possible.

Because there is no direct proof for the existence of any gods, a typical believer must make at least *nine* leaps of faith to arrive at the god they believe in. These are *separate* leaps of faith because one leap *does not* imply the next leap.

The first leap of faith is that a supernatural realm even exists.

Second, that beings of some sort exist in this realm.

Third, that these beings have consciousness.

Fourth, that at least one of these beings is eternal.

Fifth, that this being is capable of creating something from nothing.

Sixth, that this being is capable of interfering with the universe after it is created (i.e. miracles).

Seventh, eighth, and ninth, that this being is all-knowing, all-powerful, and all-loving.

If people want to believe in a god more specific to a particular religion, then some additional leaps of faith are necessary.

So, when we speak about gods, we have absolutely no idea what we’re talking about (see unconvincing argument #1), and we have to make at least nine leaps of faith to get to the god most people believe in.

(3) Holy Books - Just because something is written down does not make it true. This goes for the Bible, the Qur’an, and any other holy book. It is circular reasoning to try to prove the god of a holy book exists by using the holy book itself as “evidence.”

People who believe the holy book of one religion usually disbelieve the holy books of other religions.

(4) The Argument from Historical Settings - This argument states that because historical people and places are mentioned in ancient stories, that everything else about those stories, including descriptions of supernatural events, must be true. By this argument, everything written in the *Iliad*, including the intervention of the ancient Greek gods, must be true.

(5) “Revelations” of Others - All religions claim to be revealed, usually through people called “prophets.” But how can we know that a “revelation” is actually a “message from a god” and not a hallucination?

A revelation is a personal experience. Even if a revelation *really did* come from a god, there is no way we could prove it.

People of one religion usually disbelieve the revelations of other religions. These revelations often contradict each other, so what basis do we have for deciding which are the “true revelations”?

(6) “Revelations” of One’s Own (Personal Testimony, Feelings, “Open Heart”) - This is when you are personally having the revelation or feeling that a god exists. Though you may be sincere, and even if a god really does exist, a feeling is not proof, either for you or for someone else.

It will do no good to ask atheists to “open our hearts and accept Jesus” (or any other deity). If we were to set aside our skepticism, we might indeed have an inspirational experience. But this would be an emotional experience and we’d have no way to verify if a god was really speaking to us or if we were just hallucinating.

Many atheists have stories of how wonderful it felt to lose their belief in gods. As with religion, this is not proof that atheism is true.

(7) Most People Believe in God - It's true that throughout history, most people have believed in at least one god. But mere popularity doesn't make something true. (Most people used to mistakenly believe that the Earth was the center of the universe.)

The number of atheists in the world is currently increasing. We can imagine a day when most people are atheists. (In fact, most of the top scientists in the U.S. already are atheists.) However, as with religion, the popularity of atheism will not be able to be used as proof of its truth.

Even today, it is probable that in England and France atheists outnumber theists. Does this mean that God exists everywhere except in those two countries?

(8) Evolution Would Not Favor a False Belief - Would evolution reward a species incapable of perceiving reality? Would evolution reward a species that hallucinated? If not, then a god must exist, according to this argument.

However, evolution does not reward what is true. Evolution rewards that which is *useful*.

No one can doubt that religion and god-belief have sometimes been useful. "God" can be employed like Santa Claus, to keep people behaving well in order to earn a reward. "God" can also be used to justify horrible behavior that benefits your group, such as Islamic suicide bombings or the Christian Crusades. "God" can reduce your fear of death.

Nevertheless, in an age of nuclear weapons, the dangers of god belief far outweigh its usefulness.

(9) The "God Part" of the Brain - Some religious people argue that a god must exist, or why else would we have a part of our brain that can "recognize" a god? What use would that part of our brain be otherwise?

However, imagination is important for us to be able to predict the future, and thus aids in our survival. We can imagine all kinds of things that *aren't* true. It is a byproduct of being able to imagine things that *might* be true.

As a matter of fact, scientists have begun to study why some people have religious beliefs and others don't, from a biological perspective. They have identified certain naturally occurring chemicals in our brains that can give us religious experiences. For example, the brain chemical dopamine increases the likelihood that we will "see" patterns where there are none.

