

The Atheist Bible

An atheist's view on life, the
universe, and everything

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This Book

This book describes a world view without gods and without the supernatural. Different from a number of other books, it does not merely argue that God does not exist or that religion would be harmful. Rather, it offers an atheist view on life, the universe, ethics, the meaning of life, and truth. It also discusses the history, the functioning, the tenets, the diversity, the benefits, and the liabilities of the major world religions.

Legal conditions

In all of the following, "I" refers to the author of this book, [Fabian M. Suchanek](#). "You" refers to the reader of this book. "We" is the author's "we", and refers to this book.

Since I have no education in philosophy or theology, I cannot guarantee the correctness or completeness of the information given here. If you find any factual error in this text, please let me know. Loyal to its own principles ↗, this book may change over time, and definitions and theories may be updated. I am very grateful to the people who have read this book, and who have given me their feedback. It has been taken into account condignly.

When this book talks of "an atheist point of view", it describes the point of view of an atheist (namely myself). This does not mean that all atheists would share my point of view.

Religion is a controversial issue. Hence, I cannot assume responsibility for personal unease resulting from reading this book. Should you disagree with this condition, please abstain from reading this text.

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The Atheist Bible describes an atheist view on life, the universe, and everything. With 500 pages, it is one of the largest works on atheism.

Structure

The book consists of 6 parts. Each part contains several chapters. Each chapter contains several sections. Each section consists of several articles. Each article has a short unique name, which shows in the address bar of the browser when you navigate to the article via a link.

The articles are linked by cross-references (indicated by a small arrow). In the printed version of this book, these arrows serve merely to indicate that a claim is substantiated in a different part of the book. In the digital version, the references are clickable.

All articles are self-contained: every article can be read in isolation from the others. For this, the articles have to contain a certain redundancy, and the book may thus not be suitable for reading it cover to cover. Not all chapters may be interesting to all readers. Rather, you can jump directly to the articles or chapters that you find interesting. For example, the chapters that I (the author) found most interesting when writing them are:

- [Chapter on the Universe](#)
- [Chapter on Gods](#)
- [Chapter on the World Religions](#)
- [Chapter on Memes](#)
- [Chapter on Christianity](#)
- [Conclusion](#) (summarizes the entire book in half a page)

Contents

Part 0: This Book

- [Introduction](#) ([above](#))

Part 1: Atheism and Atheists

- [Atheism](#): Describes what atheism is, and responds to common criticism. The chapter also introduces secular humanism.
- [Atheists](#): Talks about atheists in general, and addresses stereotypes.

Part 2: The World

- [Truth](#): Discusses the concept of truth.
- [The Universe](#): Gives an overview of what science knows about the universe.
- [Morality](#): Discusses ethics from a secular humanist point of view.
- [The Meaning of Life](#): Treats "the" principal question of humanity: What is the meaning of life? We also discuss where atheists go when they die.

Part 3: Gods

- [Proofs](#): Discusses proofs for the existence of gods.
- [God of the Gaps](#): Discusses the idea that God would be the explanation for the unexplained.
- [Gods](#): Introduces an atheist view on gods.

Part 4: Religion

- [Religion](#): Formally defines religions and gods, and shows the diversity of today's religions.
- [The World Religions](#): Traces the history of religion from ancient rites to today's world religions.
- [Founding of Religions](#): Discusses factors that may lead to the creation of a religion.
- [Following Religions](#): Discusses factors that may make people believe in religious statements.
- [Memes](#): Analyses strategies that religions have developed in order to survive.

Part 5: The Abrahamic Religions

- [The Abrahamic God](#): Discusses the god of Judaism, Christianity, Islam, Spiritualism, and the Bahai Faith.
- [Islam](#): Discusses the Muslim world view. For security reasons, this chapter is not available here.
- [Christianity](#): Discusses the Christian world view.

Part 6: The Effects of Religion

- [Criticism of Religion](#): Criticises the effects of religion on people, society, and mankind.
- [Benefits of Religion](#): Discusses positive effects of religion on people, society, and mankind.
- [Conclusion](#): Contains a summary of this book, as well as an outlook.

In times of rising fundamentalism and fanaticism, this book wants to remind the reader of the values of the Enlightenment. The Enlightenment has given us the rule of law, tolerance towards other creeds, freedom of thought, freedom of speech, freedom of science, freedom of religion, freedom of the arts, the emancipation of disadvantaged groups, freedom in the choice of a partner, and freedom in general, as long as the freedom of others is not engaged.

By the book "A Small Atheist Catechism", in a foreword that might just as well apply to the present work

Chapter on Atheism

Introduction

This chapter introduces the concepts of atheism, agnosticism, theism, and Humanism. It consists of the following sections:

- [The Supernatural](#): Introduces atheism, agnosticism, and theism.
- [The Definition of Atheism](#): Defines atheism.
- [Atheism in Practice](#): Discusses how atheists see gods.
- [Humanism](#): Explains Humanism, which is atheism with an ethical dimension.
- [Questions for atheists](#): Discusses common objections to the concept of atheism.

I will also give a more personal account on atheism [↗](#).

The Supernatural

What is atheism, agnosticism, theism and all that?

Atheism, agnosticism, and theism are all points of view concerning God, gods, or the supernatural. There are three major stances:

A person believes in the supernatural

This point of view is commonly called *theism* [↗](#). In most Western countries, theism means belief in the Christian God. However, theism, in its general form, can also mean belief in multiple gods or deistic beings in general [[Oxford dictionary/Theism](#)].

A person rejects belief in the supernatural

This stance is commonly known as *atheism* [↗](#).

A person takes no specific stance towards the belief in the supernatural

This point of view is commonly referred to as *agnosticism* [↗](#). In its strict definition, agnosticism just says that the existence of the supernatural cannot be known [↗](#).

What about other definitions of these terms?

The notions of "atheism", "theism", and "agnosticism" are by no means agreed on universally. Definitions for atheism, agnosticism and theism vary from source to source. The Pew Research Group, for example, finds that 22% of all American self-declared atheists believe in God ([Pew Research Group: Report on the religious landscape](#)). Thus, these people use the word "atheist" in a different way than this book.

When this book uses the word "atheist", it refers to someone who rejects belief in the supernatural. This choice of words, however, is to some degree arbitrary. We just need a word for the phenomenon of disbelief, and "atheism" seems a natural choice for it because it is understood by most people. This does not mean, however, that this definition would be the only one, let alone the only "true" one. In particular, it does not mean that those who call themselves atheist would have to give up their belief in God. They shall believe whatever they wish, and call themselves whatever they wish, they are just not the people that this book talks about.

This book will later argue that words are just arbitrary names, and that what counts is the concept itself, and not the word that we use for it ↗. In this spirit, this book talks about the phenomenon of disbelief in gods, no matter how you call it ↗.

Currently we are a minority, and as long as we are a minority we need a name.

By [Why won't God heal amputees](#)

What is the supernatural?

The supernatural is anything outside the laws of nature. We will later give a more precise definition of the term ↗. For now, we just enumerate things that are considered supernatural. The supernatural includes gods, spirits, angels, and so-called higher powers. It also includes the God of the Judaism, Christianity, Islam, and the Bahai Faith ↗, who is unequivocally considered outside the laws of nature. It also includes other gods ↗, as well as the concepts of the afterlife, a cycle of rebirth, and the idea of a divine destiny. We will discuss and define these concepts later in the [Chapter on Religion](#).

Man-made objects, such as cars and toothbrushes, are not considered supernatural. Feelings, emotions, thoughts, and other abstract things are not considered supernatural either ↗. They are not tangible, but still natural.



Spirits are supernatural
[[BeforeItsNews](#)]

What is a god?

A god or deity is a superhuman being or spirit worshipped as having power over nature or human fortunes [[Oxford dictionary/god](#)]. This definition includes the God of Judaism, Islam, Christianity, the Bahai Faith, and Spiritualism, ↗, but also other gods of other religions, such as a moon god or the Hindu god Vishnu [ibid]. Variants of Buddhism have gods known as the Four Heavenly Kings (pictured) ([Wikipedia/Four Heavenly Kings](#)). The Wicca faith believes in a male god and a female god; the Bambuti believe in the forest god ↗, and variants Hinduism believe in an entire pantheon of gods. Deism believes in a single god that does not interact with the world ↗. We give a formal definition of gods later ↗, and discuss different gods in today's religions in the [Chapter on Religion](#).

Gods are supernatural ↗.



The Heavenly Kings are revered as gods in variants of Buddhism
[Picture taken in the Longhua Temple in Shanghai/China]

What is the abrahamic god?

The abrahamic god is a particular god ↗, who is revered as the God of Islam, Judaism, the Bahai Faith, Spiritualism, and Christianity ↗. He is considered the creator and ruler of the universe and source of all moral authority; the supreme being [[Oxford dictionary/god](#)]. Common attributes ascribed to God include omniscience (infinite knowledge), omnipotence (unlimited power), omnipresence (present everywhere), omni-benevolence (perfect goodness), divine simplicity, and eternal and necessary existence [[Wikipedia/God](#)].

The name "abrahamic god" stems from the fact that Islam, Judaism, the Bahai Faith, Spiritualism, and Christianity all trace their roots to the prophet Abraham. To distinguish the abrahamic god from the other gods, this book writes the abrahamic god with a capital letter: God. Seen this way, "God" is a proper name for the abrahamic god. We discuss this god in detail in the [Chapter on the Abrahamic God](#).

Remark: There is some debate as to whether the god of Islam, the god of Christianity, the god of the Bahai Faith, and the god of Judaism are the same god. We discuss this later ↗, and for simplicity refer to these gods together as "God".



God, as painted by Michelangelo in 1511 [photo anonymous]

What is theism?

Theism is the belief that there is some supernatural being ↗. In the Western world, theism commonly means belief in God ↗. God is the supreme being in the abrahamic religions, which are Christianity, Islam, the Bahai Faith, Spiritualism, and Judaism ↗. Yet, theism can also mean belief in multiple gods, as in some variants of Hinduism ↗. It can also mean belief in some unspecified higher powers, as in Spirituality ↗.

Buddhism (and related spiritual practices) have no god in the Western sense in most of their variants ↗. Yet, also Buddhism believes in supernatural concepts such as Samsara (the cycle of birth and death), Karma (the force that drives Samsara), and Nirvana. Therefore, Buddhism is a belief in the supernatural, and we will group it together with theism for the purpose of this book. The same goes for modern sense-seeking philosophies, if they posit a supernatural cause or quality of natural phenomena ↗. For example, one of these philosophies sees "God" as a name for the first cause of the universe ↗. This view point posit a supernatural beginning of the world ↗, and is thus considered theistic for the purposes of this book.

We discuss the most common types of supernatural entities later, in the [Chapter on Religion](#).

What is religion?

A religion is the service and worship of God or the supernatural [[Merriam-Webster Dictionary/Religion](#)]. Religions usually come with an entire belief system, cultural systems, and world views that relate humanity to spirituality and, sometimes, to moral values [[Wikipedia/Religion](#)]. We will define the concept of a religion formally later, in the [Chapter on Religion](#). We will also give an extensive overview of today's religions and their history in the [Chapter on the World Religions](#). Depending on how we count, there are about 9 major religions with more than 10m adherents: Hinduism, Buddhism, Confucianism/Taoism/Chinese folk religion, Judaism, Christianity, Spiritualism, Sikhism, Islam, and Shintoism.

By definition, every religious person is a theist ↗. However, not every theist necessarily follows the cultural and moral values of a religion. Some theists explicitly reject the framework of religion. They believe in a supernatural power, but resent organized religion, the Pope, holy books, or dogma. Examples for such belief systems are Deism ↗, Spirituality ↗, and metaphysical philosophies ↗.

Remark: Vice versa, some people are "culturally religious". This means that they identify with a religious tradition, but do not believe in the theological content thereof. These people can be theists or not.



From left to right: Bahai Faith, Buddhism, Christianity, Chinese folk religion, Hinduism, Islam, Jainism, Judaism, Neopaganism, Shinto, Sikhism, Taoism
[Sowlos @ Wikicommons]

What is agnosticism?

Agnosticism is the stance that you do not take any particular position towards belief in the supernatural. The supernatural could exist, it could not exist, or it could be non-sensical – you just have no particular opinion on it.

By this definition, everybody who does not actively believe or disbelieve in supernatural beings is an agnostic: Babies (because they cannot actively believe), people who do not care (because they do not bother), and all those people who never heard of gods (and thus had no chance to believe). For the purpose of this book, agnosticism will also include all people who simply say "none" when asked for their religious beliefs, but who are not atheists.

There is a different, epistemic, definition of agnosticism, which we discuss further down [↗](#). We will also discuss why atheists are not rather agnostics, at the end of this chapter [↗](#).

A claim to knowledge needs to be substantiated; ignorance needs only be confessed.

By Anthony Kenny

What is epistemic agnosticism?

In common discourse, the word "agnosticism" means that a person has no particular stance towards the belief in the supernatural [↗](#). However, agnosticism can also have a different meaning. It can be the philosophical view that the truth value of certain claims – particularly theological claims regarding metaphysics, afterlife or the existence of God, god(s), or deities – is unknown or (possibly) inherently unknowable [\[Wikipedia/Agnosticism\]](#)[\[Oxford Dictionary/Agnosticism\]](#). We will call this stance "epistemic agnosticism". Epistemic agnosticism is a theory about knowledge. It is not actually concerned with the existence of supernatural beings. Epistemic agnosticism says that we cannot know, but it does not say whether we have to believe or not. These two things are different. In fact, you can be an agnostic theist or an agnostic atheist.

To see how that works, let's consider as an example a vegetarian version of Schroedinger's cat, a fridge: When you open the fridge door, the light is switched on. Now assume that the light switch is broken, so that it may possibly not switch off properly when you close the fridge door. But when you open it, it is always on. With this fridge, you can never tell whether the light is actually on or off when the door is closed. You take an agnostic attitude: You believe (rightly) that you cannot know the state of the fridge light when the door is closed. Nevertheless, you may believe that the light is off. For example, if you have faith in the fridge mechanics, you will believe that the light is off. Thus, you may believe that something is unprovable and you may believe it nevertheless. You can also believe that the fridge light is broken. Even though you are convinced that you cannot know, you can believe.

Similarly, one may believe in God in an agnostic way: One acknowledges that it is impossible to prove God's existence, but one believes nevertheless in him. Analogously, one may be an agnostic atheist. One can also be an agnostic agnostic, meaning that one does not know whether God exists, and one thinks that nobody can ever now.

I think God makes more effort for us agnostics. Well, I guess he has to.

By Harry Rowohlt

Definition of Atheism

What is atheism?

Atheism is the rejection of belief in the supernatural. This means that atheists do not believe that God exists, that any other gods exist, that there is life after death, or that we are reborn.

There are a number of other definitions of atheism. One of them says that atheism rejects belief "in gods" instead of "in the supernatural". This definition is as valid as any other definition ↗. However, it would also include some Buddhists ↗, because some Buddhists also do not believe in gods. Thus, these Buddhists would be atheists under such a definition. This is indeed a common view point. However, this book does not use the word "atheist" in this sense. When this book talks about "atheists", it means people who reject everything supernatural. Thus, Buddhists are not atheists in the sense of this book, because they believe in a kind of supernatural world order, including rebirth and Karma.

Another definition says that atheists "lack belief in the supernatural" – instead of rejecting it. This is a more general definition of atheism, which would also include all those who have not made up their mind about God. For example, babies would also be atheists, because they "lack belief in the supernatural". However, babies do not actively reject belief in gods. In order to distinguish babies (and other people who have not come to a definite conclusion) from the people who actively reject the belief in God, this book calls the former "agnostics" ↗ and the latter "atheists". Again, the words are just devices that we use to talk about these people.

Another possible definition says that "Atheists believe that gods do not exist". However, not all atheists share this point of view. To see why, consider as an example the sentence "Cinderella sleeps greenly". This sentence does not make any sense. Thus, we can reject it. But would you want to say that "Cinderella does not sleep greenly"? No, because that would make as little sense as the original sentence. Many atheists hold that supernatural statements fall in the same category: They make so little sense that it cannot be decided whether they are true or not. Atheists just reject such statements as they are. Such statements are not part of what atheists consider true.

This means in particular that atheists do not believe that God created this world, that there would be life after death, or that there would be some overall justice in this world other than the one administered by humans. Furthermore, atheists live without the belief in angels, good or evil spirits, and the devil.

I am an atheist. You claim that a god exists and I don't believe you. It's really that simple.

By United Atheists of America

Atheists for practical purposes

Atheism is the rejection of belief in the supernatural ↗. Some people have more nuanced positions towards the supernatural. They hold, e.g., one of the following tenets:

- The question of whether there is a god or not is irrelevant for my everyday life.
- The question of whether there is a god is ill-defined.
- The existence of a god cannot be formally denied, because there could be an alternate universe with different laws of physics where a god exists.
- There is the possibility that some force created the universe, and that this force appears divine to us.

Adherents of these tenets may hesitate to call themselves atheists. At the same time, the existence of a god is only a very abstract possibility for them. They will not arrange their life in any way to cater to this possibility. In particular, these people typically reject belief in gods as personified characters, in supernatural intervention in this world, in a supernatural quality of this world, and in interaction with the supernatural. This makes these people atheists for all practical purposes.

The Dawkins Scale

We have seen that some people consider the hypothesis of God ill-defined or irrelevant for their life ↗ ↗. Now let us look at the other people: Those (atheists and theists alike) who are ready to accord the hypothesis of God some plausibility. For these people, Richard Dawkins ↗ developed the "spectrum of theistic probability" in his book "The God Delusion". The spectrum goes as follows:

1. Strong theist. 100% probability of God. In the words of C.G. Jung: "I do not believe, I know."
2. De facto theist. Very high probability but short of 100%. "I don't know for certain, but I strongly believe in God and live my life on the assumption that he is there."

3. Leaning towards theism. Higher than 50% but not very high. "I am very uncertain, but I am inclined to believe in God."
4. Completely impartial. Exactly 50%. "God's existence and non-existence are exactly equiprobable."
5. Leaning towards atheism. Lower than 50% but not very low. "I do not know whether God exists but I'm inclined to be skeptical."
6. De facto atheist. Very low probability, but short of zero. "I don't know for certain but I think God is very improbable, and I live my life on the assumption that he is not there."
7. Strong atheist. "I know there is no God, with the same conviction as Jung knows there is one."

When this scale speaks of "God", let us think of the supernatural in general, not just the abrahamic god ↗. Then Darwin's point is: Once you accept that the hypothesis of the supernatural is a valid hypothesis, you can assign it some "probability", or "degree of belief".