In studies of religion and the brain, a new field called neurotheology, they have identified the temporal lobe as a place in the brain that can generate religious experiences.

Another part of the brain, which regulates a person's sense of "self," can be consciously shut down during meditation, giving the meditator (who loses his or her sense of personal boundaries) a feeling of "oneness" with the universe.

(10) Ancient "Miracles" & Resurrection Stories - Many religions have miracle stories. And, just as people who believe in one religion are usually skeptical towards miracle stories of other religions, atheists are skeptical toward all miracle stories.

Extraordinary events can become exaggerated and grow into miraculous legends. Good magicians can perform acts that seem like miracles. Things can be mismeasured and misinterpreted. Many things that seemed like "miracles" in the ancient world can be explained with modern knowledge.

Regarding resurrections, atheists will not find a *story* of someone resurrecting from the dead to be convincing. There are many such legends in ancient literature and, again, most religious people reject the resurrection stories of other religions.

Many religions reports that their god(s) performed obvious, spectacular miracles thousands of years ago. Why have these miracles stopped? Is it because the gods have become shy? Or is it because science started?

(11) Modern Medical "Miracles" & Resurrection Stories - Modern medical "miracles" are a good example of "god-of-the-gaps." A person experiences a cure for a disease that science can't explain. Therefore, "God did it." God never has to prove himself in these arguments. It is always assumed that he gets to win by default.

But this argument assumes we know everything about the human body, so that a natural explanation is impossible. But the fact is, we don't have complete medical knowledge. Why don't we ever see something that would be a true miracle, like an amputated arm instantaneously regenerating?

Several studies of prayer, where the patients didn't know whether or not they were being prayed for, including a study by the Mayo Clinic, have shown prayer to have no effect on healing.

(This raises the question of why we would have to beg an all-powerful, all-loving god to be healed in the first place. It seems ironic, to say the least, to pray to a loving god to be cured from diseases and the effects of natural disasters that he himself created. It also raises the Problem of Evil: If God is all-powerful and all-loving, why does evil exist in the first place?)

Modern resurrection stories always seem to occur in Third World countries under unscientific conditions. However, there have been thousands of people in modern hospitals hooked up to machines that verified their deaths when they died. Why didn't any of them ever resurrect?

(12) "Heaven" (Fear of Death) - Atheists don't like the fact that we're all going to die any more than religious people do. However, this fear does not prove there is an afterlife – only that we *wish* there was an afterlife. But wishing doesn't make it so.

There is no evidence for a god, no evidence that he created any place for us to go after we die, no explanation as to exactly *what* that place is composed of, nor *where* it is, nor *how* a god created it from nothing.

There is no evidence for a soul, no description of *what* a soul is composed of, and no explanation of *how* a *non-material* soul evolved in a *material* body, or, alternately, no explanation of *how* or *when* a god zaps a soul into a body.

If a fertilized human egg has a soul, what happens if that egg splits in two to form identical twins? Does each twin have half a soul? Or did the original fertilized egg have two souls?

What about when the opposite happens, when two fertilized eggs fuse to form one human being, creating what is known as a chimera? Does that person have two souls? Or did each original fertilized egg have only half a soul?

If a one-week-old baby dies, what kind of thoughts will it have in an afterlife? The thoughts of a one-week-old, which are zero? The thoughts of an adult? If so, how will that happen? Where will those thoughts come from and what will they be?

There is no reason to believe our consciousness survives the death of our brains. The mind is not something separate from the body.

For example, we know the chemicals responsible for the feeling of love. Drugs can alter our mood, and thus change our thoughts. Physical damage to our brains can change our personalities, and our thoughts. And learning a new skill, which involves thinking, can physically change the structure of

our brains.

Some people get Alzheimer's disease at the end of their lives. The irreversible damage to their brains can be detected by brain scans. These people lose their ability to think, yet they are still alive. How, one second after these people die, does their thinking return (in a "soul")?

If people had to choose between a god and an afterlife, most people would choose the afterlife and forget about God. They only choose god belief because it's the only way they know of to fulfill their desire for an afterlife. [*Thanks to Edward Tabash for this point.*]

(13) Fear of Hell - The idea of hell strikes atheists as a scam – an attempt to get people to believe through fear what they cannot believe through reason and evidence.

The only way to approach this "logically" is to find the religion that punishes you the *worst* for disbelief, and then believe that religion. Okay, you will have saved yourself from the worst punishment that exists – *if* that religion is the "true" religion.

But if that religion (with its punishment) is not the *true* religion – if the religion that has the *second or third worst* punishment for disbelief is the *true* religion – then you have saved yourself nothing.

So, which religion's hell is the *true* hell? Without evidence, we can never know.

Even within Christianity there are three different versions of hell. There is the traditional version, where your "soul" burns forever. A second version says that eternal punishment is too cruel for a loving god, so your "soul" is burnt out of existence.

And a third version says that hell is not a physical place but the condition of being forever separated from God. But atheists are already separated from God and are having a good time, so they fail to see how this is a punishment. And, how can a person be separated from God when God is supposedly everywhere?

(14) "Pascal's Wager" / Faith - In short, Pascal's Wager states that we have everything to gain (an eternity in heaven) and nothing to lose by believing in a god. On the other hand, disbelief can lead to a loss of heaven (i.e. hell).

We've already noted that heaven is wishful thinking and that hell is a scam, so let's address the issue of faith.

Pascal's Wager assumes a person can *will* himself or herself into having faith. This is simply not the case, at least not for an atheist. So atheists would have to pretend to believe. But according to most definitions of God, wouldn't God know we were lying to hedge our bets? Would a god reward this?

Part of Pascal's Wager states that you "lose nothing" by believing. But an atheist would disagree. By believing under these conditions, you're acknowledging that you're willing to accept some things on faith. In other words, you're saying *you're willing to abandon evidence as your standard for judging reality*. Faith doesn't sound so appealing when it's phrased that way, does it?

(15) Blaming the Victim - Many religions punish people for disbelief. However, belief requires faith, and some people, such as atheists, are incapable of faith. Their minds are only receptive to evidence. Therefore, are atheists to be blamed for not believing when "God" provides insufficient evidence?

(16) The End of the World - Like the concept of hell, this

strikes atheists as a scare tactic to get people to believe through fear what they can't believe through reason and evidence. There have been predictions that the world was going to end for centuries now. The question you might want to ask yourselves, if you're basing your religious beliefs on this, is how long you're willing to wait – what amount of time will convince you that the world is not going to end?

(17) Difficulties of Religion - It has sometimes been argued that because certain religious practices are difficult to follow, nobody would do them if a god didn't exist. However, it is the *belief* in the existence of a god that is motivating people. A god doesn't really have to exist for this to happen.

Difficulties can serve as an initiation rite of passage into being counted one of the "select few." After all, if just anybody could be "saved," there might be no point in having a religion.

Finally, the reward for obedience promised by most religions – a heaven – far outweighs any difficulties religion imposes.

(18) The Argument from Martyrdom - It has been argued that no one would die for a lie. This overlooks the fact that people can be intentionally or unintentionally fooled into believing a religion is true.

Most religious groups that promote martyrdom promise a great reward in "heaven," so followers don't perceive the loss of their lives as a great sacrifice.

Does the fact that the 9/11 bombers were willing to die for their faith make Islam true? What about cults like Heaven's Gate, where followers committed suicide in 1997 believing their "souls" were going to a space ship carrying Jesus on the far side of a comet?

(19) The Argument from Embarrassment - Some religious people argue that because their holy book contains passages that are embarrassing to their faith, that those passages – and the accompanying descriptions of supernatural events – must be true or they wouldn't have been included in the book.

A classic example of this argument is the Biblical description of the disciples' cowardice after Jesus' arrest. Yet in this case, as in others, embarrassing moments can be included in a fictional story to heighten dramatic tension and make the eventual triumph of the hero of the story that much greater. [*Thanks to Robert M. Price for this point.*]

(20) False Dichotomies - This is being presented with a false "either/or" proposition, where you're only given two alternatives when, in fact, there are more possibilities.