Now here is the point: Nobody "knows" that the supernatural exists (Point 1 on the scale). Proofs for the supernatural are usually wrong, as we will discuss in the [Chapter on Proofs](#). Likewise, nobody "knows" that the supernatural does not exist (Point 7 on the scale ↗). So strictly speaking, there cannot be a "atheist", and there cannot be a "theist". We should all be agnostics ↗. However, if we always stay mute just because we do not have proof, we can never make any statement at all. As Jack Smart has argued, such neutrality would amount to an unreasonable philosophical skepticism that would not allow us to make any claims to knowledge about the world at all. Take democracy as an example: Nobody "knows" with 100% certainty that democracy is the best political system. So, technically speaking, there cannot be a "democrat". The notion would be meaningless. And still, we're not agnostics with respect to democracy. We prefer democracy to tyranny. We are, in this sense, "democrats" – even if we are aware that our preference for democracy is mainly a belief for which we have no formal proof.

And in the very same way, we can be theists, even if we have no proof for the supernatural. We can just believe that the supernatural exists. And vice versa, we can be atheists if we believe that the supernatural does not exist. Assigning a low probability to the supernatural makes us atheist in this sense.

What is positive atheism?

Positive atheism is the belief that the supernatural does not exist ([Wikipedia/Negative and Positive Atheism](#)). On the Dawkins Scale ↗, we find positive atheists on Level 6 and on Level 7. These are the people who are willing to consider the hypothesis that the supernatural exists, and who consciously consider this hypothesis implausible. These people do not have proof – but nobody has proof ↗. They just consider it unlikely that the supernatural exists. In other words: They believe that the supernatural does not exist.

This means that positive atheists believe that the abrahamic god does not exist; that there are no gods at all; that demons, ghosts, angels, and spirits do not exist; that the universe was not created by God; that there is no Heaven and no Hell; that moral values are not given by God; that prayer has no effect other than psychological; and that all other supernatural claims (such as horoscopes) are nonsense.

This book describes a positive atheist's point of view. For most practical purposes, however, there is little difference between positive atheism and the more general variant of it.

<i>Aries</i>	The stars and planets will not affect your life in any way.
<i>Taurus</i>	The stars and planets will not affect your life in any way.
<i>Gemini</i>	The stars and planets will not affect your life in any way.
<i>Cancer</i>	The stars and planets will not affect your life in any way.
<i>Leo</i>	The stars and planets will not affect your life in any way.
<i>Virgo</i>	The stars and planets will not affect your life in any way.
<i>Libra</i>	The stars and planets will not affect your life in any way.
<i>Scorpio</i>	The stars and planets will not affect your life in any way.
<i>Sagittarius</i>	The stars and planets will not affect your life in any way.
<i>Capricorn</i>	The stars and planets will not affect your life in any way.
<i>Aquarius</i>	The stars and planets will not affect your life in any way.
<i>Pisces</i>	The stars and planets will not affect your life in any way.

An positive atheist's horoscope
[\[Atheist World\]](#)

Atheism in Practice

The Bambuti

To understand the atheist point of view ↗, consider the religion of the Bambuti Pygmies. The Bambuti are an ethnic group in Africa. In their belief, there is a god called Khonvoum (pictured on the right). He wields a bow made from two snakes that together appear to humans as a rainbow. After sunset every day, Khonvoum gathers fragments of the stars and throws them into the sun to revitalize it for the next day. He occasionally contacts mortals through Gor (a thunder god who is also an elephant) or a chameleon. Khonvoum created mankind from clay. Black people were made from black clay, white people came from white clay, and the Pygmies themselves came from red clay. ([Wikipedia/Bambuti mythology](#))



Khonvoum
[Justin Williams @Fanpop]

You probably think that these things are not really true. Khonvoum does not really clog stars together and throw them at the sun. You reject such a belief. This makes you an atheist with respect to Khonvoum. You may even think, more specifically, that Khonvoum does not exist. This makes you a positive atheist with respect to Khonvoum.

Where is Khonvoum?

But if Khonvoum does not exist, what is he? Where did he come from?

Well, put simply, Khonvoum is a myth. Most likely, some shaman came up with the story of Khonvoum. He used it to explain to people why the sun rises every day, and why there are rainbows. Maybe he used the story also to remind people that we are all ultimately part of nature ("made from clay"). Quite possibly, the shaman also counted himself among the people whom Khonvoum contacts occasionally.

Since then, the Bambuti keep telling this story of Khonvoum to each other. The story is part of the oral tradition of the Bambuti.

But Khonvoum does not exist in the real world. He is just a character in the story that the shaman made up.



The Bambuti keep telling each other the story of Khonvoum.
[Aino Tuominen (modified)]

How can we be sure?

How can we be sure that Khonvoum is just made up? Can we prove that he is made up? Well, we cannot. Khonvoum could indeed be hiding in some forest in Africa in this very moment. But there are a number of reasons that indicate that Khonvoum is indeed made up:

Magical events

The story goes that Khonvoum makes snakes appear like a rainbow. This is obviously nonsense. A rainbow is a reflection of the light in water particles, and not in any way related to snakes.

Locality

The story of Khonvoum is known exclusively among the Bambuti. No other civilization has heard of Khonvoum – even though every other civilization enjoys rainbows and the rising of the sun.

No other evidence

Apart from the story, there is no other evidence for Khonvoum. Nobody has ever seen him, he has left no traces, and has spoken to no-one in some verifiable manner. Of course, the Bambuti will cite the rainbow as evidence. Doesn't the rainbow prove that Khonvoum put it there? Well, no. It could have been any other force that put the rainbow there – and we even happen to know these forces.

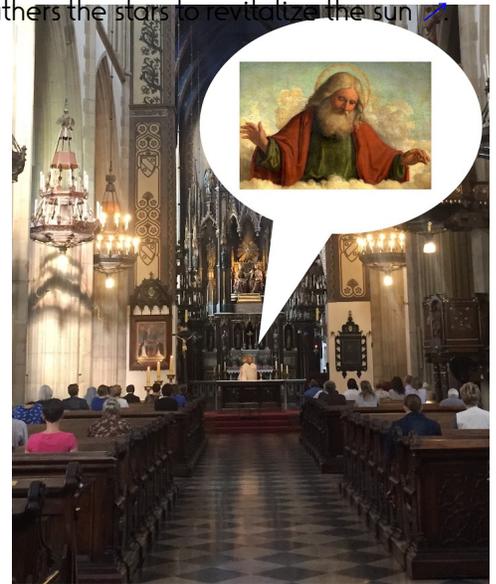
All of this makes it clear that Khonvoum does not exist. He is just a character in a story that the Bambuti keep telling each other.

We have seen that the Bambuti believe that Khonvoum, the god of hunt, gathers the stars to revitalize the sun. We have also come to the belief that Khonvoum does not really exist. He is part of a story that some shaman came up with, in order to explain to people how the sun rises. Since then, Bambutis have been telling each other this story over the generations.

From an atheist point of view, it is the same with the other religions: A religion is just a story that someone made up. This may be the story how a god gave fire to people (as in the Bambuti myth), or the story how a god created the world (as in the abrahamic religions), or the story how the Earth sprang from a lotus flower (as in some variants of Hinduism). In the end, it's all just stories that someone made up once upon a time, and that people keep telling each other.

These stories are not necessarily born out of a bad intention. They may not even be consciously "made up" at all. They may, e.g., stem from honest early attempts to explain nature, or from hear-say, as we will discuss later. But they are, in an atheist view, not factual descriptions of reality.

So, from an atheist point of view, when you listen to a preacher in the church, mosque, or temple, you are listening to a set of stories that people came up with some thousand years ago.



A priest telling the story of a god to his disciples.
[Picture taken in the Dominican Church of Kraków/Poland]

How can we be sure?

As in the case of Khonvoum, we cannot prove that God does not exist. We can just use the same arguments we have used before:

Magical events

The abrahamic god made a person walk on water. People cannot walk on the water. The other major religions all have their own respective magical stories.

Locality

Gods are always local to their culture. The Chinese gods are known only to the Chinese – because they live on in stories that the Chinese tell each other. The abrahamic god was first known only in the Middle East – until the Romans spread the story in Europe, and later the missionaries spread it in Africa and the Americas. But where the story is not spread, the god is not known.

No other evidence

Apart from scripture, there is no evidence for gods. Nobody has ever seen them, they have left no scientifically proven traces, and they have never spoken to anyone in some verifiable manner.

Hence, atheists conclude, the Bible is just a story. God is a fictional character in that story. He does not really exist. It is exciting to read these stories, but once you close the book, God is gone. The same is true for all other gods, spirits, and supernatural concepts. They appear in stories, fairy tales, and myths, but not in the real world. They are just products of human imagination.

I believe in all gods equally.

By *Mike Rumore*

What do you mean, it's all stories?

We have just advanced the idea that religions are basically just stories that people tell each other. The gods and the other supernatural entities are then just characters in these stories. This raises a number of questions:

Why would people create such stories?

People have come up with religious stories for several reasons: to explain the phenomena of nature; to find or give hope in the super-natural; to explain and justify the events of life; to establish social stability and identity; or to govern a people. We discuss these reasons in detail in the [Chapter on the Founding of Religion](#).

Why would people believe such stories?

By far the most common reason why people believe in these stories is that they have been brought up with this belief, and it never occurred to them to question it. Other people believe because their religion gives them a community and peace of mind. Again others are pressured into the belief by society. We discuss these reasons in detail in the [Chapter on Following Religion](#). We also discuss the positive effects of religion on a society in the [Chapter on the Benefits of Religion](#).

How could a fiction survive for so long?

Over the millennia, religions have developed techniques to keep their adherents loyal, and to secure their own survival. These include the encouragement to make many children; the threat of hell and the promise of heaven; the punishment of apostasy; and the ability to adapt to current societal trends. We discuss these factors in detail in the [Chapter on Memes](#).

Aren't there proofs for the existence of God?

People have developed a number of proofs for the existence of their respective gods or supernatural concepts. This book will argue in the [Chapter on Proofs](#) that none of them holds water. We discuss the abrahamic God in particular in the [Chapter on the Abrahamic God](#). We discuss proofs for Christianity in the [Chapter on Christianity](#). We discuss proofs for the truth of Islam in the [Chapter on Islam](#).

In this view of the world, gods are just fictional characters. They are the product of our imagination. They exist only in our heads.

The idea that gods are fictitious characters is actually widely accepted – as long as we talk about the gods of other civilizations. Think about Zeus, the Greek god. Today, most people assume that Zeus does not really exist. He is nothing more than a fictional character in a myth. In the same vein, few people in the Western world believe that Brahma and Vishnu (the Hindu gods) exist. They are just mythical creatures. Vice versa, few Buddhists believe that Jesus is really the son of God. Jesus is the son of God much like Harry Potter flies on a broom – it's all just stories. Atheists apply this logic not just to Hindu gods and Western gods, but to all gods. We discuss this idea in detail in the [Chapter on Gods](#).

*Cogito, ergo est.
I believe, and therefore He exists.
(And that is also the only way in which He exists.)*

By Ludger Lütkehaus

Is there a proof against the existence of God?

Theists cannot prove that God exists. Atheists cannot prove that he doesn't exist. Thus, don't atheists look as weak as theists?

Surprisingly, very few theories can be proven. Take the theory of gravity: Things fall down if not obstructed. How would you prove this theory? A number of things falling down validate that theory ↗ – but do not prove it. There could be one thing one day that does not fall down. There is no way to actually prove that things always fall down ↗. It can only be proven wrong: If one day, a thing does not fall down, the theory is false. Until that day, the theory is useful, because it helps us get along with the physical world.

And it is the same with positive atheism ↗. It cannot be proven right. But it makes predictions. It predicts that prayer will have no influence ↗. It predicts that no god will ever show up and manifest himself in a scientifically verifiable way. It predicts that miracles do not happen ↗. It tells us that there is no supernatural power to help us take care of this world. It cannot be proven that this will always be the case. But we could immediately see if it is not. Until that day, the theory is useful, because it helps us get along with the physical world. In this sense, positive



Atheists do not claim to have a proof
[Dan Etherington @ Flickr]

atheism is like the theory of gravity: it cannot be proven right, but it can be proven wrong. While it has not been proven wrong, it is useful.

Theism, in contrast, has no such benefits. It cannot be proven wrong ↗. This is because it does not make any predictions. If it ever made a prediction, it could be proven wrong. But it does not make predictions. By assuming god, a believer cannot make a single prediction about the real world that an atheist could not make. This means that theism does not help in any way in understanding the physical world. Worse, it allows everybody to come up with their own, contradictory, theological theories. Since none of them can ever be proven wrong, they all co-exist ↗. This makes them meaningless in atheist eyes ↗ ↗. They can even be dangerous, as we discuss in the [Chapter on Criticism of Religion](#).

*Prove to me that Harry Potter doesn't exist,
and I'll use your method to prove that your god does not exist.*

Why not believe anyway?

There is no proof for gods as there is no proof against them ↗. Then the question arises why atheists don't just believe in God anyway.

The answer is first ideational: If there is no reason to believe a supernatural statement, then atheists prefer not to believe in it. This holds in particular because these statements do not provide any insight on the observable world. For example, if Chris knows that brushing your teeth eliminates caries, and Douglas doesn't, then Chris can have healthier teeth than Douglas. Now, if Chris knows that God exists, and Douglas doesn't know that, then there is nothing that Chris gains from this. Chris will not be any smarter about how to eradicate diseases, understand human behavior, or predict nature. There is not a single thing that Chris can predict about the real world that Douglas cannot predict. In this sense, supernatural statements are decoupled from reality. Technically speaking, they are unfalsifiable ↗.

Since supernatural statements are decoupled from reality, everybody can have a different opinion on supernatural statements. Some people believe there is one god, others believe that there are several gods, and again others believe in spirits ↗. Nobody has provable evidence for their gods, and the beliefs are all contradictory – which makes them meaningless in atheist eyes. We discuss the disadvantages of believing unfalsifiable statements in general later ↗.

Things become more intricate when the supernatural is combined with a religion. A religion may require the believer to restrict his diet, limit his choice of partners to followers of the same religion, or teach the religion to his children. Before an atheist would engage in any of these, they would require evidence. Most atheists find it repelling that people willingly restrict their lives without evidence ↗. Furthermore, all major religions have value systems that predate our modern Humanist values. They give less rights to women, prohibit interfaith marriage, shun freedom of religion, discriminate against gays, or encourage child marriage ↗.

If a religion starts exercising power on the society, things become even more intricate. Religions have demanded exemptions from laws ↗; fostered intolerance between the denominations ↗; lead to the persecution of adherents of other religions or atheists ↗; and lent their force to half of the world's most deadly conflicts ↗. This works through a combination of societal, psychological, and financial factors ↗ that many atheists find scary and objectionable.

*It is absurd to believe in something just because it cannot be proven wrong. By the same argument,
we should also all believe in the tooth fairy.*

By Philipp Möller, paraphrased

The History of Atheism

Throughout the written history of mankind, people have been religious in general. We discuss the birth of religions in the [Chapter on the Founding of Religion](#), and the history of religion in the [Chapter on the World Religions](#). Atheism has always been an exception to the rule.

Wikipedia mentions as first atheistic life stances a number of Indian philosophies that originated in 200 BCE, in opposition to theistic Hinduism [↗\(Wikipedia/Atheism in Hinduism\)](#). These philosophies rejected, or at least did not incorporate, the hypothesis of God. However, they also upheld the validity of the Vedas [↗](#). I could not find out whether these philosophies rejected not just God, but also the spirits, re-incarnation, and unfalsifiable hypotheses about life in general [↗](#). Thus, I am not sure in how far these philosophies were atheistic in the comprehensive sense that we use in this book [↗](#).

The following centuries saw a number of individual atheist philosophers ([Wikipedia/Atheism](#)): Several ancient Greek philosophers tried to explain the world in a purely materialistic way (Democritus, Critias, and Prodicus, among others). They held that religious stories were invented by men in order to frighten people – much like we will later argue in the [Chapter on Gods](#) and the [Chapter on Memes](#). These thoughts are clearly atheist. At the same time, they appear to have been opinions of individual philosophers rather than widely shared opinions – much like other Greek philosophers believed in Dualism or Metempsychosis. Interestingly, the early Christians were also labeled atheists by non-Christians because of their disbelief in pagan gods [ibid].

The Golden Age of the Islamic world, likewise, saw a number of atheists in Arab and Persian lands: Muhammad al Warraq (fl. 9th century), Ibn al-Rawandi (827–911), Al-Razi (854–925), and Al-Ma'arri (973–1058) [[Wikipedia/Atheism](#)]. Al-Ma'arri wrote and taught that religion itself was a “fable invented by the ancients” and that humans were “of two sorts: those with brains, but no religion, and those with religion, but no brains” [ibid]. These atheists did not leave a long-lasting impression, though. Today, there are few outspoken atheists in Muslim lands [↗](#).

In Europe, the Middle Ages saw several philosophers and groups who questioned the classical Christian doctrine. However, these people were so busy rejecting dogmata, that they did not arrive at fully rejecting God. Already the rejection of dogmata was prohibited and could result in prosecution [↗](#); much more so the rejection of God. Things changed with the Protestant Reformation in the 16th century, when Martin Luther openly questioned the authority of the Catholic Church. With the inviolability of the Church broken, people started questioning also the nature of God. Some people arrived at Deism (the idea that there is a god that does not interfere with the world [↗](#)) or Pantheism (the idea that God is in everything [↗](#)), but not at atheism. The first known explicit atheist was the German critic of religion Matthias Knutzen in his three writings of 1674 [[Wikipedia/Atheism](#)], followed by a number of other European philosophers with atheistic tendencies such as David Hume, Immanuel Kant, and Denis Diderot [↗](#). However, atheism never reached a larger audience – most likely because people were unable to imagine how the complexity of nature and life could exist without a creator [↗](#) [Steven Pinker: Enlightenment now]. Only when Charles Darwin discovered the principle of evolution [↗](#) in the 19th century, the necessity for a creator was put in question.

The main catalyst for this thinking was the Renaissance, and more specifically the Age of Enlightenment that followed ([Wikipedia/Age of Enlightenment](#)). The Enlightenment included a range of ideas centered on reason as the primary source of authority and legitimacy, and came to advance ideals like liberty, progress, tolerance, fraternity, constitutional government, and separation of church and state [ibid]. These philosophies valued reason, rationalism, and empirical evidence, and thus they started to critically question belief in God without empirical evidence. The French Revolution dethroned the Catholic Church, and permanently reduced its influence in state affairs. In the latter half of the 19th century, atheism rose to prominence under the influence of rationalistic and freethinking philosophers [[Wikipedia/Atheism](#)]. Many prominent German philosophers of this era denied the existence of deities and were critical of religion, including Ludwig Feuerbach, Arthur Schopenhauer, Max Stirner, Karl Marx, and Friedrich Nietzsche [↗](#) [ibid]. Around that time, people also knew about the other world religions, and religious texts from other traditions had been translated to European languages ([Wikipedia/Religious studies](#)). Comparative studies of different religions [↗](#) might have pushed people to a descriptive view of religion as an artefact of human thinking ([Wikipedia/Deism / Discovery of Diversity](#)). These times also saw the beginning of more wide-spread Humanist [↗](#) thought – first in the frame of Deism, and then without ([Wikipedia/Humanism](#)).

The 20th century saw the rise of state atheism: the imposition of atheism by the state, in particular in communist regimes. We discuss state atheism further down in this chapter [↗](#). In some ways, this had the effect of making the Western world more religious, as an opposition to the communist atheist world [↗](#). After the fall of communism, the Eastern-European countries (including Russia) reverted largely to being religious [↗](#). The US remained as religious as it was during the Cold War [↗](#). Western Europe, in contrast, is slowly becoming less religious, and a bit more atheist [↗](#). The rest of the world has low rates of atheism, in particular in the developing countries [↗](#). We discuss the demographics of atheism in the [Chapter on Atheists](#).

What types of atheism are there?

Atheism itself is just the rejection of the belief in the supernatural ↗. This basic attitude can be combined with other attitudes, which yields a spectrum from the implicit to the militant. There is no definite grouping of these attitudes, but some prominent ones are:

Silent Atheism

Some people are atheist, but do not specifically engage in discussing their attitude. They just behave like everybody else, and mind their own business.

State Atheism

State atheism is the official promotion of atheism by a government, sometimes combined with active suppression of religious freedom and practice ↗.

New Atheism

New atheism is the attitude that religion should not simply be tolerated but should be countered, criticized, and exposed by rational argument wherever its influence arises ↗.

Humanism

Humanism combines atheism with moral values. It is based on the Human Rights, promotes democracy, supports freedom of religion ↗, and holds that science is the way to learn about the natural world. Humanism is the world view that this book promotes ↗.

These attitudes are by no means comprehensive, and not even disjoint. This book will explain the viewpoint of atheists in general, and of Humanists in particular.

What is New Atheism?

New atheism is the view that religion should not simply be tolerated but should be countered, criticized, and exposed by rational argument wherever its influence arises [\[Wikipedia/New Atheism\]](#). The term is commonly associated with individuals such as Richard Dawkins, Daniel Dennett, Sam Harris, and Christopher Hitchens [ibid].

This view can be considered a more militant version of atheism, which actively goes beyond individual belief, and aims to convince people of atheism, and oppose religion. Thus, it is a proselytizing life stance.

Many atheists will sympathize with the viewpoints of new atheism. However, most likely, the majority of atheists is not as activist as the "New Atheists". This book incorporates the main arguments of New Atheism in the [Chapter on Criticism of Religion](#).

The opposite of New Atheism is what Stephen Pinker calls "Faitheism". A faitheist is an atheist who is "soft" on religious belief, and tolerant of even the worst intellectual and moral excesses of religion – an "atheist accommodationist". A faitheist may say, "I'm not religious, but we shouldn't criticize the Muslim oppression of women because it's a sincere religious belief." [\[Urban Dictionary / Faitheism\]](#). This is not the position of this book. Much like the large Humanist organizations, this book takes an assertive position against religious ideology whenever it clashes with Human Rights ↗.

*Never be a spectator of unfairness or stupidity.
The grave will provide plenty of time for silence.*

By Christopher Hitchens

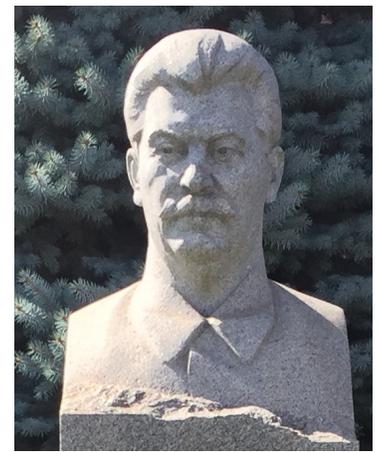
What is State Atheism?

State atheism is the official promotion of atheism by a government, sometimes combined with active suppression of religious freedom and practice [\[Wikipedia/State Atheism\]](#). It has its roots in the attempt of the French Revolution to abolish religion and establish an atheist state. This attempt failed. Mexico also violently suppressed religion between 1917 and 1940, with thousands of people killed [\(Wikipedia/Cristero War\)](#). The largest wave of state

atheism happened in the communist countries from the Second World War to the end of the Cold War – often to cement the power of the respective regimes. This includes Albania, China, the Soviet Union, Cuba, and North Korea. These policies have led to the suppression of religion, arrests, exilations, and uncounted numbers of executions. After the Cold War, state atheism continues to suppress religious minorities in some countries. In China, religion is viewed with suspicion by the state ([The Economist: Religion in China, 2014-11-01](#)), and the Muslim minority of Uighurs is systematically deported and detained ([The Economist: China has turned Xinjiang into a police state like no other, 2018-05-31](#)).

State Atheism is directly opposed to the concept of freedom of religion ↗. Hence, State Atheism is incompatible with Humanism ↗, and thus incompatible with the values that this book promotes. State atheism is sometimes seen as a proof that atheism is evil ↗.

*All I share with communist dictators is the number of gods we believe in.
Would you like to be held responsible for the deeds of all people
who believe in the same number of gods as you?*



Joseph Stalin (Иосиф Сталин), the dictator of the early Soviet Union. Responsible for the death of millions.
[Picture taken in Moscow/Russia]

How do atheism and communism relate?

Most self-declared communist regimes were atheist ↗ ↗. This invites the question how atheism and communism are related.

The founders of modern communism were Karl Marx and Friedrich Engels ([Wikipedia/Communism](#)). They developed a philosophy that was later called "Dialectic Materialism". Its main points are:

1. Matter is the fundamental substance in nature, and mental phenomena are merely the result of it ("Materialism").
2. The history of society is best understood as a struggle between opposing forces ("Dialectics") – most notably between the class of workers and the class of capitalists.

According to Marx, this struggle would eventually be won by the workers, and lead to the dissolution of the classes altogether. This would then be perfect communism.

In this philosophy, atheism is a by-product of materialism: everything is ultimately physical matter, and thus there is no place for the supernatural. This assertion, however, is but one component of communism. In his "Economic and Philosophical Manuscripts", Marx states

*Communism begins with atheism, but atheism is initially far from being communism. [...]
Atheism [...] no longer has any meaning, for atheism is a negation of God [...]
But socialism as such no longer needs such mediation [...]*

By Marx in [Economic and Philosophical Manuscripts/3rd Manuscript/Private Property and Labour](#)

Thus, atheism is an ingredient for Marx' ideology, but nothing more. Atheists agree, observing that communism may imply atheism, but atheism does not imply communism. The strong association of atheism with communism stems most likely from the attempt to differentiate the Western World from the Communist World during the Cold War: The US was deliberately cast into a religious country ("In God we trust" was added to the bank notes), and the Communist countries were explicitly demonised as atheist – thereby reinforcing the ideological difference by a religious difference ↗.

Remark: All that said, Marx' theories are abstract universal hypotheses, i.e., hypotheses that are so general that they are neither verifiable nor falsifiable ↗. They are thus, paradoxically, quite similar to some hypotheses that are brought forward as a proof for the supernatural (ibid).

Humanism

What is Humanism?

Humanism is a philosophy that usually rejects supernaturalism and stresses an individual's dignity and worth and capacity for self-realization through reason [Merriam-Webster Dictionary/Humanism]. Humanism has its roots in the Renaissance, and was not necessarily atheist. However, in the sequel, the word "humanism" came to mean "secular humanism", and thus implied atheism. We follow this terminology in this book, and see Humanism as the ideology that espouses reason, ethics, and justice, while specifically rejecting supernatural and religious ideas as a basis of morality and decision-making [Wikipedia/Humanism]. Thus, Humanism is basically atheism combined with the moral and philosophical values of the Enlightenment. It is the moral alternative to theism.



The "happy human" is the symbol of Humanism [Andres Rojas]

More precisely, Humanism is a life stance that emphasizes

The search for truth

Humanism recognizes that reliable knowledge of the world and ourselves arises through a continuing process of observation, evaluation and revision. It is committed to the use of the rational methods of inquiry, logic, and evidence in developing knowledge and testing claims to truth ↗. We discuss one implementation of this in the [Chapter on Truth](#).

Liberal ethic values

Humanists believe that morality is an intrinsic part of human nature based on understanding and a concern for others. It affirms the worth, dignity and autonomy of the individual and the right of every human being to the greatest possible freedom compatible with the rights of others ↗. We discuss one implementation of this in the [Chapter on Morality](#).

Democracy and Human Rights

Humanism affirms that human beings have the right and responsibility to give meaning and shape to their own lives. Humanism holds that the best political system to this end is democracy, because it allows a people to decide its own fate. While all political systems are imperfect, democracy is the only one that acknowledges that it can be improved. Hence, Humanism is democratic in spirit, and condemns any totalitarian regime, be it religious or secular. In particular, Humanism holds that states should follow the Human Rights ↗.

Freedom of Religion

Humanism remains committed to the freedom of religious beliefs, and holds that individuals and voluntary associations should be free to accept or not to accept any religious belief they wish – as long as that belief does not interfere with the state ↗, and does not curtail the freedom of others ↗. We discuss religion in detail in the [Chapter on Religion](#), and Humanist stance on religion in the [Conclusion](#).

The use of science

Humanism believes that the scientific method, though imperfect, is the most reliable way of understanding the world ↗. We discuss a scientific view of the world, life, and the universe in the [Chapter on the Universe](#).

The rejection of truth by faith

Humanism holds that faith alone cannot establish truth. Therefore, Humanism is atheistic. We discuss atheism in the present chapter.

Thus, Humanism goes beyond atheism by adding the components of rationality, morality, democracy, Human Rights, and a scientific world view. Humanism is the life stance advocated in this book.

While every Humanist is (in this definition) an atheist, not every atheist is a Humanist. However, I have never met an atheist who disagreed with the principles of Humanism. Hence, my guess is that many atheists in the Western world identify with the principles of Humanism – possibly without knowing it.

Being a Humanist means trying to behave decently without expectation of rewards or punishments when you're dead.

By Kurt Vonnegut

Remark: See [IHEU/Amsterdam Declaration](#) and [Secular Humanism/A Secular Humanist Declaration](#) for the sources for the above summary of Humanism.

What is Rationalism?

Rationalism is the practice or principle of basing opinions and actions on reason and knowledge rather than on religious belief or emotional response [[Oxford Dictionary/Rationalism](#)]. The main insights of rationalism are

- to not believe something that is wrong ↗
- to not believe something that cannot be falsified ↗
- to believe what has been shown by evidence ↗
- and to be open and ready to change one's beliefs in light of new evidence ↗

Rationalism is part of Humanism ↗, and thus of the life stance advocated in this book. This is because rational thinking has proven to be one of the safest ways to arrive at true conclusions. We discuss rational thinking in the [Chapter on Truth](#).

What is Science?

Science is the intellectual and practical activity encompassing the systematic study of the structure and behaviour of the physical and natural world through observation and experiment [[Oxford Dictionary/Science](#)]. The basic method of science is to come up with rules that explain certain phenomena, and to test if these rules also predict future phenomena and do not produce contradictions with past or future phenomena ([Wikipedia/Scientific Method](#)). The sciences are the formal sciences (mathematics, logic, statistics, computer science), the physical sciences (physics, chemistry, astronomy, Earth sciences), life sciences/biology, social and behavioral sciences, and applied sciences (engineering, healthcare) ([Wikipedia/Science](#)). Science is directly opposed to superstition ↗.

Humanism ↗, and thus the life stance advocated in this book, considers science to be the best method to learn about the physical world. This is because science has shown to predict natural phenomena much better than any competing method. We discuss a scientific view of the world in the [Chapter on the Universe](#).

We live in a society exquisitely dependent on science and technology, in which hardly anyone knows anything about science and technology.

By Carl Sagan

What is superstition?

A superstition is a belief, not based on human reason or scientific knowledge, that future events may be influenced by one's behaviour in some magical or mystical way [[Wiktionary / Superstition](#)]. Common superstitions include the belief that certain things or events (such as the number 13) bring bad luck, or that certain rituals avoid bad luck (such as looking into the mirror if you have forgotten something in the house). The common trait of all superstitions is that they do not predict bad or good events any better than chance ↗.

With this definition, a superstition is not scientific ↗. It is thus rejected by Humanists, and hence by this book ↗.



Some people in Argentina believe that you have to touch your left

*Don't want a silver dollar,
Rabbit's foot on a string.
The happiness in your warm caress
No rabbit's foot can bring.*

By Elvis Presley in "Good Luck Charm" (by Wally Gold & Aaron Schroeder)

testicle if you say hello to a person
who brings bad luck.
[Taringa]

Remark: Other definitions of superstition make use of the supernatural ([Wikipedia/Superstition](#)). Under such definitions, an atheist cannot be superstitious. However, I think that everyday superstitions are hardly ever consciously connected to the supernatural. They hold that a certain behavior has a certain effect for an unknown reason, but this reason is not necessarily considered supernatural. Hence, this book sticks to the definition of superstition without the supernatural, so that atheists can be superstitious.

What is liberal ethics?

Liberalism is a worldview founded on the ideas of liberty and equality ([Wikipedia/Liberalism](#)). Thus, liberal ethics is a system of moral rules ↗ that gives everybody equal rights ↗, and that gives everybody the maximal possible freedom ↗. The freedom of a person ends only where the freedom of another person begins. Such a system basically says that everything is permitted unless it harms someone else. Thus, such a system typically allows for the right to speak one's opinion, for homosexuality, for pre-marital sex, and for the right to follow, abandon, or change religion.

Humanism, and thus the life stance advertised in this book, advocates such a liberal ethics ↗. We discuss a liberal moral framework in the [Chapter on Morality](#).

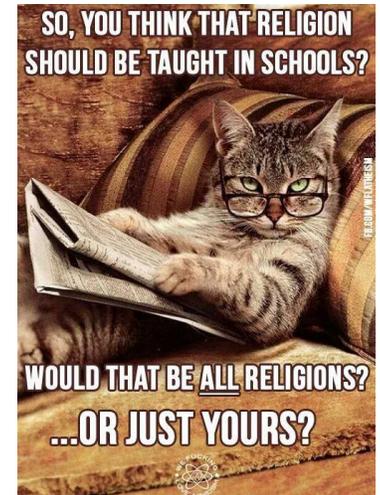
What is Secularism?

Definitions of the word "secularism" vary from atheism and naturalism ↗ ↗ to Humanism ↗ and irreligiousness. The word can also mean the separation of religion and politics. We will use the word in this sense in this book. This type of secularism is also called *laïcité*. It wants the state to take no opinion in religious matters, and religion to take no influence in political matters ↗. This means that religion should be kept out of politics, national identity, law making, and public education. It regards religion as a private matter, which can be practiced by individuals and organizations, but which should not interfere with the government. Secularism is the stance advocated by Humanism ↗ – and thus by this book. Humanism holds that religion should take no influence on the state, and that it has to respect the secular law just like all other organizations ↗.

Secularism does not imply atheism. People who believe in God, and who practice their religion, can still find that religion should be kept out of politics. Secularism also does not imply prohibition of religion. On the contrary, secularism explicitly separates religion and state, meaning that the state cannot prohibit religion. Secularism is one way to implement freedom of religion ↗.

There is no tradition of scientists picketing Sunday Schools and stopping children from hearing the stories of the Bible. So why is there a push for Christians in the US to stop people in school from hearing the stories of science?

By deGrasse Tyson



[Found in: Atheist Cartoons]

What is freedom of religion?

Freedom of religion means that everybody has the right to practice their religious world view, as long as this does not harm other people. In the common understanding of the term, it also includes the freedom to not practice any religion at all, or to change one's religion. Freedom of religion also means that people are free to hold any view on the supernatural, be it in the frame of a religion or not ↗ ↗. Naturally, freedom of religion also means that atheists can be atheists and agnostics can be agnostics ↗ ↗. Atheism itself does not take a stance on freedom of religion. Humanism, however, does ↗. Humanism holds that every person or association may hold supernatural beliefs as they please. This is a consequence of the liberal ethics that Humanism proposes ↗. However, this freedom finds its limits when the religion imposes harm on non-consenting people, interferes with the secular law, or promotes unequal rights ↗.

Freedom of religion is a difficult concept. If a person is 100% convinced of their religious attitude (or non-religious attitude), then it seems only logical that this person will want the rest of humanity to follow the same attitude. Following this line of reasoning, some atheistic governments violently enforced atheism ↗. Vice versa, many religious countries do not grant freedom of religion ↗ ↗. Furthermore, there is dispute about how far freedom of religion should go when secular rights and religious duties clash. Humanism is clear on this question: Everybody shall be able to live according to their religion, but in the case of a conflict, the secular law has to prevail ↗.

It does me no injury for my neighbor to say there are twenty gods, or no god. It neither picks my pocket nor breaks my leg.

By Thomas Jefferson

Humanism and Humans

The word "Humanism" is related to the word "human", because humanism cares exclusively about human wellbeing. In Humanist philosophy, the ultimate goal is to make humans happy, healthy, safe, and just. In recent decades, the notion has been broadened to include also the other species. This is sometimes made explicit by using the term "Evolutionary Humanism" ([Giordano Bruno Stiftung: Evolutionary Humanism](#)). This type of Humanism (which cares not just about humans, but also about the well-being of animals) is the position advertised in the present book ↗. For simplicity, we will talk of humans in what follows, keeping in mind that we accord equal protection to the other species as well.

The Humanist position is that nothing can be more important than the well-being of humans. This sounds as if Humanism were hopelessly individualist – caring more about individual people than about higher values. And this is indeed the case. In particular, the following concepts cannot have importance in Humanism (Stephen Pinker: Enlightenment Now):

Nations

Nationalist societies see the nation as the highest good, and are willing to sacrifice their people for the good of the nation. Humanism opposes such thinking. In Humanist philosophy, nations are human constructs that exist to serve humans – not vice versa ↗. Therefore, Humanism is international in its spirit, and refuses to lift the concept of "a nation" to the importance it accords to humans.

Races

Racism is the position that certain ethnicities would be superior to others. Nazism has further developed this idea into the concept of "racial purity", which holds that a race has to be "kept clean" by prohibiting intermarriage – and even by destroying other races. Such ideas are contrary to Humanism. For a Humanist, all people are equally worthy of care ↗, and no race is better than the other. In particular, a race itself cannot be an entity worthy of protection.

Community Laws

Some communities are governed by their own laws. Examples can be family clans, ethnic or religious minorities, or youth gangs, which have rules that dictate which behavior is acceptable and which behavior is not. Violating these rules is seen as something comparable to treason, and is socially sanctioned. Such "laws" are contrary to Humanist spirit, if they limit the freedom of the individual against their will. Humanism accords the same rights to everyone ↗, no matter which community they belong to. In particular, the community itself or its principles cannot be an entity worthy of protection more than the individual human.

Natural Law

A "natural law" is a moral principle that is held to exist independently of the positive law of a given political order, society or nation-state – most often considered to be given by a god ([Wikipedia/Natural Law](#)). Such "laws given by nature" have been used to condemn homosexuality, gender equality, or painkillers during childbirth. For the proponents of such ideas, the "natural laws" are something that humans have to follow deontologically. They have a higher value than human well-being. With this, such thinking is opposed to Humanism, which values human wellbeing above all else. Besides, Humanism is atheist, and thus considers that the "natural laws" do not at all come from nature, but were made by men and then declared to come from nature ↗. In Humanism, it is humans who have to make their own rules ↗.