Here's one that many Christians are familiar with: "Either Jesus was insane or he was god. Since Jesus said some wise things, he wasn't insane. Therefore, he must be God, like he said he was." But those are not the only two possibilities.

A third option is that, yes, it *is* possible to say some wise things and be deluded that you are a god.

A fourth possibility is that Jesus didn't say everything that is attributed to him in the Bible. Maybe he didn't actually say all those wise things, but the writers of the Bible said he did. Or maybe he never claimed to be God, but the writers turned him into a god after he died.

A fifth possibility is that Jesus is a fictional character and so everything was invented by the authors.

(21) Meaning in Life - This is the idea that, without belief in a god, life would be meaningless. Even if this were true, it

would only prove we wanted a god to exist to give meaning to our lives, not that a god actually does exist. But the very fact that atheists can find meaning in their lives without a belief in a god shows that god belief is not necessary.

(22) “God is Intangible, Like Love” - Love is not intangible. We can define love both as a type of feeling and as demonstrated by certain types of actions.

Unlike “God,” love is a physical thing. We know the chemicals responsible for the feeling of love.

Also, love depends upon brain structure. A person with a lobotomy or other type of brain damage may lose the ability to feel love.

Furthermore, if love were not physical, it would not be confined to our physical brains. We would expect to be able to detect an entity or force called “love” floating around in the air.

(23) Morality/Ethics - This is the idea that without a god we’d have no basis for morality. However, a secular moral code existed before the Bible: the Code of Hammurabi.

In Plato’s dialogue called *Euthyphro*, Socrates asks a man named Euthyphro whether something is good because God says it is, or does God announce something to be good because it has intrinsic goodness?

If something is good because God says it is, then God might change his mind about what is good. Thus, there would be no absolute morality.

If God merely announces something to be good because it has intrinsic goodness, then we might be able to discover this intrinsic goodness ourselves, without the need for god belief.

Christians can’t even agree among themselves what’s moral when it comes to things like masturbation, premarital sex, homosexuality, divorce, contraception, abortion, war, embryonic stem cell research, euthanasia, and the death penalty.

Christians reject some of the moral laws found in the Bible, such as killing disobedient children or people who work on the Sabbath. Therefore, Christians must be applying their *own* ethical standards *from outside the Bible* to be able to recognize that these commandments in the Bible are unethical. *[Thanks to Dan Barker for this point.]*

In fact, most religious people ignore the *bad ethics* in their holy books and concentrate on the *good advice*. In other words, theists *pick and choose* their ethics just like atheists do.

Other animals exhibit kindness toward one another and a sense of justice. We have found the part of our brains responsible for feelings of sympathy and empathy – “mirror neurons” – which serve as the foundation for much of our ethics.

Morality is something that evolved from us being social animals. It’s based on the selfish advantage we get from cooperation, and on consequences. Helping one another is a selfish act that has evolutionary rewards. (See also Argument 25, against the existence of altruism.)

We also judge actions by their consequences, through trial and error. The best formula we have come up with is to allow the maximum amount of freedom that does not harm another person or impinge on that person’s freedom. This creates the greatest amount of happiness and prosperity in society, which benefits the greatest amount of people (the greatest good for the greatest number). This view includes the protection of minority rights, since in some way we are each a minority.

Since there is no evidence for any gods, it follows that *any* moral belief can be attributed to a god. So, rather than

being a certain guide, religion can be used to justify *any* behavior. One simply has to say “God told me to do it.” The best way to refute this reasoning is to discard the idea of gods altogether.

Even if a god doesn’t exist, some people think that a *belief* in a god is *useful* to get people to behave – kind of like an *invisible policeman*, or, in the words of President George W. Bush: “(God) is constantly searching our hearts and minds. He’s kind of like Santa Claus. He knows if you’ve been good or if you’ve been bad.” *[April 8, 2007 (Easter), Army post, Fort Hood, Texas.]* Do we really want to make this the basis for our ethics?

Any decent ethical system does not need the supernatural to justify it. However, belief in the supernatural has been used to justify many unethical acts, such as the Inquisition, the Salem Witch trials, gay-bashing, and 9/11.