The Supernatural

Religions value the supernatural more than human life ↗ – both supernatural beings and supernatural rules. This contradicts Humanist philosophy, which posits that we should care for humans, and not for the supernatural concepts that they came up with. Humanism defends the freedom of religion ↗, but only in so far as the religion does not cause harm to people ↗.

Suffering is suffering, no matter who endures it.

Scholarship is scholarship, no matter who procures it.

Humanism and Christianity

Humanism believes in the individual rights of each person. This belief was quite possibly taken over from Christianity, which postulated that God created all humans with equal dignity. However, Humanism does not need this creation story for its belief in equal rights. Humanism gives people equal rights, no matter how humanity came into existence.

Humanism has departed in other ways from Christianity: Humanism has advocated equal rights for men and women, freedom of religion, freedom of thinking, the rights over one's own body, and a scientific understanding of human evolution long before Christianity did ↗ ↗ ↗ ↗ ↗. Furthermore, Humanism also incorporates the elements of science, democracy, and freedom of speech, which have no counterpart in Christianity.

Humanism and the Enlightenment

Humanism traces its history back to the Age of Enlightenment: the intellectual and philosophical movement in Europe during the 18th century, which centered on reason as the primary source of knowledge and advanced ideals such as liberty, progress, toleration, fraternity, constitutional government and separation of church and state [[Wikipedia/Age of Enlightenment](#)]. Since that time, humanity has gone through several painful periods: The industrialization brought distress to millions of workers – in particular to the underage ones. Colonialism has subdued entire continents, and reduced them to sources of workers, slaves, and natural resources. Two world wars have devastated the world, and have killed humans on an unprecedented scale. The rise of communism on one side of the iron curtain, and merciless capitalism on the other side has devalued humans as individuals. These backslides nourish the idea that the rise of science and reason has brought humanity more bad than good. This "Second Culture", as Stephen Pinker calls it, considers material and scientific progress, as well as reason, an impediment to human well-being ↗ ↗ ↗ ↗ ↗. It holds that things get worse as we drift away from the original sources of meaningfulness, which include religion, the community, a spiritual approach to life, and a mystical appreciation of nature ↗ ↗ ↗.

And yet, this viewpoint is not correct. The Enlightenment and its ideas have started a global improvement on nearly all axes of human well-being (Steven Pinker: Enlightenment Now, p. 1- 452):

Technology

Trains, airplanes, steam ships, running water, air conditioning, dishwashers, electrical light, photography, recorded music, central heating, computers, the Internet – basically all appliances that we use today did not exist 300 years ago. It is a fair guess that even the critics of science and technology would not want to live without them. Hans Rosling has argued that the washing machine alone has freed mankind (and women in particular) from thousands of hours of work per life time – and it still does, and in more and more parts of the

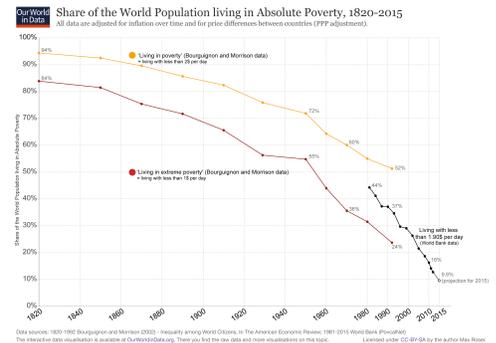
world ([Hans Rosling: The Magic Washing Machine](#)). This technology also becomes safer: Over the course of the 20th century, Americans became 96% less likely to be killed in a car accident, 99% less likely to die in a plane crash, and 95% less likely to be killed on the job.

Health

Even adherents of the Second Culture admit that in terms of health, humanity has made impressive advances: Average life expectancy has doubled from 30 years in the year 1760 to 70 years in the year 2000 – globally. In 1750, one in 3 children would not make it to their 5th birthday in Sweden, one of the richest counties in the world. Today, child mortality is down to 10% in the poorest countries on Earth. That is still too high, but corresponds to billions of lives saved. Furthermore, we can now contain illnesses and epidemics. Smallpox alone disfigured and killed hundreds of millions of people. It has been eradicated and no longer exists today.

Equality

Contrary to a public opinion, material equality has improved drastically over the past 200 years. The percentage of people living in extreme poverty (i.e., with less than 2 USD per day) has fallen from 90% before the Enlightenment to 10% now (see figure). This holds even though the world population has increased sevenfold over this time. The percentage also keeps declining. It is still too high, to be sure, but global inequality is actually decreasing ([Wikipedia/Gini](#)). Let us not forget that the working conditions that we deplore today for Bangladeshi child workers were the norm across the entire world before the Enlightenment. In Europe, people would sell themselves as slaves to get through the winter. That has become unthinkable in the rich countries. Rich countries now spend 10%-30% of GDP on social welfare – up from 1% or 0% in 1900.



Share of the world population living with less than 2 USD per day, adjusted for inflation ([Our world in data: Extreme poverty](#))

Environment

All this progress has taken a hard hit on the environment. People have now understood this. 195 countries signed a pact to reduce the effects of climate change ([Wikipedia/Paris Agreement](#)). Chlorofluorocarbon is being phased out globally ([Wikipedia/Chlorofluorocarbon](#)), and the ozone layer is coming back ([Wikipedia/Ozone](#)). Deplorably, we have only just begun to address the damage that we have created, and some major polluters are not playing the game. On the other hand, nearly all of humanity is united in the goal to do something good – something that did not exist prior to 1900.

Peace

The two world wars were the deadliest wars in human history. Since then, the number of battle deaths has been decreasing. Even the deplorable conflict in Syria at the time of this writing kills nowhere as many million people as the Korean War, the Vietnam War, the wars in India, in China, in Sudan, in Uganda, in Bangladesh, in Cambodia, and in Mozambique did – in the 20th century alone. The number of people killed in war each year today is an 18th of what it was in the 1950's. It may be astonishing, but in terms of number of deaths, humanity has entered the "Long Peace" after the Second World War ([Wikipedia/Long Peace](#)). Quantifying the misery in cold numbers is by no means callous to the suffering of victims – on the contrary, it ensures that each victim's suffering is honored equally (Steven Pinker: Enlightenment Now, p. 160). While there are still wars, and there will always be, there has been a fundamental change in 1945: War is now illegal ([Wikipedia/UN Charter](#)). Not so long before that, war was idealized as a romantic duty for the fatherland. There was nothing bad in attacking some country in order to enlarge one's own country. Religious texts have no shortage of examples. The idea that humanity should aim for peace (without domination by one power) is a new one. It was born in the Enlightenment ([Wikipedia/Perpetual Peace](#)).



Saint Petersburg was built in 1703 on territory that Russia and European countries conquered from Sweden – mainly because Sweden had a young king at the time and was considered an easy target. Tens of thousands of serfs died building the city.

Justice

The Enlightenment has brought us the moral milestones that are the foundation of our Western culture today: The abolition of slavery, the equality of all people before the law, the rule of law, the banning of torture, tolerance towards other creeds, freedom of thought, freedom of speech, freedom of the arts, freedom in the choice of a partner, and freedom in general, as long as the freedom of others is not engaged. While we consider these rights normal today (and while we are still a long way from achieving them globally), the very existence of these ideas is thanks to the Enlightenment. More than that, the insight that we have to develop these moral concepts ourselves in the first place (rather than obtaining them from some god or king) is a child of the Enlightenment ↗ ↗.

Knowledge

Before the Enlightenment, barely 20% of the population could read – even in the richest countries. Now, literacy is at 80% globally, and on the rise. Before the Enlightenment, we had only anecdotic knowledge about the genesis of the universe, the functioning of a cell, the diversity of the animal kingdom, the chemical elements, or the laws of physics. Today, the physical laws that govern our everyday life are completely known. The genesis of the universe and life has been traced back all the way to the Big Bang ↗. And for all our current irrationality, few influential people today believe in werewolves, unicorns, witches, alchemy, astrology, bloodletting, miasmas, animal sacrifices, the divine right of the kings, or supernatural omens in rainbows and eclipses ↗. And yet, these beliefs were ubiquitous in pre-Enlightenment times.

Happiness

Happiness is difficult to measure ([Wikipedia/Happiness](#)). However, by and large, the different studies show that happiness correlates with health, GDP per capita, more freedom, higher life expectancy, low violence, and the rule of law ↗ ([Wikipedia / Well-being, Happiness economics](#)) – that is, contrary to a popular opinion, by and large the factors that we have already discussed.

So while life is for sure not perfect (and will possibly never be), life is immensely better now for more people than it was 300 years ago. This progress has nothing to do with religion ↗ ↗. All major religions were already in place for more than a thousand years in the year 1700, and they have not used that time to fight for scientific progress, the abolition of slavery, the equality of genders, freedom of religion, or the abolition of cruel punishments (as we discuss in the [Chapter on Criticism of Religion](#)). On the contrary, if anything, the progress has gone along with less religion ↗. The factors that have contributed to this progress include a quest to systematically improve the life of people, the use of reason to solve problems, a better scientific understanding of the world (including the human body), and better ideals (such as equality for all before the law, ostracism of war, freedom as a value, and the Human Rights). These are the values of Humanism ↗.

Humanism says that if we want to push this positive development further, we should not condemn science and progress, and wallow in a mystic appreciation of nature – let alone seek earthly betterment in more religiousness. Rather, we should appreciate the ideas of the Enlightenment: reason, science, freedom, education, and, by extension, the Human Rights. We should value these principles, teach them, and develop them ↗. Only when we avow ourselves to the principles that have brought us so many good things we can continue to produce more good things for more people.

If you had to choose one moment in history in which you could be born, and you didn't know ahead of time who you were going to be – what nationality, what gender, what race, whether you'd be rich or poor, gay or straight, what faith you'd be born into – you wouldn't choose 100 years ago. You wouldn't choose the fifties, or the sixties, or the seventies. You'd choose right now ↗.

By Barack Obama

How did you become an atheist?

All of the above discussions about gods, atheism, Humanism, and religion are pretty abstract. So let me tell you my own experience with atheism. What follows is a purely subjective account of my thoughts.

God

I grew up in a Christian environment. I went to a Christian school. I went to mass and had courses on Christianity. I learnt about Jesus, Bible, and God. I was also an altar boy. And yet, the idea of a god and the biblical miracles always looked implausible to me. As a child already I did not believe that Jesus walked on the water. People do not walk on the water. So I discarded all these stories, and the existence of God with them. However, during my first years as an atheist, I was still considering the possibility that a god existed. Since I lived in a Christian culture, I was considering of course only the abrahamic god ↗. In all discussions about God, I was arguing against God, but did not know what God would be if he didn't exist.

It was only later that I understood what God is if he doesn't exist. He is a fictional character. Just like Harry Potter or Cinderella, he is a product of our imagination ↗. He does not float around out there in some dark inexistence (as I imagined before). Rather, he is a character in a story. Anybody can make up such a story. I later did that by myself. It is actually easy to create gods ↗. Once I got that, I could finally answer the question of why I did not believe in God: Because he is a character in a story. Nobody believes in Cinderella either. If you close the book, she's gone. Likewise, if you close the Bible, God is gone. I explain this way of thinking in the [Chapter on Gods](#).

Truth

That still left me with the question of where to draw the line between truth and falsehood. I was very sure that the story of divine creation would be nonsense, but I could not prove it. Many other philosophical questions came up in discussions with friends: Isn't there maybe a conscious being behind everything? ↗ Isn't God the one-ness of this universe? ↗ ↗ If there is no god, then how do you explain the human soul? ↗ I was pretty sure that all of these arguments were nonsense. But I did not know how to show it. It did not help that I studied Philosophy of Mind, which is concerned with equally abstract conundrums. I argued with Occam's Razor, saying that an explanation that is simpler is better. However, the razor is nothing more than a subjective preference. It was only much later that I discovered the magic sword that separates the truth from the nonsense: Falsifiability ↗. If something cannot be proven wrong, then it is not falsifiable. This means that it does not have any consequence on this world. This means that the hypothesis is nonsense. The theory that God exists, in particular, is unfalsifiable ↗. Falsifiability reliably cut away all the philosophical blabla, and left only the real world. It worked so well that I am still wondering why it is not taught at school. And it worked so well that it also cut away things that I previously held dear. In these cases, I had to understand that what I considered the truth was in fact nothing more than a subjective conviction. I elaborate on this theory of truth in the [Chapter on Truth](#).

Once I knew how to draw the boundary between reality and imagination, I felt much better. What followed was a deeper understanding of evidence: Evidence for a hypothesis is a validated theory that predicts it ↗. A theory is false if it produces conclusions that contradict reality ↗. Any theory that does not produce conclusions is unfalsifiable, and any theory that produces wrong conclusions is false ↗. This insight changed my view on life. While, before, I was willing to grant things like superstition, homeopathy, prayer, and lucky charms some *raison-d'être*, I came to understand that these things have no effect other than psychological ↗. If you pray, touch wood, or take a homeopathic medicine, it does not work. This is a pretty radical thought in a world that routinely does these things. So I was hesitant at first. But then I came to see that I can defend my view without any fear. Prayer really does not work. And walking under a ladder really does not bring bad luck. I found out that I can completely rely on this insight. All this talk about potential consequences of prayer ("Yes, but *maybe* it helps!") is just wrong. It does not have any effect. It's just nonsense. Before, there was always this aura of untouchability around religious issues: But maybe there is a God? But maybe prayer helps? But maybe you go to hell? I learned to become more bold on these issues: no, God is imaginary. Prayer does have no effect on this world. And no, there is no evidence for this hell. Once you try it out, you come to see that it is completely safe.

Science

Now if all of this is cut away, we still want to know how this world came into existence. This made me explore the scientific perspective of things. I was amazed to find how much science already knows about life and the universe. It is fascinating to see how small our planet is in the context of the universe, how life can be explained by chemical reactions, that humans existed in different species that even merged, and how a snowflake can be so beautiful by purely natural processes. I can only warmly recommend the summary of all this in the [Chapter on the Universe](#). I am sad to see how the majority of humanity follows ancient rites and myths, while science does the real job of explaining the physical world, developing inventions, and healing illnesses. It deserves far more credit than we usually give it.

Morality

This leaves the question of morality. How do we know what is good and what is wrong? Again, it is fascinating to dive into history: Did you know that the Mesopotamians had written laws 2000 years before Christ? Some of these laws were written literally in stone, and exist until today. You can actually see them. They regulate theft, slavery, compensation for lost profit, inheritance, divorce, paternity and the presumption of innocence – all 1000 years before Moses supposedly received his 10 commandments. Once I saw how many different laws people developed throughout history, I came to understand that morality is not something absolute. It is not a property of a behavior that we can discover like the weight of an electron. Rather, morality is an attempt by humans to regulate their life. Humans make rules to make sure they can live their lives unharmed. A behavior becomes "morally bad" just because we decided to punish it. A law is the law because there is a government who puts you in prison if you don't follow it. That's all there is to a law. I elaborate more on this insight in the [Chapter on Morality](#).

Now this is of course horrible! It means that we can make any law! There is no objective criterion to say, e.g., that slavery is wrong. This is just a convention between humans (and a rather recent one, by the way). This is very disturbing ↗. Can we just make any law we want? It took me some time to understand that, yes, indeed, we can make any law we want. This heaps an enormous responsibility on us. Some people shy away from this responsibility by retreating to some rules that they are told are divine. But once you accept that, indeed, humans make the rules, there is a huge task to solve here: What are the "good" rules? With a Western background, I quickly arrived at the conclusion that, for me, the good rules are those that give equal maximal liberty to everybody ↗. This simple constraint already is far superior to religious rules, which usually don't give the same rights to women, slaves, or adherents of other religions ↗. Based on this, I developed a liberal moral framework ([Thoughts on Ethics](#)), which I also briefly discuss in this book ↗. One of the consequences of this is that human law evolves: Behaviors that were once shunned (such as homosexuality) can become acceptable. Vice versa, behaviors that were once permitted (such as keeping slaves) can become immoral. Only religious values are often frozen in time ↗.

Humanism

All of this leads to a system of liberal values, belief in science, and rejection of myths. I was happy when I found that there is actually a word for exactly this combination: It's called Humanism ↗. There is a sizable proportion of people who share my values – even though they probably don't know it's called Humanism.

All of this still left me with the question of the questions: What is the sense of life in such a world? ↗. The main interpretation of the question is probably "What is the intention that someone pursues with my life?". In an atheist world, there is no god who pursues an intention with my life. So the role is vacant. So I decided to volunteer myself for the job. I am the one who pursues an intention with my life. And this intention is the sense of my life. I elaborate on this in the [Chapter on the Sense of Life](#).

Thank God I'm an atheist!

By Georg Christoph Lichtenberg

Questions for atheists

Is atheism a belief?

Atheism is the rejection of a belief. Positive atheism ↗, in contrast, is the belief that the supernatural does not exist. Hence, it is a belief.

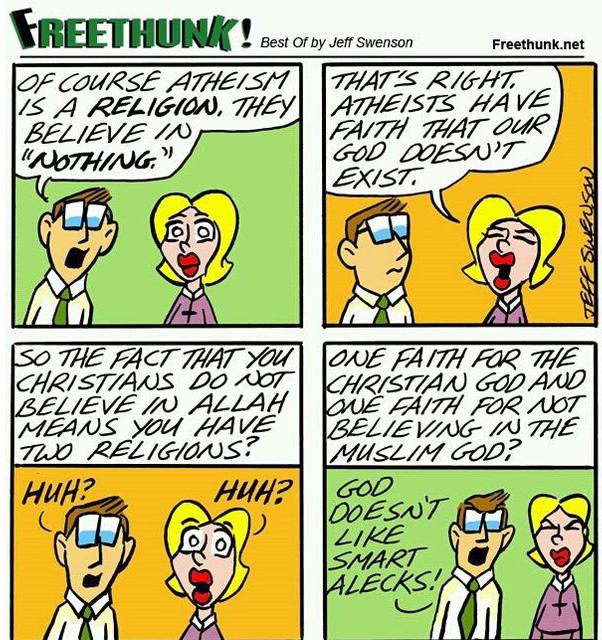
Is atheism a religion?

A religion is the service and worship of God or the supernatural [[Merriam-Webster Dictionary/Religion](#) ↗]. With this definition, atheism is not a religion, because atheism actually rejects the belief in something supernatural ↗.

If you do not agree with this definition of religion, see the next article [↗](#).

So atheism is a religion? No, I'm afraid not, no more than being completely healthy is just another kind of disease.

By David Horton



Isn't any belief a religion?

Our definition of religion [↗](#) [↗](#) is debatable. We could say that "religion" is simply another word for "belief". Since positive atheism is a belief [↗](#), positive atheism would be a religion.

"Believing something" means to accept something as true [Oxford Dictionary/Believe]. Believing something does not necessarily have to do with religion in the usual sense of the word. For example, you and I take it for true that the moon orbits around the earth. So, if we take every belief as a religion, then believing that the moon orbits around the Earth is a religion. If you believe that you will get up tomorrow at 8 o'clock, then this is also a religion. And atheism becomes a religion, too.

However, we rarely talk of our "religion" that the moon orbits around the Earth. In order to differentiate between arbitrary beliefs and beliefs in supernatural beings, this book calls the former a "sets of beliefs" and the latter "religions". This is a purely pragmatic decision, which conforms to the way in which the words are commonly used [↗](#).

Religion is a belief concerning the supernatural. Then, atheism is a religion.

Religion is sometimes defined as a belief concerning the supernatural. Since positive atheism is the belief that the supernatural does not exist, positive atheism is a religion in this sense [↗](#).

This is, however, just a play with the definition of words. We are talking here about the belief that the supernatural exists, together with associated rites – no matter how you call this phenomenon. This book calls it "religion", but if you think that "religion" is the wrong word (because it includes atheism), you can use any other word. It suffices to download this book, and replace all references to "religion" by a more precise word, such as "theistic religion". This book is about a concept, and not about how you call it [↗](#).

You are free to use the word "car" to mean "t-shirt". Then you can prove that I am wearing a car. It is just not the way the word is usually used.

Even atheists believe in something.

The argument goes that everybody believes in something. Some people believe in love, others in power or in music. Even atheists believe in something. The question is whether this renders atheism inconsistent.

Atheists have no belief in supernatural beings ↗. Since love, power and music are not supernatural, a belief in these things (whatever it implies) is not inconsistent with atheism ↗.

- *Even atheists believe in something!*
- *Yes, but not in the supernatural.*

Everyone believes something

We cannot know everything for sure. Therefore, we usually take some facts for granted, i.e. we believe them. Hence even atheists believe something. Hence, we can ask, are they really atheists?

Like all people, atheists may believe facts that they cannot verify. However, this is not a contradiction to atheism, because atheism excludes only the belief in supernatural beings. See above ↗ for a treatise on the difference between a belief and a religion.

Besides, atheists hold their belief about the supernatural because it appears most plausible to them. If ever their belief is proven wrong, they would change their belief. This distinguishes them from theists: First, a theist's belief in God cannot be proven wrong. Second, some theists continue to believe certain things even if they have been proven wrong – as we will discuss in the [Chapter on Proofs for Gods](#) ↗ ↗ ↗ ↗ ↗.

Can atheism exist without religion?

Literally, "A-theism" is the contrary of "theism", the belief in gods. Therefore, the question arises whether "atheism" can exist without "theism".

The answer is: Yes, it can. The concept of atheism is meaningful even if there were no theists. Consider again the god Khonvoum ↗. If people who worship this god are called Khonvoumists, then you are probably a non-Khonvoumist. In fact, you have been a non-Khonvoumist through all your life, without even knowing it. People all over the world were non-Khonvoumists before belief in Khonvoum came into existence. And all people will be non-Khonvoumists if Khonvoumism eventually dies out.

Similarly, atheists are atheists no matter whether some people believe in gods or not.

In fact, "atheism" is a term that should not even exist. No one ever needs to identify himself as a "non-astrologer" or a "non-chemist." We do not have words for people who doubt that Elvis is still alive or that aliens have traversed the galaxy only to molest ranchers and their cattle. Atheism is nothing more than the noises reasonable people make in the presence of unjustified religious beliefs.

By Sam Harris in "Letter to a Christian Nation"

Not everything can be proven!

Atheists are critical of the belief in God, because the existence of God cannot be proven. This leads to the idea that atheists only believe what can be proven.

This is not true. Atheism by itself is just the rejection of belief in the supernatural – it does not say anything about beliefs in other things. One can be an atheist and believe that the Earth is flat, for example. Even if an atheist demands a proof for God before he believes in him, he is free to believe all kinds of other things without a proof. This is much like people believe in God without a proof, but are free to demand proofs for other things. For example, most people (atheists or theists) believe that democracy is the best form of government. Still, we do not have a proof for that, and so far no one has asked for one. However, most people (atheists or theists) will not believe that they have won the lottery until they have seen a proof. For some things, we want proofs, for others, we don't – there is nothing wrong about it.

Things are different if the belief comes with duties ↗. Consider again the Bambuti's belief in Khonvoum, the god of the forests ↗. To believe in Khonvoum, you have to raise your left hand in prayer every morning and speak the holy words "Khonvoum, kolao esa nokui". You have to attend regular group dances to appease Khonvoum. You have to renounce sweets, because Khonvoum is weary of any food source that is not his own. You would educate your children in devotion to Khonvoum, and you would not allow them to marry anybody else than a follower of Khonvoum. Before agreeing to this, you would probably demand proof of Khonvoum. For the very same reason, atheists demand proof before adhering to Yahweh ↗.

The same goes if the belief starts exercising an influence on society. Suppose for example that the Bambuti became the dominant group of people in your country. Then they would start imposing their belief in Khonvoum. They would go from door to door to convince you that you should pray to Khonvoum in order to secure good hunting. They would gain seats in parliament and make a law that prohibits eating sweets. They would introduce the doctrine of how Khonvoum created the Earth into schools and textbooks. They would print "In Khonvoum we trust" on your bank notes. If this really happened, then you would beg to differ. You would want to see proof for these Khonvoum stories. This is why atheists demand proof for these Yahweh stories ↗.

The problem with religion goes a bit further: Religious beliefs cannot just not be proven right. They cannot even be proven wrong. This is a fundamental problem that we discuss later ↗.

Tell people that there is an invisible being who created the universe, and the vast majority will believe you.

Tell them that the paint is wet and they have to touch it to be sure.

By [George Carlin](#)

Atheism cannot produce anything positive

Atheism is the rejection of a belief. Thus, it is assumed that it cannot bring forward anything constructive. Furthermore, atheism is not an organized world view, so that no contributions to our culture carry its explicit signature.

We first note that, if a belief is harmful, then the absence of that belief is actually something positive. Consider for example the belief that female genital mutilation purifies the woman spiritually. If we remove this belief, the world actually becomes better. If we remove religious reasons for conflict, people have one less reason to go to war. Still today, religion lends its force to around half of the world's most deadly conflicts ↗. If people had no religion, they would in many cases not even know whom to choose as their foe. Thus, the absence of a belief is not necessarily bad.

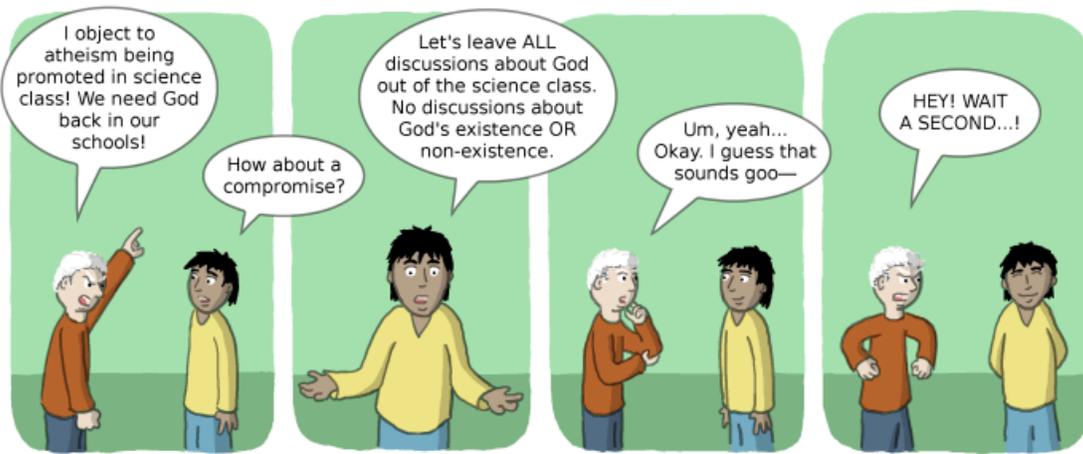
The same is true for the ills that religion brings us still today: The ancient values ↗ that some religions defend today would be history if people did not believe. Again, the absence of a belief can be something positive.

Apart from this, atheism can even bring along constructive contributions. This is because if God is not used as an answer to the questions of life ↗, then a lot of work is needed to come up with such answers. Thus, some atheist people feel a particular necessity to address the scientific and philosophical mysteries of life. This includes moral thinkers and activists ↗, philosophers ↗, and scientists ↗.

Humanism ↗, the particular brand of atheism that this book advocates, goes beyond disbelief in gods. It adds a moral dimension, a world view, and a political attitude (the support of democracy). It can thus be considered a comprehensive life stance in its own right.

Freeing someone from error does not mean depriving him of something. It means giving him something. It means giving him the insight that he was in error — which is in itself a piece of the truth.

By [Philaletes](#) in [Arthur Schopenhauer's "Dialog about Religion"](#), translated and adapted



[Atheist Cartoons/page 2]

Who created the universe?

Most religions provide a supernatural explanation of how the universe came into existence. Atheism can have no such explanation. Thus, a frequent question is how the world was created in an atheist world view.

The short answer is: Atheists do not know how the universe came into existence. Each year, science tells us a little more about the birth of the universe, but plenty of things are still unknown. We discuss this topic in detail in the [Chapter on the Universe](#).

If we do not know how the universe came into existence, that does not necessarily mean that it was created by God. Just because we do not know the answer, it does not mean that the supernatural answer would be the right one. Atheists hold that it is better to admit that "We do not know" rather than to believe in some explanation without scientific evidence. In particular, the universe may not have come into existence at all. It may have always existed ↗. Until we have more evidence in these matters, we should just not believe anything. This is not just common sense, but an imperative: Only when we admit that we do not know, we will be able to know one day ↗.

If we abandon the requirement for scientific evidence, then everybody can come up with their own belief. This is indeed what happens: There is a plethora of supernatural creation narratives ↗. Everyone believes theirs is the right one, while everyone has as little evidence as everyone else ↗. This makes such explanations meaningless in atheist eyes. We discuss this way of thinking in detail in the [Chapter on the God of Gaps](#).

Now atheists do not know the origin of the universe. Believers do not know the origin of God. Does this not put atheists and believers on equal terms? It actually does not: We know for sure that the world exists, and thus it makes sense to search for its origin. The same cannot be said of God. Thus, atheists are one step ahead of the believer, because they know at least that their object of study exists.

I don't know where the universe came from. But I can tell you it was not created in 7 days.

Doesn't State Atheism show how bad Atheism is?

State atheism is the forced introduction of atheism in a country. State atheism has led to the persecution, torture, and death of millions of people ↗. Therefore, atheism is (understandably) associated to the atrocities of these regimes. This association seems to show that atheism is immoral.

State atheism was mainly pursued by regimes that called themselves communist. We have discussed the relationship between communism and atheism in ↗, showing that while communists are atheists, atheists are not necessarily communist. To see this, consider an example: The leaders of the Soviet regime enforced the use of Russian in the Soviet Union. It is wrong (according to most moral frameworks) to force people to speak Russian. Still,

that does not mean that there would be anything wrong with Russian. Similarly, it is wrong to force people to become atheists ↗. Still, that does not make atheism wrong.

The association of atheism with communism was a deliberate political move in the US to cast the political struggle with the Soviet Union as a struggle of religion versus atheism ↗. But atheism is just the absence of belief in God. It does not come with any moral imperatives or laws. In fact, atheism is often criticized precisely for not having any laws or rules ↗. There is no book of the "Rules of Atheism". Thus, by its very definition, atheism cannot have any rule that asks people to kill other people. Nothing in the concept of atheism entails that we should force other people to be atheists. On the contrary, Humanism explicitly advocates freedom of religion ↗. Humanism says that we should give everybody the right to believe or disbelieve as they please. Compare that to some religious interpretations, which force their adherents to convert and/or kill people who do not believe ↗.

*Atrocities are committed by atheists, but never in the name of atheism.
This distinguishes atheism from religions.*

By Richard Dawkins

Why are Atheists not rather Agnostics?

Atheism is the denial of the supernatural, while Agnosticism leaves the option that the supernatural exists. Then we may ask whether it is not safer to opt for agnosticism ↗.

Then let's opt for agnosticism. In this view, we do not believe in that the supernatural exists, and we do not believe that it doesn't. So God could exist. Then we have to apply the same logic also to the other gods. Khonvoum, the god of hunt of the Bambutis ↗ could also exist. He could have created the world together with Tore, the god of the forest. We do not exclude this option any more. Unicorns, likewise, could exist. It is true that they have not been seen, but their absence has not been proven either. So we have to admit that they could exist. The same goes for Cinderella ↗. Of course, the mainstream opinion is that Cinderella is a fictional character. However, atheists say the same of God. Hence, if we want to be correct, we have to at least admit the possibility that Cinderella exists in the real world. After all, she has not been proven to not exist.

Now, do you believe that such agnostics exist? My guess is rather no. Most agnostics claim to be agnostic about the Christian god, but they will have a pretty strong opinion on the existence of Tore, Khonvoum, Odin, Cinderella, and unicorns. This makes the agnostic position inconsistent in atheist eyes. ([AtheistCartoons/page 7](#))

Isn't an agnostic just an atheist without balls?

By Stephen Colbert

Chapter on Atheists

Introduction

This chapter will discuss some general facts about atheists, such as their demographics, their organization, and their views on morality. It also addresses stereotypes about atheists. The chapter consists of the following sections:

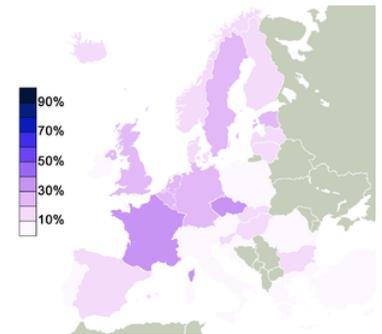
- [Atheists](#): Discusses the demographics of atheism, notable atheists, and the persecution of atheists.
- [Atheists & Morality](#): Discusses claims that atheists would be immoral.
- [Atheist Attitude](#): Counters stereotypes concerning atheist attitudes.
- [Atheists & Emotion](#): Discusses emotional arguments against atheists.
- [Atheist Beliefs](#): Treats beliefs about atheist beliefs.
- [Atheists & Society](#): Discusses the atheist's role in society.

Atheists

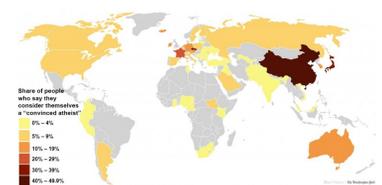
How many atheists are there?

It is hard to count the number of atheists in the world, for several reasons. First, global surveys on religion often do not provide atheism as an option. The classical options in such surveys are the world religions, and "other" or "none". These "other" options group together agnostics, atheists, non-religious people, and adherents of minority religions. Second, definitions of atheism vary, and can include critical positions of agnosticism, non-theistic religions, and non-religiosity ↗. Third, atheism is socially unacceptable, oppressed, or even illegal in a number of countries ↗. This makes it hard or even illegal for pollsters to ask, and anywhere from awkward to unimaginable for atheists to answer. Vice versa, some governments support or even enforce atheism, which may yield an overrepresentation of atheism in the polls ↗.

Global surveys on religious attitude report the number of atheists to be between 2% and 8% ([Wikipedia/Demographics of atheism](#)). I found two polls that systematically asked for an atheistic viewpoint in a larger number of countries. The 2005 Eurostat Eurobarometer poll ([Eurobarometer group: Special Eurobarometer 225 / Wave 63.1 / Social values, Science, and Technology](#)) said that 52% of European Union citizens responded that "they believe there is a God", whereas 27% answered that "they believe there is some sort of spirit or life force", and 18% that "they do not believe there is a spirit, God, nor life force" (which is most likely atheism). A [2012 poll by WIN/Gallup International](#) found the number of atheists to vary from 0-4% in African countries to 5-10% in some richer countries, closer to 50% in China. As cautioned before, such statistics have to be taken with a grain of salt.



Percentages of people in European countries with no belief in a spirit, god, or life force
[\[Wikipedia/Demographics of atheism, based on Eurostat\]](#)



Percentage of convinced atheists according to the [WIN/Gallup International poll](#)
[\[Washington Post: Where the world's atheists live, 2013-05-23\]](#)

What makes atheists atheist?

We have seen that the vast majority of people in the world are religious ↗. As we have argued before ↗, people have always been mainly religious throughout written history. This is due to a number of factors that we discuss in

the [Chapter on Following Religion](#). Now how do atheists become atheist? Why are they not subject to the same factors that make all the other people religious?

We first note that atheism as a popular life stance is a modern phenomenon. Atheism did not have many adherents before the 19th century ↗. Since the 19th century, the factors that make people religious have become less strong. For example, there is less need today to explain the phenomena of nature by the supernatural ↗. This has nurtured the debate whether the supernatural exists at all. Some people then resolve that the supernatural does not exist. I am, putatively, listing some of the factors that may play a role in this process:

- Many atheists become atheist by rejecting religious dogmata. They find that religious stories, values, or philosophies are incompatible with what they know or what they believe. Then they renounce religion, and with it the belief in God. I consider myself such a case, as I discuss in the [Chapter on Atheism](#). More often than not, this is a painful process that attracts much animosity ↗. Once the decision is made, the Internet does its job of providing the arguments for whatever position has been chosen.
- Some atheists start out as deeply religious people. They wish to learn more about their faith, and start reading the scripture. The more they learn about their faith, the more they find that it is incompatible with what they hold dear ↗. If they then turn to other religions, and start reading the respective scriptures, they realize that the other religions share the traits they despise ↗. This pushes them into atheism.
- Again other people are simply born into atheist environments. Much like religious children follow the religion of their parents ↗, atheist children then follow atheism.

A number of factors help such thinking:

- A stable environment. People who live in an unstable environment (with a high risk of losing their job, falling ill, or being victimized by crime) have a tendency to be more religious ↗. Thus, atheism generally flourishes more in stable environments.
- Education ↗ ↗. Educated people have easier access to alternative life philosophies and scientific knowledge. Indeed, we find that atheism often correlates positively with education, at least in the US ↗ ([Pew Research Center: In America, Does More Education Equal Less Religion?, 2017](#); [Pew Research: Religious Landscape Study](#)).
- A spirit of contradiction. More often than not, becoming atheist means opposing the thought of the mainstream society. This "spirit of contradiction" has been interpreted as a co-factor of intelligence, in the sense that intelligence would be the capacity to overcome learnt and inherited traits ([Dutton & Van der Linden: Why is Intelligence Negatively Associated with Religiousness?. Evolutionary Psychological Science, 2017](#); [Zuckerman et al: The relation between intelligence and religiosity, 2013-08-06](#); [Wikipedia / Religiosity and intelligence](#)).

This does not mean that all educated and intelligent people automatically become atheist, or, vice versa, that all those who don't become atheist would be uneducated or not intelligent. It just means that these factors are often prerequisites for the kind of thinking that makes atheists atheists: It is difficult to become an atheist if the factors are not present.

Remark: In countries such as China where atheism is the norm, the situation is the inverse: People who are sort of religious are [the non-conformists] because they are open minded and curious (they usually have more money and time, btw) to think about spirit stuff [[Chen Bin on Quora. sic](#)].

Are most atheists men?