(24) The Argument from Goodness/Beauty - Some religious people argue that without a god there would be no goodness and/or beauty in the world. However, goodness and beauty are defined in human terms.

If the Earth’s environment had been so nasty that it was impossible for life to evolve, then we wouldn’t be here to ponder this question. So, obviously, at least some things about the Earth’s environment are life-affirming, and we are naturally drawn to these things – our survival depends upon it.

As for the beauty of art: we are naturally drawn to life-affirming images, shapes, and colors. However, there are many examples of art, such as the paintings of the Cubists and the Surrealists, that are loved by some people and hated by others.

(25) Altruism - People sometimes say that without a god there would be no altruism, that evolution only rewards selfish behavior.

However, it can be argued that there is no such thing as altruism, that people always do what they want to do. If they are only faced with bad choices, then people choose the thing they hate the least.

Our choices are based on what gives us (our genes) the best advantage for survival, including raising our reputation in society.

“Altruism” towards family members benefits people who share our genes. “Altruism” towards friends benefits people who may someday return the favor.

Even “altruism” towards strangers has a basis in evolution. This behavior first evolved in small tribes, where everyone knew each other and a good reputation enhanced one’s survival. It is now hard-wired in our brains as a general mode of conduct. *[Thanks to Richard Dawkins for this point.]*

(26) Free Will - Some people argue that without a god there would be no free will, that we would live in a deterministic universe of cause and effect and that we would be mere “robots.”

Actually, there is far less free will than most people think there is. Our conditioning (our biological desire to survive and prosper, combined with our experiences) makes certain “choices” far more likely than others. How else can we explain our ability, in many cases, to predict human behavior?

Experiments have shown that our brain makes a “decision” to take action *before* we become conscious of it!

Some believe that the only free will we have is to exercise a conscious veto over actions suggested by our thoughts.

Most atheists have no problem admitting that free will may be an illusion.

This issue also brings up a conundrum: If a god who created us knows the future, how can we have free will?

In the end, if we are enjoying our lives, does it matter if free will is real or an illusion? Isn't it only our ego – our healthy self-esteem that is beneficial for survival – that has been conditioned to believe that *real* free will is somehow better than *imaginary* free will?

(27) A Perfect Being Must Necessarily Exist - This is known as the *ontological* argument for God, first developed almost 1,000 years ago by Anselm.

We are asked to imagine the greatest or most perfect being possible. For most people, this is their conception of a god. Then it is pointed out that it is greater or more perfect for something to exist rather than not to exist. Therefore, this being (God) must necessarily exist.

But this argument does not address the question of whether it is *possible* for a perfect being to exist. It also means that our imagination can *will* things into existence. Not everything we can imagine is possible.

Let's apply this logic to a different subject. Imagine a perfect skyscraper. It would remain undamaged if terrorists flew planes into it. Yet no skyscraper can withstand such an assault without at least some damage. But that violates our premise that the skyscraper must be perfect. Therefore, such an indestructible skyscraper must exist.

(28) Why is there Something Rather than Nothing? - This argument assumes that, without a god, we wouldn't expect anything to exist. However, we have no idea of the statistical probability of Something existing rather than Nothing.

According to physics and astronomy professor Victor Stenger, symmetrical systems tend to be unstable. They tend to decay into less symmetrical systems. Now, Nothing – the lack of anything – is *perfectly symmetrical*, and thus highly *unstable*. Therefore, Something is *more stable* than Nothing. Thus we would *expect* there to be Something rather than Nothing.

We might just as reasonably ask: "Why is there a god rather than no god?" and "Who created this god?"

(29) The Argument from First Cause - This argument states that we live in a universe of cause-and-effect. However, the argument goes, it is logically impossible to have an infinite regression of causes. At some point the regression has to stop. At that point you need a First Cause that is not the result of any cause itself. That First Uncaused Cause, it is claimed, is God.

The universe we live in now "began" about 13.7 billion years ago. Whether the universe existed in some other form before that – whether there was energy/matter/gravity/etc. (a natural world) before that – is unknown.

We don't know if the natural world had a beginning or whether it always existed in some form. If it had a beginning, we don't know that a god is the only possible creative source. We don't know that a god can be an uncaused cause. What caused God?