Numerous surveys indicate that the majority of self-proclaimed atheists are male. The ratios vary somewhere between 50% and 75% of male atheists. This still means that there are millions of female atheists, but the discrepancy is nevertheless astonishing. In general, women are more likely to say that religion is important to them ([Pew Research: Women generally are more religious than men, but not everywhere, 2016-03-22](#))

Several reasons have been proposed:

- In most contemporary societies, women have statistically speaking less control over their lives than men. Women usually earn less than men, they are often primarily expected to deal with child care, they are less likely to have dominating positions in industry or politics, and in some countries they have less legal rights. This imbalance is due to cultural, legal, historical, and sometimes religious biases. I elaborate on this bias extensively in my essay [Why are poor countries poor?](#). Now, people who have less control over their own lives tend to be more religious ↗. This could be part of the explanation why, statistically, women are more religious.

If this theory is true, then women and men should be roughly equally religious in societies that give an equal position to men and women. That is indeed the case: in the Nordic countries, the difference in religiosity is smaller.

- In most contemporary societies, women are educated to be kind, obedient, and consensual. Any job that involves taking care of children is usually given to women. Women are expected much less than men to stand up against the main stream, question what they are told, or defend controversial theories. Yet, atheism in a predominantly religious society often requires exactly this ↗.
- Leaving the group of believers and declaring yourself atheist is a risk. This is especially true in countries that penalize or shun atheism ↗. Now, some pieces of research suggest that women are more risk averse than men ([Web search](#)). This may entail that there are less female atheists.
- In many societies, women are (or have been) less educated than men ([Wikipedia/Sex differences in education](#)). Still today, two-thirds of the illiterate are women ([UNESCO: Literacy data shows persistent gender gap](#)). Illiteracy and lack of education are some of the factors that keep people religious ↗.
- There could be other reasons, including genetic, psychological, societal, or biological reasons.



It's not like female atheists don't exist.
[Ariane Sherine, photographed by Blackcat]

Remark: These thoughts are based on [Phil Zuckerman: Are Men More Likely to Be Secular Than Women?](#). This picture may change, however. In the OECD countries, women earn 58% of the university degrees. This indicates better chances for work and more independence, in particular because the industry shifts from low-qualification jobs to high-qualification jobs. Consequently, 23% of women in the US out-earned their husbands, up from 4% in 1960. Housework has become more equally distributed, with 18h per week done by the woman as opposed to 10h by the man. In Britain, the gap between employed men and women has shrunk from 39% to 10% ([The Economist: Men adrift, 2015-05-30](#)). These developments may make the ratio of female and male atheists more balanced.

Do Atheists want to abolish religion?

Atheism is the rejection of belief in the supernatural ↗. This definition alone does not imply any particular other attitudes. As an analogy, take people who reject playing golf. From the fact that they do not play golf, we cannot deduce that they wish to abolish golf.

There are some atheists who take an active stance against religion ↗. They see religion as an institution that stifles free thought, encourages harmful rituals, and induces intolerance (see the [Chapter on Criticism of Religion](#)). That said, on average and in total, atheist militants are nowhere as violent as religious militants.

In any case, the vast majority of atheists do not want to abolish religion. Most atheists see no reason to fight against a belief – as long as it is a personal belief ↗. Furthermore, religion can have a positive influence on people ([Chapter on the Benefits of Religion](#)). Therefore, most public atheistic voices demand the separation of state and church and criticize certain religious practices, but they do not demand the abolition of religion in general ↗. This is also the viewpoint of Humanism, the life stance advocated in this book ↗.

	<p>Militant Christian Eric Rudolph: planted explosives at the 1996 Atlanta Olympics, then 2 abortion clinics and a bar in 1997-98. 4 dead, over 100 wounded</p>
	<p>Islamic Militant Osama bin Laden: led al-Qaeda terrorist network; planned 9/11 attacks and countless other atrocities. Over 3000 dead, full toll unknown.</p>
	<p>Militant Atheist Writes books and gives lectures. Really?</p>

Let's not forget what "militant" means.
[anonymous]

This tolerance holds only if the religion leaves other people (and notably atheists) in peace. If a religion starts interfering with other people's lives, influencing the laws or education, or even persecuting people of other beliefs

or non-beliefs, then Humanists oppose such endeavors ↗.

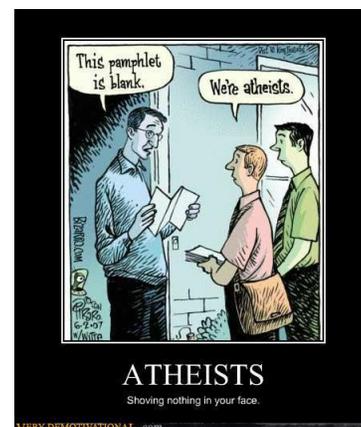
Religion is a superstition plus the conviction that it is not.

Is atheism an organization?

A religion often takes the form of an organization, i.e., a legal entity ↗. This organization can run schools and hospitals, offer religious education, employ priests, own territory, build temples, define a world view, define social values, and implement a jurisdiction for these values.

Atheism has none of this. Atheism is just unbelief in the supernatural ↗. Atheists are as organized as people who do not play golf: They are individuals spread over the globe, whose only common point is that they do not share enthusiasm for a certain activity. There is no "atheistic value system". Most atheists subscribe to certain values, but these are not unified, let alone "atheistic". Likewise, there is no unified atheistic world view. There is also no "Atheist Church". Therefore, atheists have no specific community – much like non-golf-players have no specific community.

The picture is different for Humanism, the particular brand of atheism advocated in this book ↗. There are some organizations that aim to represent the interests of Humanists. These are, e.g., the [International Humanist and Ethical Union](#), or the [Humanistischer Verband Deutschland](#). However, these organizations are de facto nowhere as established as the major religious organizations. Most people who are technically Humanists will probably not even know about these organizations.



[Evangelical Pastafarianism]

Discrimination

There is widespread discrimination against atheists. Over 70% of people in Southeast Asia, the Middle East, Africa, and South Asia believe that one has to believe in God in order to be a moral person ([Pew Research Center: The World's Muslims: Religion, Politics and Society](#)). This means that they believe that atheists are immoral people.

In six US states, atheists are not allowed to hold a public office. The constitutions of these states explicitly require belief in a supreme being as a precondition for holding the office ([Wikipedia / Persecution of Atheists / United States, Atheist Cartoons / post 22016543416](#)). Atheists are widely subjected to prejudice in the US. Atheists are the minority group most Americans are least willing to allow their children to marry – ahead of Jews, Muslims, and black people ([Penny Edgell et al: Atheists as "other" – Moral Boundaries and Cultural Membership in American Society, American Sociological Review, April 2006, Vol 71](#)). Atheists are less likely to be accepted, publicly and privately, than any others from a long list of ethnic, religious, and other minority groups [ibid]. Atheism is associated with criminality, and people trust atheists as much as they trust rapists ([Will M. Gervais et al: Do You Believe in Atheists? Distrust Is Central to Anti-Atheist Prejudice, Journal of Personality and Social Psychology, 2011, Vol. 101, No. 6](#)). If someone identifies as atheist, family members turn against them, they lose friends, people denounce them in prayer groups, and they are excluded from clubs and associations ([Financial Times: Atheism in America, 2012-02](#)). No wonder many atheists live in the closet.

These phenomena are not evenly spread in the US. It is likely, e.g., that the coastal regions of the US are more tolerant towards atheism. At the same time, discrimination against atheists exists and is a problem – not just in the US ([Wikipedia/Discrimination against atheists](#)).

In Germany, roughly 1/3 of the population is atheist. Still, religious organizations dominate the labor market in the social sector. They run hospitals, kindergardens, and senior citizen homes. 80%-100% of the financial support for these institutions comes from the state, but the religious organizations have free reign in their governance ↗. They can legally reject atheist job candidatures. They can also teach their world view in their schools and kindergardens. One third of the schools is run by religious organizations. Secular alternatives are often not available in rural areas. In all schools, church-run or not, religious education is mandatory. Secular alternatives are often not provided. The constitution of several German states requires children to be educated in obedience to

God. In Bavaria, these provisions have been used to prevent Humanists from founding a school. Due to state-sponsoring of religious scholarship agencies, 10% of state-sponsored scholarships are bound to a religion. Thus, religious students overall have more chances to obtain a scholarship than atheist students. Public tax money is used to sponsored theology professors that are appointed by the churches. The advisory council of the public radio and television is staffed with representatives from the churches, but not with representatives for an atheist or Humanist world view. There are religious radio emissions, but no Humanist ones. The state levies taxes for the churches. Public money supports religious events ("Kirchentage") with millions of euros each year. In a nod to the churches, dancing is prohibited on religious holidays ("dancing ban"). A dozen people are convicted each year of blasphemy. (IHEU: [German Humanists expose systematic discrimination against the non-religious, 2015-09-23](#), based on HDV: [Gläserne Wände, 2015](#)).

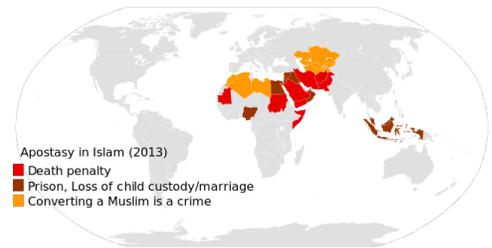
In some countries, atheists are systematically persecuted ↗.

In Germany, the state finances rhetoric trainings for preachers at universities. They call it theology.

By Philipp Möller, paraphrased

Persecution

In many Islamic countries, a Muslim is not allowed to commit apostasy, i.e., to abandon their faith. If a Muslim abandons their faith and becomes atheist, they are persecuted. Some Islamic countries even punish apostasy by death: Mauritania, Sudan, Saudi Arabia, Iran, Pakistan, Afghanistan, and the Maldives (IHEU: [Freedom of Thought 2012 – A Global Report on Discrimination Against Humanists, Atheists, and the Nonreligious](#)). Countries such as Egypt or Indonesia imprison people who publicly profess their own atheism [ibid]. Other countries restrict rights for atheists, for example by limiting marriage rights or public service [ibid]. Indonesia demands that people declare themselves as one of six religions; atheism and agnosticism do not count (The Economist: [No God, not even Allah – Ex-Muslim atheists are becoming more outspoken, but tolerance is still rare, 2012-11-24](#)). Egypt's draft constitution makes room for only three faiths: Christianity, Judaism and Islam [ibid]. Something similar goes for India (Times of India: [Indian atheists seek recognition in the land of a million gods, 2012-06-30](#)). In Israel, atheists cannot marry, because Israel does not know the concept of civic marriage (US Embassy in Israel: [Marriage](#)).



Countries with penalties for atheism, according to the [US Library of Congress](#) [[edrusia567@wikicommons](#)]

These laws are just the tip of the iceberg. In general, atheists suffer widespread social discrimination in the Islamic world, up to beatings or beheadings (The Economist: [Ex-Muslim atheists are becoming more outspoken, 2012-11-24](#)). All four schools of Sunni Islamic law teach that male apostates should be put to death [ibid]. 84% of Muslims in Egypt and 86% in Jordan backed the death penalty for apostates, as do 51% in Nigeria and 30% in Indonesia [ibid]. Thus, no matter whether the death penalty is actually implemented or not, the thinking that atheists must be put to death is rooted in the society ↗.

How do atheists protect themselves?

A religious person can pray to gods in order to ask for protection from illnesses, bad luck, accidents, or being fired. An atheist has no such remedy. How do atheists protect themselves against the difficulties of life?

There are several things that you can do as an atheist:

- Get a good education
- Select your life partner carefully
- Take your work seriously, and do a good job at it
- Take care of your body, monitor your health, and exercise regularly (do a [Web search](#))
- Avoid dangers (do a [Web search](#))
- Follow all safety instructions prescribed by the law
- Handle your data and your digital identity responsibly (see, e.g., my [A practical guide to data security](#))

These measures provably reduce the risk of disaster. In order to reduce the damage once it happened, you can

- subscribe to a health insurance and an accident insurance
- build up a financial buffer
- have a network of friends and family

These measures may sound pedestrian in comparison to the array of methods that a believer can use [↗](#). However, unlike the supernatural methods, the "atheist measures" provably reduce the risk of damage. They are thus a useful way to spend your time.

It is much more sound to take the risks you can measure rather than to measure the risks you're taking.

By Nassim Taleb in "The Black Swan"

Where do atheists get inspiration?

Throughout history, people have always been inspired by religion [↗](#). So then the question arises what inspires atheists.

Some atheists are also inspired by religion. The author of the present book is an example. Other atheists are inspired by philosophy, the study of ethics, poetry, music, literature or the arts ([Wikipedia/Criticism of Religion](#)). Some atheists and some agnostics have proven particularly inspired. We list some of the more prominent ones here.

Philosophers ([Wikipedia/List of atheist and agnostic philosophers](#))

Simone de Beauvoir (1908-1986)

French author and existentialist philosopher. Beauvoir wrote novels and monographs on philosophy, politics, social issues and feminism.

Rudolf Carnap (1891-1970)

German philosopher who was a prominent advocate of logical positivism.

Noam Chomsky (born 1928)

American linguist, philosopher, political activist, author, and lecturer, Institute Professor and professor emeritus of linguistics at the Massachusetts Institute of Technology, credited with the creation of the theory of generative grammar.

Denis Diderot (1713-1784)

editor-in-chief of the Encyclopédie, the first systematic collection of human knowledge.

David Hume (1711-1776)

Scottish philosopher, historian, economist, and bookist, considered one of the most important figures in the history of Western philosophy.

Immanuel Kant (1724-1804)

German philosopher, best known for his work "Critique of Pure Reason".

Karl Marx (1818-1883)

philosopher, political economist, sociologist, humanist, political theorist and revolutionary.

John Stuart Mill (1806-1873)

British philosopher famous for his works on utilitarianism.

Friedrich Nietzsche (1844-1900)

German philosopher known for his criticism of religion and his work on morality.

Karl R. Popper (1902-1994)

philosopher of science, who promoted falsifiability as a necessary criterion of empirical statements in science.

Willard Van Orman Quine (1908-2000)

American philosopher and logician

Bertrand Russell (1872-1970)

British philosopher and mathematician. He won the Nobel Prize in Literature in 1950.

Jean-Paul Sartre (1905-1980)

French existentialist philosopher, dramatist and novelist who rejected the Nobel Prize for Literature in 1964.

Arthur Schopenhauer (1788-1860)

Pessimistic German philosopher.

John Searle (born 1932)

American philosopher, Slusser Professor of Philosophy at the University of California, Berkeley, widely noted for contributions to the philosophy of language, the philosophy of mind, and to social philosophy.

Theodorus the Atheist (300 BCE)

Philosopher of the Cyrenaic school who taught that the goal of life was to obtain joy and avoid grief.

Ludwig Wittgenstein (1889-1951)

Austrian-British philosopher who worked primarily in logic, the philosophy of mathematics, the philosophy of mind, and the philosophy of language. He is known for his book "Tractatus Logico-Philosophicus".

Authors ([Wikipedia/List of atheist authors](#))

Douglas Adams (1952-2001)

British radio and television writer and novelist, author of "The Hitchhiker's Guide to the Galaxy".

Isaac Asimov (Исаак Юдoвич Азимoв, 1920-1992)

Russian-born American author of science fiction and popular science books. He invented the word "robot".

Albert Camus (1913-1960)

French philosopher and novelist who has been considered a luminary of existentialism. He won the Nobel Prize in Literature in 1957.

Giosuè Carducci (1835-1907)

Italian poet and teacher. In 1906, he became the first Italian to win the Nobel Prize in Literature.

Sir Arthur C. Clarke (1917-2008)

British scientist and science-fiction author.

George Eliot (1819-1890)

aka. Mary Ann Evans, a famous British novelist.

Franz Kafka (1883-1924)

Jewish Czech-born writer. Best known for his short stories such as "The Metamorphosis" and novels such as "The Castle" and "The Trial".

Arthur Miller (1915-2005)

American playwright and bookist, known inter alia for his book "Death of a Salesman".

Marcel Proust (1871-1922)

French novelist, critic, and bookist. Best known for his work "In Search of Lost Time".

George Bernard Shaw (1856-1950)

Irish playwright and a co-founder of the London School of Economics. He is the only person to have been awarded both a Nobel Prize in Literature (1925) and an Oscar (1938), for his contributions to literature and for his work on the film Pygmalion (adaptation of his play of the same name), respectively.

Wole Soyinka (born 1934)

Nigerian writer, poet and playwright. He was awarded the 1986 Nobel Prize in Literature.

Gao Xingjian (born 1940)

Chinese emigre novelist, dramatist, critic, translator, stage director and painter. Winner of the Nobel Prize in Literature in 2000.

Gene Weingarten (born 1951)

American humor writer and Pulitzer Prize-winning journalist.

Nadine Gordimer (born 1923)

South African writer and political activist. Her writing has long dealt with moral and racial issues, particularly apartheid in South Africa. She won the Nobel Prize in literature in 1991.

Seamus Heaney (born 1939)

Irish poet, writer and lecturer, winner of the 1995 Nobel Prize in Literature.

Pär Lagerkvist (1891-1974)

Swedish author who was awarded the Nobel Prize in Literature in 1951.

Roger Martin du Gard (1881-1958)

French author, winner of the 1937 Nobel Prize for Literature.

Pablo Neruda (1904-1973)

Chilean poet and diplomat. In 1971, he won the Nobel Prize for Literature.

Harold Pinter (1930-2008)

Nobel Prize-winning English playwright, screenwriter, director and actor. One of the most influential modern British dramatists, his writing career spanned more than 50 years.

Luigi Pirandello (1867-1936)

Italian dramatist, novelist, and short story writer awarded the Nobel Prize in Literature in 1934.

José Saramago (1922-2010)

Portuguese writer, playwright and journalist. He was awarded the Nobel Prize in Literature in 1998.

Artists ([Wikipedia/List of atheists \(miscellaneous\)](#))

Marcel Duchamp (1887-1968)

French artist whose work is most often associated with the Dadaist and Surrealist movements. Considered to be one of the most important artists of the 20th century.

Henri Matisse (1869-1954)

French artist, draughtsman, printmaker, and sculptor, known primarily as a painter. Matisse is commonly regarded, along with Picasso and Marcel Duchamp, as one of the three artists who helped to define the revolutionary developments in the plastic arts in the opening decades of the 20th century.

Claude Monet (1840-1926)

French painter. Best known as a founder of French impressionist painting.

Pablo Picasso (1881-1973)

Spanish painter, sculptor, printmaker, ceramicist, and stage designer. One of the greatest and most influential artists of the 20th century, he is widely known for co-founding the Cubist movement.

Vincent van Gogh (1853-1890)

Dutch post-Impressionist painter whose work, notable for its rough beauty, emotional honesty and bold color, had a far-reaching influence on 20th-century art.

Frank Lloyd Wright (1867-1959)

American architect, interior designer, writer and educator, who designed more than 1,000 structures and completed 500 works. Wright believed in designing structures which were in harmony with humanity and its environment, a philosophy he called organic architecture.

Woody Allen (born 1935)

American screenwriter who has won more screenwriting Academy Award nominations than any other writer.

Rowan Atkinson (born 1955)

British comedian, who is best known for his character of "Mr. Bean".

Jodie Foster (born 1962)

American actress, film director, and producer, who has won two Academy Awards, three BAFTA Awards, and three Golden Globe Awards.

This list does not mean that the works of these philosophers, authors, and artists would appeal to every reader. Nor does it mean that there would not be many more great religious men and women who contributed to our culture. However, this list shows that atheists, just like theists, can be particularly inspired.

Atheism – because the universe is far more fascinating than any god your imagination can create.

By *anonymous*

Remark: We list some atheist scientists late in this book [↗](#), as well as some atheist advocates of ethics [↗](#).

Atheists & Morality

Are atheists immoral?

Morality is a dimension that is orthogonal to atheism. Atheism without ethics is immoral, but atheism with ethics is not. It's just like brown-eyed people with ethics are moral, but brown-eyed people without ethics are immoral.

Some atheists were prominently immoral (if we judge by, say, the Human Rights). This applies in particular to the leaders of the Communist regimes in the Soviet Union and China, whose establishment of State Atheism is widely regarded as immoral [↗](#). We have discussed this phenomenon before [↗](#), together with the link between atheism and communism [↗](#). Similarly, Adolf Hitler is often regarded as the prototypical evil atheist [↗](#). Other famously evil people are also taken as proof that atheism is wrong [↗](#).

On the other hand, quite a number of atheists have been instrumental for the moral advancement of our society. They contributed to the philosophy of ethics, fought for women's rights, or helped initiate social reform. We list them in the next article [↗](#).

If we add in Humanism [↗](#), the moral component becomes explicit. Humanists explicitly embrace moral values, a liberal and egalitarian law system, and the Human Rights as a guideline for their behavior. This does not mean that they always behave morally. But at least they have a moral standard that tells them when they do not. We discuss Humanist ethics in detail in the [Chapter on Morality](#).

The belief that atheists would be immoral stems probably from the fact that some religious people cannot imagine where morality could come from if not from God. This belief has been reinforced at times by religious authorities, with the goal to present atheism as a slippery slope towards immorality, and their religion as the only bulwark against indecency [↗](#). And yet, morality predates all of today's major religions, as we shall see in the [Chapter on Morality](#).

*One is often told that it is a very wrong thing to attack religion, because religion makes men virtuous.
So I am told; I have not noticed it.*

By Bertrand Russell in "Why I Am Not A Christian"

Remark: Some studies claim that atheists in general are less likely to commit a crime or to get divorced. Other studies say that atheists are as likely as believers to commit a crime. See [Adherents.com / Prison Incarceration and Religious Preference](#) for a Christian position on this. Usually, each world view tries to interpret statistics in such a way that the number of its adherents is maximized. Atheists occasionally count all non-religious people as atheists, whereas religious people occasionally count all non-atheist people as religious, even though these people may not be practicing their religion. When it comes to statistics about prison inmates, however, things are the other way round: Atheists count only those people as atheists who explicitly

declare themselves atheists. Religious people, in turn, count only those people as religious who practice their faith. This makes the interpretation of their conclusions difficult.

An Internet commentator provides an interesting thought on this topic: "Obviously there are more religious people in prisons in the US, because religion is associated with poverty and so is going to prison. It doesn't mean being religious makes you more criminal! It just means the same factors that drive people to crime also drive them to religion! Heck, people with tattoos are over-represented in prison — that doesn't mean David Beckham was going to start holding up post-offices as soon as he got that "Brooklyn" tattoo! Obviously atheists will be more highly educated, because both are strongly correlated with class (in the US). The real point is not that religion or atheism make you better or worse people, its that people in an unequal society need religion more, and the poor in that society need it most of all." [[The Guardian: Societies without God are more benevolent, 2010-09-12 / Comment by formerlefty](#)] We will come back to this argument later ↗.

Who are moral atheists?

Some atheists are particularly engaged in moral behavior:

Jeremy Bentham (1748-1832)

British atheist, was a leading philosopher of law, advocating public welfare, freedom of expression, equal rights for women, and the right to divorce, and fighting against slavery and the death penalty ([Wikipedia/Jeremy Bentham](#), [Philosopedia/Jeremy Bentham](#)).

Richard Carlile (1790-1843)

British atheist, was an important agitator for the establishment of universal suffrage and freedom of the press in the United Kingdom ([Wikipedia/List of atheist activists and educators](#)).

Percy Shelley (1792-1822)

British atheist, writer and poet, developed the concepts of civil disobedience and non-violent resistance that later inspired Mahatma Gandhi ([Wikipedia/Percy Shelley](#)).

Harriet Martineau (1802-1876)

British atheist and the "the first female sociologist", spearheaded women's rights in the UK ([Wikipedia/Harriet Martineau](#), [Philosopedia/Harriet Martineau](#)).

William Lloyd Garrison (1805-1879)

American atheist, was a prominent social reformer, working against slavery and for women's suffrage ([Wikipedia/William Lloyd Garrison](#), [Philosopedia/William Lloyd Garrison](#)).

John Stuart Mill (1806-1873)

British atheist, was one of the most influential English-speaking philosophers and politicians. He pioneered the concepts of liberty, freedom of speech, and human rights, and fought against slavery and the suppression of women ([Wikipedia/John Stuart Mill](#)).

Mary Anne Evans (aka. George Eliot, 1819-1880)

British atheist, was one of the leading writers of the Victorian era and an early adopter of humanism ([Wikipedia/George Eliot](#), [Philosopedia/George Eliot](#)).

Ernestine Rose (1810-1892)

American atheist, was one of the major intellectual forces behind the women's rights movement in the US ([Wikipedia/Ernestine Rose](#)).

George Jacob Holyoake (1817-1906)

British atheist, devoted his life to the cooperative movement among lower-class workers ([Wikipedia/George Jacob Holyoake](#)).

Susan B. Anthony (1820-1906)

American agnostic, was a prominent American civil rights leader who played a pivotal role in the women's rights movement in the US ([Wikipedia/Susan B. Anthony](#), [Philosopedia/Susan B. Anthony](#)).

Marie Souvestre (1830-1905)

French atheist, was a feminist educator who sought to develop independent minds in young women ([Wikipedia/List of atheist activists and educators](#)).

Henry Stephens Salt (1851-1939)

English atheist, campaigned for social reform in the fields of prisons, schools, economic institutions and the treatment of animals ([Wikipedia/List of atheist activists and educators](#)).

Rosika Schwimmer (1877-1948)

Hungarian-born atheist, was a pacifist, feminist and female suffragist ([Wikipedia/List of atheist activists and educators](#)).

Margaret Sanger (1883-1966)

American atheist, was an iconic figure in the American reproductive rights movement ([Wikipedia/Margaret Sanger](#)).

Bertrand Russell (1872-1970)

British atheist and philosopher, was for his whole life - among many things - an ardent campaigner against the nuclear weapons and other weapons of mass destruction. He managed to get himself arrested at the age of 98 while demonstrating for his cause ([Wikipedia/Bertrand Russell](#)).

A. Philip Randolph (1889-1979)

American atheist, was an African-American civil rights leader ([Wikipedia/List of atheist activists and educators](#)).

Saraswathi Gora (1912-2006)

Indian atheist, was a social activist who campaigned against untouchability and the caste system ([Wikipedia/List of atheist activists and educators](#)).

William L. Moore (1927-1963)

American atheist, was a member of the Congress of Racial Equality (CORE) member who staged lone protests against racial segregation. He was murdered on his final protest ([Wikipedia/List of atheist activists and educators](#)).

Baba Amte (1914-2008)

Indian atheist, is a social activist, known for his work with lepers ([Wikipedia/List of atheist activists and educators](#)).

Uri Avnery (born 1923)

German-born Israeli atheist, is a left-wing peace activist ([Wikipedia/List of atheists in politics and law](#)).

Mikhail Gorbachev (Михаил Сергеевич Горбачёв, born 1931)

Soviet atheist, was the Soviet president and winner of the Nobel Peace Prize in 1990 ([Wikipedia/List of atheists in politics and law](#)).

José Mujita (born 1935)

president of Uruguay, donates 90% of his salary to charity, declined to use the presidential palace and lived on his farm instead; legalized abortion, marijuana, and gay marriage ([Wikipedia/José Mujita](#)).

David Suzuki (born 1936)

Canadian atheist, is an environmental activist ([Wikipedia/List of atheist activists and educators](#)).

Peter Singer (born 1940)

Australian atheist, is an ardent animal rights activist. His influential book *Animal Liberation* (1975) exposed the inhumane treatment of animals in slaughter houses and in medical experiments ([Wikipedia/Peter Singer](#)).

Deng Pufang (born 1944)

Chinese atheist, is an activist for the rights of handicapped people ([Wikipedia/List of atheist activists and educators](#)).

Ingrid Newkirk (born 1949)

British atheist, is an animal rights activist, author, and president and co-founder of People for the Ethical Treatment of Animals, the world's largest animal rights organization ([Wikipedia/List of atheist activists and educators](#)).

Zackie Achmat (born 1962)

South African atheist, is an anti-HIV/AIDS activist and the founder of the Treatment Action Campaign ([Wikipedia/List of atheist activists and educators](#)).

Taslina Nasrin (born 1962)

Bangladeshi atheist, is a feminist human rights activist ([Wikipedia/List of atheist activists and educators](#)).

Maryam Namazie (born 1963)

British atheist, is a human rights activist, commentator and broadcaster who supports Iranian refugees in Britain ([Wikipedia/List of atheist activists and educators](#)).

Ayaan Hirsi Ali (born 1969)

Somali-Dutch atheist, is a feminist and activist who campaigns (among other things) against female genital cutting ([Wikipedia/List of atheists in politics and law](#)).

These atheists have contributed to the moral milestones of our modern society. This does not mean that these people would be morally perfect. Nor does it mean that there would not be many more theists who also contributed to the moral advancement of society. Finally, it does not mean that all atheists are always moral (many are not ↗). However, this list of people refutes the claim that all atheists are immoral. It tells us that some atheists were and are exceptional advocates of moral advancement.

We discuss an atheist view on morality in the [Chapter on Morality](#), and religious values in the [Chapter on Criticism of Religion](#).

- *Atheists are miserable. No light at the end of the tunnel.*
- *Yep. Just darkness. But at least we have light *in* the tunnel.*

By [Ricky Gervais](#)

Remark: We list some atheist scientists somewhere else in this book ↗, as well as some atheist artists ↗.

Wasn't Adolf Hitler also an atheist?

Adolf Hitler was the German dictator who initiated the Second World War, and started a genocide against Jews, homosexuals, Roma, and other communities. He is often regarded as an atheist. Yet, Hitler was not an atheist. He believed in an "active deity", which he frequently referred to as the "Creator" or the "Providence" ([Wikipedia/Hitler's believes](#)). Going further, he wrote in his book "Mein Kampf": "I am convinced that I am acting as the agent of our Almighty Creator. By fighting the Jews, I am doing the Lord's work.". He was thus not only a believer, but used his belief to justify his killings (as have many before him ↗

). Hence, he was not an atheist ↗. We may argue that he was not a good Christian either. But that does not make him an atheist.

Independently of what Hitler believed or not, we may not take the belief of a single person to judge an entire life stance ↗ ↗.

Weren't many evil people atheists?

The so-called "Famous-people-argument" argues that many famously evil people were atheists. This is seen as an indication that atheism is associated to evilness.

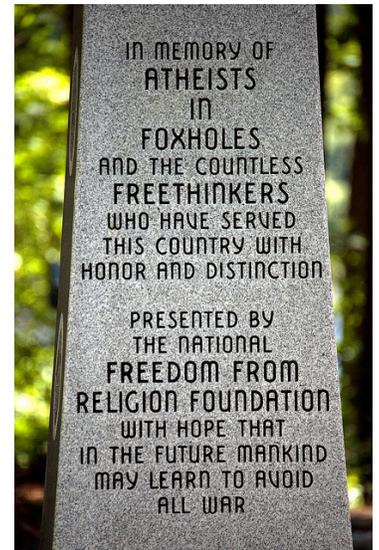
It is true that some evil people were atheists ↗ ↗. However, this does not mean that atheism itself is evil. To see this, consider religious people: There are numerous evil people who are Muslims, Christians, Hindus or Jews. In fact, some domains of violence are exclusively in religious hands ↗ ↗. And yet, from the fact that there are extremely brutal adherents of Christianity, Islam, or Hinduism, we cannot conclude that Christianity, Islam, or Hinduism would be bad ↗. And in the same way, one cannot conclude that atheism would be bad, even if there are a number of evil atheists.

Are there atheists in foxholes?

Atheists do not believe in God. However, so the common thinking goes, they can only uphold this defiance of the supernatural as long as their life goes well. As soon as they are exposed to extreme stress (such as a war, and hence "in the foxholes"), the thinking goes, everybody starts believing in God ([Wikipedia/There are no atheists in foxholes](#)).

There is indeed a correlation between exposure to war stress and frequency of prayer ([Wikipedia/There are no atheists in foxholes](#)). This may be because powerlessness increases the need to appeal to the supernatural ↗. However, by assuming that all military personnel would be theist, we are doing injustice to those who are not. The atheists in the military are represented by the "Military Association of Atheists and Freethinkers" ([MilitaryAtheists.org](#)). The association speaks for thousands of these people in the military. However, due to public discrimination against atheists in the US ↗, only a few hundred have spoken out.

It shall not be forgotten either that a major atheist force contributed to World War II (Steven Pinker: Enlightenment Now). Not Nazi Germany, mind you. Nazi Germany was a Christian force ↗. We are talking about the Soviet Union. Despised as atheist communists by the US, the Soviet Union fought the second world war on the allied side against the Nazis. 8 million of their atheists died in the foxholes ([Wikipedia/NW 2 Casualties](#)).



Monument to atheists in the foxholes, in Alberta/USA
[\[Marty Stone @ Flickr\]](#)

Maybe there are only atheists in foxholes. If the faithful truly and fully believe in a protective deity, why would they dive into a foxhole to protect themselves from the bullets whizzing by? A part of their brain knows damn well that if they do not protect themselves, the bullets will hardly discriminate between those who claim faith and those who reject it.

By J. Anderson Thomson, Jr.

Atheists and Authority

Atheists do not acknowledge any personified authority above mankind. This makes it look as if atheists are by definition egoistic or anarchistic.

However, the rejection of belief in God does not mean the rejection of authorities in general. Most atheists respect all authorities of their country ↗. They submit to the law just as everybody else. The only difference to believers is that atheists see no supernatural authority above humanity. This means that atheists believe that humanity has to take matters of morality in its own hands ↗. This is indeed what happens: the law of a country is always written by humans, and not by gods ↗. This is true even if people have the habit of ascribing their laws to the gods ↗. Thus, the atheist position that laws are made by humans has nothing to do with arrogance. It is just a factually correct assertion. We discuss how humans make laws in detail in the [Chapter on Morality](#).

So the problem is not that atheists would see themselves as the highest authority. This problem is, in fact, more likely to appear on the believer's side. Believers hold that their god has the highest authority. However, nobody can know for sure what the god wants. Nobody has verifiably received communication from the god. Therefore, all that believers have is their own interpretation of the god's will. It is this interpretation that believers consider the highest moral authority. Thereby, they raise their own human interpretation of morality to the status of the divine – i.e., to a status that is higher than human laws. This can be arrogant ↗, and even dangerous ↗.

Atheist Attitude

Atheism is ungrateful towards God

In religious eyes, God has created the world. He has also created all people – including all atheists. Then, it seems ungrateful that atheists do not believe in his existence.

In atheist eyes, the situation is different. Atheists do not believe that the world was created by God. They do not believe that God exists, or that he gave them life. Compare this again to the Bambuti religion [↗](#). In the Bambuti religion, Khonvoum is the god of the forest, who supplies humanity with animals that they can eat. Hence, people have to be grateful to Khonvoum for their food. Yet, when you eat your chicken wings, you are probably not grateful to Khonvoum. This is because you think that the idea of Khonvoum who supplies food is just a story. And the same holds for atheists and your god. In atheist eyes, the god who created Earth is nothing more than a story. It's a myth that people told each other when they did not yet know the science behind the formation of the Earth ([Chapter on the Universe](#)). If the world was not created by God, then there is no necessity to be grateful.

In atheist eyes, the idea that we have to be thankful to God is just a cheap trick: No-one knows how the universe came into existence. Hence, Christianity and Islam had the brilliant idea to claim the creation of the universe for their own god [↗](#). Not believing this is not ungrateful.

I didn't ask to be made: no one consulted me or considered my feelings in the matter.

By the robot Marvin in Douglas Adams' "Fit the Twelfth"

Atheists make their life easy

An atheist's life seems easier in some aspects than a believer's life. Atheists don't have to follow rituals or traditional rules [↗](#) and it may appear easier for them to justify their world view. Making life easy is not necessarily bad. On the contrary, if one succeeds in making life easier without violating moral norms, then this is even desirable.

Unfortunately, life is not even easier for atheists. There is widespread discrimination against atheists in the world [↗](#). In some countries, atheists have less rights than believers. In others, atheism is punished by death. Thus, being an atheist is not necessarily easier [↗](#).

From a philosophical point of view, too, life is not necessarily easier for an atheist. Unlike believers, who can, if they wish, accept religious values, atheists have no such guidance. They have to decide for themselves for a set of values and for a view of life – often under flak from religious parties, who claim that this would be impossible [↗](#). We discuss this journey in the [Chapter on Morality](#) and the [Chapter on the Sense of Life](#).

Atheists think they know everything

Atheists have no belief in God. Consequently, they do not believe that God created the Earth. This makes it seem as if atheists think they know better than theists how the Earth came into existence. This makes the atheist look arrogant.

In fact, most atheists make no such claims. Nobody knows for sure how the universe came into existence (if it did at all [↗](#)). Most atheists will plainly admit that [↗](#). It is just that, instead of using God to explain these mysteries, these atheists say that they do not know the answer. Atheists may believe in some scientific theories for explanation, and it is likely that they are in favor of exploring scientific solutions to the question. Humanists, in particular, believe that science is the best way to arrive at an answer to the question [↗](#). However, as of now, nobody knows the answer for sure [↗](#).

Most religions, in contrast, offer a supernatural explanation for the questions of life. Adherents of these religions believe that they know how the world came into existence, what the nature of the human soul is, what is good and what is bad, and what will happen after death – even though there is no scientific evidence for their theories. Such an attitude can indeed be considered arrogant [↗](#).

God made me an atheist. Who are you to question his wisdom?

By the [Global Secular Humanist Movement](#)

Atheists and God's Will

Atheists believe that there are no gods. Thus, they believe indeed that they are immune to God's will. This makes them look arrogant.

Indeed, most people are arrogant in this way. For example, most people in the Western world think they are immune to the will of Khonvoum, the God of the forests in the Bambuti mythology [↗](#). This is because they think that Khonvoum is just a mythical creature, and not something that has any influence on this world. Atheists hold the same for all gods. In atheist eyes, all gods are mythical creatures, and none of them has any influence on the world. People just invented the gods in order to justify and explain the events of life [↗](#).