Virtual particles pop into and out of existence all the time. Quantum physics demonstrates that there can indeed be uncaused events.

(30) The "Laws" of the Universe - Where did the "laws" of the universe come from? Any physical "law" is merely an observed regularity. It's not something handed down by a celestial tribunal.

According to physics and astronomy professor Victor Stenger: "It is commonly believed that the "laws of physics" lie *outside* physics. They are thought to be either *imposed from outside* the universe or *built into its logical structure*. Recent physics disputes this. The basic "*laws*" of physics are *mathematical statements* that have the form they do in an attempt to describe reality in an objective way. *The laws of physics are just what they would be expected to be if they came from nothing.*" [all emphasis added]

(31) The "Fine-tuning" of the Universe - Some religious people argue that the six physical constants of the universe (which control such things as the strength of gravity) can only exist within a very narrow range to produce a universe capable of sustaining life. Therefore, since this couldn't have happened "by accident," a god must have done it.

Again, this is a god-of-the-gaps argument. But beyond that, this argument assumes that we know everything about astrophysics – a field in which new discoveries are made on almost a daily basis. We may discover that our universe is not so "fine tuned" after all.

Another possibility is that there may exist multiple universes – either separately or as "bubble universes" within a single universe. Each of these universes could have its own set of constants. Given enough universes, *by chance* it is likely that at least one will produce and sustain life.

We know it is possible for at least one universe to exist – we are in it. If one can exist, why not many? On the other hand, we have no evidence that it is possible for even one god to exist.

Now let's take a look at most people's definition of a god: eternal, omni-present, all-knowing, all-powerful, and all-loving. Can God be any other way than *exactly* the way he is?

Although there is *some* small margin for variance in the "fine-tuning" of the constants of the universe, there is traditionally *no* margin for variance in the constants of God. Therefore, our universe with a traditional god is logically more implausible than our universe without one.

And, of course, we must ask: Who or what fine-tuned God?

If the universe was created *specifically* with humans in mind, then the enormous size of the universe (most of it hostile to life) and the billions of years that passed before humans showed up are ridiculous and wasteful – not what we would expect from a god.

(32) The "Fine-tuning" of the Earth - Some religious people argue that the Earth is positioned "just right" in the solar system (not too hot, not too cold, etc.) for life to exist. Furthermore, the elements on Earth (carbon, oxygen, etc.) are also "just right." These people claim that this couldn't have happened "by accident," so a god must exist to have done the positioning and chemistry.

We should be able to recognize a god-of-the-gaps argument here. But an even better rebuttal exists. If Earth was the *only* planet in the universe, then it would indeed be remarkable that our conditions turned out to be "just right."

But most religious people acknowledge that there are probably thousands, if not millions, of other planets in the universe. (Our own solar system has eight planets.) Therefore, *by chance*, at least one of those planets will have conditions that will produce some kind of life.

We can imagine religious purple creatures with four eyes and breathing carbon dioxide on another planet also falsely believing that their planet is "fine-tuned" and that a creator god

exists in their image.

(33) Creationism / “Intelligent Design” - This is the idea that if we can’t currently explain something about life, then “God did it” (god-of-the-gaps).

However, if Genesis, or any similar religious creation myth, is true, then virtually every field of science is wrong. Not only is biology wrong, but so too are chemistry, physics, archeology, and astronomy, as well as their many subdisciplines such as embryology and genetics. In fact, we might as well throw out the entire scientific method.

Creationists often make a distinction between “micro” evolution and “macro” evolution – that is, change within a species, which they accept, and change from one species to another, which they do not accept.

But what are the mechanisms for “micro” evolution? They are: mutation, natural selection, and inheritance. And what are the mechanisms for “macro” evolution? Exactly the same: mutation, natural selection, and inheritance. The only difference is the amount of time required. Do some genes say to themselves: “Gee, I better not change too much or it will upset some religious people?”

Evolution is the best explanation, and the only explanation for which we have any evidence, for the age of fossils, for the progression of fossils, for genetic similarities, for structural similarities, and for transitional fossils.

Yes, there *are* transitional fossils. For example, we have a good fossil trail of species going from land mammal to whale, including basilosaurus, a primitive whale that still retained useless, small hind legs. Even today, whales retain their hip bones.

(Some creationists argue that those tiny hind legs would have been useful for mating, thus basilosaurus was a separately created species and not a transition. But if those hind legs were so useful, why did they evolve completely away?)

In fact, snakes, too, still have hip bones, and once in a great while we see a snake born with vestiges of hind legs, demonstrating their evolution from reptile ancestors that had hind legs.

In China we have found many half-reptile/half-bird fossils, demonstrating that transition.

There is the recently discovered fossil *tiktaalik*, which helped filled a gap between fish and amphibians. It was discovered in Canada, exactly where, and in the age of rock, that evolution predicted. [*Thanks to PZ Myers for this point.*]

On the other hand, if a *perfect god* created life we would expect him to do a better job. We wouldn’t expect that 99% of all species that have ever existed would have gone extinct.

As the Christian evolutionary biologist Kenneth R. Miller stated: “if God purposely designed 30 horse species that later disappeared, then God’s primary attribute is incompetence. He can’t make it right the first time.” [*“Educators debate ‘intelligent design’ ” by Richard N. Ostling, Star Tribune. March 23, 2002, p. B9.*]

As the evangelical Christian Francis Collins, head of the Human Genome Project, stated: “ID [Intelligent Design] portrays the Almighty as a clumsy Creator, having to intervene at regular intervals to fix the inadequacies of His own initial plan for generating the complexity of life.” [*The Language of God, pp. 193-194.*]

If a *perfect god* created life we would not expect birth defects. If a *perfect god* created life we would not expect “unintelligent design” such as a prostate gland that swells and shuts down the urinary tract, when the urinary tract could have

just as easily have been routed around the prostate gland. Is “God” an incompetent or sloppy designer?

If a god created all life within a week then, even with an alleged worldwide flood, we would expect to find a thoroughly mixed geologic column of fossils. We don’t find this.

We also have the contradiction that people claim that God is “pro-life,” yet he allows for spontaneous abortion. *One third to one half* of fertilized human eggs get spontaneously aborted, often before the woman is even aware that she’s pregnant. If a god designed the human system of reproduction, this make God the world’s biggest abortionist.

Thus, scientific evolution provides answers, whereas religious creationism and “intelligent design” only introduce more questions.

(34) The universe and/or life violate the second law of thermodynamics (entropy) - The second law of thermodynamics (entropy) states that in a closed system, things tend toward greater disorder. Some religious people argue that because the universe and life are so orderly, that a god must be required who could violate this law.

Again, I thank physics and astronomy professor Victor Stenger for the secular explanation:

The universe does not violate the second law of thermodynamics. The universe started with the *maximum* amount of *disorder* possible *for its size*. Then, as the universe expanded, this allowed for *more* disorder to occur, and, in fact, it is occurring.

Despite the fact that the overall disorder is increasing in the system called the universe, *increasing order* is allowed in *subsystems*, such as galaxies, solar systems, and life – so long as the *net effect* to the *entire universe* is *increased disorder*.

If a god created the universe, we would have expected it to start in an orderly fashion, not in disorder. The fact that the universe started with *maximum disorder* means that a god could *not* have created it, because a purposeful creation would have had at least some order to it.

It also turns out that the *negative gravitational energy* in the universe exactly cancels the *positive energy represented by matter*, so that the *total net energy* of the universe is *zero*, which is what you would expect if the universe came from Nothing by *natural means*. However, if a god was involved, you would have expected him to have introduced energy into the universe. There is no evidence of this.

It’s interesting how theists will cling to the second law of thermodynamics to try to prove the existence of their god, while totally ignoring the first law of thermodynamics – that matter/energy can be neither created nor destroyed – which would thoroughly *disprove* the existence of their god as a being who can create something from nothing.

Conclusion - Religious people have a tough, if not impossible task to try to prove a god exists, let alone that their particular religion is true. If any religion had objective standards, wouldn’t everyone be flocking to the same “true” religion? Instead we find that people tend to believe, to varying degrees, the religion in which they were indoctrinated. Or they are atheists.