This does not mean that atheists would be immune to the risks and dangers of life. Atheists know very well that they, as well as anybody else, can fail an exam, lose their job, fall ill, or suffer an accident. Not believing in gods does not imply believing in immunity from distress. In fact, two famous atheists are heavily marked by illness: Christopher Hitchens, one of the driving forces behind the New Atheism movement [↗](#), was diagnosed with esophageal cancer and died one year later ([Wikipedia/Christopher Hitchens](#)). Stephen Hawking, one of the most famous physicists (and atheists), has a motor neurone disease, which paralyses him nearly completely ([Wikipedia/Steven Hawkins](#)). Thus, atheists are not free from distress. It's just that atheists believe that this distress is either made by man or made by nature – and not made by gods.

In general, theists fare no better than atheists on the accounts of suffering, accidents, and mishap. In fact, globally speaking, believers fare much worse [↗](#).

Those who say I am being punished are saying that God can't think of anything more vengeful than Cancer for a heavy smoker.

By [Christopher Hitchens](#)

Remark: Theists may see Christopher Hitchens' cancer as a punishment from God. However, God also punished Bill Johnson's father with cancer ([GodSpeak.net / The Cost of Healing](#)). Bill Johnson is an active faith healer who believes he can heal people from cancer by praying. And yet, he could not even heal his own father.

Atheists are satirical about faithfals

Although atheists should obey the rules of respect and tolerance just as everybody else, it may occasionally happen that they are satirical about religious people.

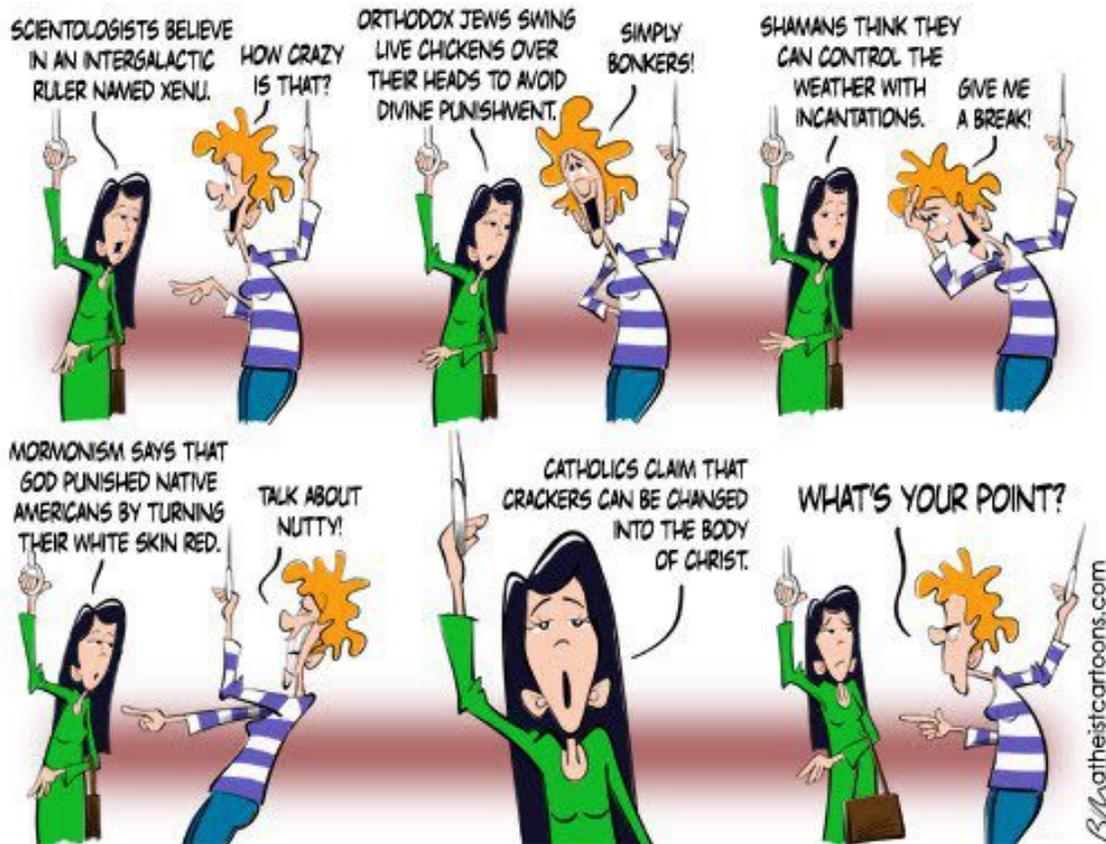
In the atheist's defence, some religious practices are surprisingly bizarre. Some religions believe that a man has to suck the penis of a baby boy, others that a certain ritual can protect them against throat illnesses, others that God wants them to cut off a part of their body, again others that they have to throw their babies from a 10 meter balcony, and yet another one believes that they eat a human [↗](#).

Beliefs such as these are incompatible with enlightened values. Therefore, they deserve to be exposed, discussed in public, and (where appropriate) ridiculed. This is the only way in which our society can become aware of them – and ultimately get rid of them. This is even more true because believers themselves are often unable to see the absurdity of their beliefs, having been brought up with them since childhood [↗](#). Many believers will not even have noticed that the above rituals are those of conservative Judaism, Catholicism, Islam, variants of Hinduism, and Christianity [↗](#). Therefore, the task of exposing such absurdities falls disproportionately on the unbelievers.

Humanism, the particular life stance advocated in this book, holds that harmful religious influences on society have to be identified and countered [↗](#).

Everybody has the right to believe whatever they want,
and everybody else has the right to find that fucking ridiculous.

By Ricky Gervais



[Atheist Cartoons]

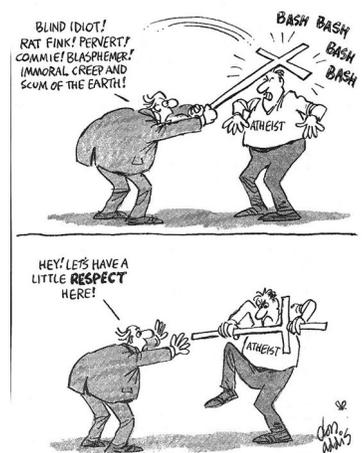
Atheism insults the faithful

Atheists reject belief in God. If they say in public that God does not exist, that belief in God is nonsense, or that religion is harmful, then this can be seen as an insult to the faithful.

If we follow this logic, then it can be seen as an insult to the atheist if a believer argues that God exists, that all non-believers are errants, or that they have to be "guided back to the right path". Such beliefs are part of some religious scripture ↗, they are printed on bank-notes (in the US), they are preached in temples, churches, and mosques, they are taught to children, and they are part of the school curriculum in Germany and some Muslim countries ↗. This has traditionally not been counted as an insult to atheists. Hence, it cannot be counted as an insult either if atheists say that God does not exist.

It turns out that it all depends on how we define the term "insult". One standard definition (as used in legal systems) is that an insult is a pejorative statement about a person that cannot be proven true [Thoughts on Ethics / Insult]. The key point here is that an insult always concerns a person, and not an ideology. This definition disallows any unreasonable attack against a person, but it allows criticizing philosophies, concepts, and world views. In particular, it allows atheists to criticize belief and religion, and it allows believers to criticize atheism.

Humanism (the variant of atheism promoted in this book ↗) holds that human progress happens mainly when people are open to question beliefs ↗. It must be allowed to criticise people's world views without these people



[@ The Thinking Atheist]

taking offence. The right to question and criticise opinions is one of the fundamental achievements of the Enlightenment. It is the bulwark against totalitarian, extremist, stalinist, fascist, and also islamist ideologies ↗. If we prohibit or even just discourage criticism, we will never be able to find out which world views are wrong. Worse, we risk that harmful ideologies take hold and proliferate. A Humanist's nightmare is the rise of an ideology that prohibits criticism of its tenets. Such an ideology is a trap that humanity cannot leave ↗ ↗ ↗.

Religious view points, in particular, deserve to be criticised if they are in conflict with secular values or scientific evidence ↗. This holds even more if they aim to shape laws or politics ↗. From that moment on, they are no longer a personal belief. They are a political program. In a democracy, political programs have to be criticisable.

We question your beliefs because you're too afraid of a vengeful fictional character to do it yourself.

By anonymous

Atheists & Emotion

Atheists have no purpose of life

One of the biggest philosophical conundrums of humanity is the quest for the "sense of life" – also known as the "meaning of life", or the "purpose of life". The purpose of something is the intention that someone pursues with that thing. In a religious world view, God (or the supernatural) pursues some intention with us humans. People exist to worship God, to go to Heaven, to reach Nirvana, or to play the "game of life" ↗. Thus, the life of religious people has a purpose ↗.

In an atheist world, there is no god or supernatural being who could pursue a purpose with our lives. Therefore, believers hold, atheists cannot have a purpose of life. That is wrong. Atheists can very well have a purpose of life – it's just that this purpose does not come from God. Atheists have to give a purpose to their life by themselves. They have to know by themselves what they want to do with their time on Earth. Once they know, they have a purpose of life. It is whatever they decided it to be ([Chapter on the Sense of Life](#)). Some atheists dedicate their lives to raising a family, to being a good person, to helping others in need, to doing their job well, or to being a constructive member of society. Again others dedicate their lives to the moral advancement of society ↗, to the arts ↗, or to science ↗. Some very few also dedicate a part of their life to writing a book about atheism.

It is thus wrong to claim that atheists cannot have a meaning of life. In atheist eyes, such claims are just attempts by religions to justify their existence in a world that no longer needs them ↗.

Not all those who wander are lost.

By J. R. R. Tolkien in his poem "All that is gold does not glitter"

God loves you nevertheless

In discussions about faith, religious people will often state that God loves everybody – even the atheist. Thus, no matter what an atheist says or does against God, God will still love them.

To atheists, this is surprising. In all abrahamic religions, the holy scripture asks believers to kill the atheists ↗. Once that is achieved, the god promises to burn them in eternal hell fire ↗. This is not exactly what atheists would call love ↗. And even if these scriptures have since been superseded (or re-interpreted ↗), God has never retracted his original words from the scripture, let alone apologised for them ↗ ↗. These words have led to very brutal persecutions of atheists in the past ↗, and they still do in the present ↗.

Apart from these considerations, the statement "God loves you" does not make God exist. Likewise, Harry Potter loves you. He truly does! Still, he does not exist.

I will pray for you

OK.

Whom do atheists thank?

When believers are happy, they can thank God for it. The desire to thank someone is very natural. For example, you would like to thank someone for the amazing food you were having today. You wonder why you are allowed to have this wonderful food at this dinner table, while there are millions who do not even have what they need [[Quora / Anonymous question](#)]. As a Christian, Muslim, or Jew, you are happy because you can thank God. But whom does an atheist thank?

To answer this question, let's assume that you have no food on the table. You're hungry but there is nothing in the fridge. This is quite annoying, and you're a bit angry. Whom do you blame? Maybe yourself, because you forgot to do the shopping. Or your husband, who promised to do the shopping, and didn't do it. Or maybe your boss who sent you home so late that all shops were already closed. You see that, under no circumstances, you would blame God for not having food on your table. Blaming God would be just absurd. Then why do you want to thank God if you have food?

You see that, when you have no food, you go through a thought process to find the culprit. You consider the people who are directly responsible for the situation, and then maybe people who are further away, and then possibly even society as a whole – but you never come across God in this process. Atheists go through the same thought process when they have food and want to thank somebody.

Dude. Why is it that your god gets the credit whenever something good happens, but when a roof collapses and kills a bunch of kids, it doesn't get the blame? That makes no sense.

I mean I don't believe it, but I might respect your stance if it were consistent.

By Cyndy Hammond on Quora.com

Atheists are angry

Quite a number of people are concerned that atheists would be angry folks. They would be negative, hateful, and bitter ([Yahoo Answers / Why are atheists bitter?](#)).

If atheists in general were hateful people, that would indeed be reason for concern. However, it is hard to measure whether one group of people is more hateful than another group. Maybe happiness can count as a proxy. Religious people tend to be happier ↗. At the same time, atheist societies as a whole tend to be happier than theist ones ↗. Some research suggests that atheists are more altruistic and generous than believers ([Time: Study Shows Non-Religious Kids Are More Altruistic and Generous Than Religious Ones, 2015-11-06](#)). This is not exactly a sign of anger. Thus, there is no reason to believe that atheists would be more hateful than believers.

Besides, there is no hatespeech in the name of atheism. However, there is religious hatespeech. The Torah, the Bible, and the Quran, and even Buddhist and Hindu scriptures all contain considerable portions of hatespeech against atheists ↗. The very foundations of these religions contain bitter, angry, and sometimes sadistic elements. Atheism does not.

*Don't think we cannot see the sun as clear as you,
we just think it comes from a different source.*

By Lisa G

Atheists hate God!

Atheists have no belief in God. They cannot hate him.

Suggesting that I hate people with religion because I hate religion is like saying I hate people with cancer because I hate cancer.

By Ricky Gervais

Why don't you just try out religion?

Atheists do not follow a religion. Hence, we may ask why the atheists do not at least give religion a chance and try it out. Then they can decide first-hand whether it makes sense to them or not.

The first question is which religion we should choose. There are several thousands of them, and they are all incompatible: some of them believe in several gods, others believe in one god, and again others believe in no gods, but in spirits or aliens ↗. Believers tend to forget from time to time that there are more religions than their own ↗.

Let's just suppose we take an arbitrary religion. This is indeed what many atheists did: They were brought up in a religious household. They were taught to pray, and went to church or the temple. They participated in religious rituals, such as weddings and communions. In spite of this (or more precisely: because of this) they have decided to become atheist. These people have tried both options, the religious one and the atheist one, and have made a conscious decision between them ↗.

Few believers can say the same.

*Some people don't try bacon because of religion.
I don't try religion because of bacon.*

By anonymous

You have nothing to lose!

This argument goes that religion promises eternal life, while atheism doesn't. So then why don't we just become religious? If religion is wrong, we haven't lost anything. If the religion is true, we gain eternal life.

This argument is known as Pascal's Wager, and we dedicate an article to it ↗. The main argument goes that it is better to follow no religion than to follow an arbitrary one, because if there is a god, he may be more angry if we follow the wrong religion than if we follow none.

What if we believe in the wrong god, and by praying more, we just make him madder?

By Homer Simpson

Atheist Beliefs

Are atheists satanists?

Satanism is a group of ideological and philosophical beliefs based on the character of Satan ([Wikipedia/Satanism](#)). Satan (aka. "the devil") is a supernatural entity who is considered responsible for the evil on Earth. Atheism is often linked with Satanism.

Atheists reject belief in the supernatural. Satan is supernatural. Therefore, atheists reject belief in Satan. Hence, unfortunately, they cannot be Satanists. For atheists, Satan is a fictional character – just like all the other

mythological figures, including the gods ↗.

It is mainly Christians, Muslims, and Jews who believe that Satan exists ↗.

Of the two of us, only one believes in Satan.

Hint: It's not me.

By Scott Berry on Quora.com

Survive and reproduce

Many atheists, and Humanists in particular, take a scientific view of the world. This view includes the Theory of Evolution and the Theory of the Big Bang ([Chapter on the Universe](#)). This is sometimes seen as evidence that atheists believe that everything can be explained by the drive to survive.

Certainly, the drive to survive plays a role in many decisions. But it is for sure not the only factor. Claiming that an atheist's decisions are determined only by the drive to survive is as false as claiming that a believer's decisions are determined only by the fear of the Last Judgement. We discuss what drives people to do things in the [Chapter on the Sense of Life](#).

You see me as an atheist. God sees me as the loyal opposition.

By Woody Allen

What if a god showed up?

What would atheists do if a god showed up? This really depends on which god shows up ↗. Dionysus or Pan: party time. Jehova: run for cover. Zeus: lay low. Shiva the Destroyer: try to undo as much karma as possible. Krishna: break out your dancing shoes. Aphrodite? Hold my calls! [Andrew O. Dugas on Quora]

Apart from that, atheists would recognize this as a proof of that god's existence. Any physical and verifiable appearance of a god proves atheism wrong ↗. Atheists would then most likely even congratulate the believers for finally coming up with some evidence for their god, after thousands of years of blind faith ([Dan Holliday on Quora](#)).

As a side-effect, if the god is verifiably the god of one particular religion, this would also mean most theists are wrong, because all 3,700 god groups can't coexist, and all 2,500 religions can't be correct [[Noam Kaiser](#)]. Nevertheless, most likely, these theists will never admit that they were wrong. They will just declare that the other god is a form of appearance of their own god, or that their own god sent an image of the other god as a temptation to man ↗. They will never admit that any god who shows up is not somehow the work of their own god.

This distinguishes theists from atheists: Atheists can be proven wrong. It's just that they have never been.

Einstein believed in God!

Albert Einstein is often cited as a believer in God. This is seen as an argument for theism, because Einstein, as a physicist, should know something about the universe. Many other physicists also believe in God, or have a theistic view of the universe.

In general, it is questionable whether something is right just because a famous person believes it. However, if we assume this for a moment just for the sake of the argument, then we see that the list of famous scientists who believe in God is matched by another list of famous scientists who do not believe in God. In fact, 59% of American scientists do not believe in God ([Pew Forum: Scientists and Belief, 2009-11-05](#)). 40% of them are atheists. Einstein himself was maybe not atheist, but he was also not exactly religious. He once wrote: "I do not believe in a personal God and I have never denied this but have expressed it clearly." ([Wikipedia/Religious views of Einstein](#))

We list some famous atheist scientists here (from [Wikipedia / List of atheists](#), unless otherwise mentioned).

Jean le Rond d'Alembert (1717-1783)

French mathematician, mechanic, physicist, philosopher, and music theorist. He was also co-editor with Denis Diderot of the Encyclopédie.

Joseph Louis Lagrange (1736-1813)

French mathematician and astronomer.

Augustus De Morgan (1806-1871)

British mathematician and logician. He formulated De Morgan's laws and nailed down the principle of mathematical induction.

Alfred Nobel (1833-1896)

Swedish chemist, engineer, innovator, and armaments manufacturer. He is the inventor of dynamite. In his last will, he used his enormous fortune to institute the Nobel Prizes.

Élie Metchnikoff (Илья Ильич Мечников, 1845-1916)

Russian biologist, zoologist and protozoologist. He is best known for his research into the immune system. Mechnikov received the Nobel Prize in Medicine in 1908, shared with Paul Ehrlich.

Ivan Pavlov (Иван Петрович Павлов, 1849-1936)

Nobel Prize winning Russian physiologist, psychologist, and physician, widely known for first describing the phenomenon of classical conditioning (Pavlov's dog).

Wilhelm Ostwald (1853-1932)

Baltic German chemist. He received the Nobel Prize in Chemistry in 1909 for his work on catalysis, chemical equilibria and reaction velocities.

Henri Poincaré (1854-1912)

French mathematician, theoretical physicist, engineer, and a philosopher of science. He is often described as a polymath, and in mathematics as the "Last Universalist", since he excelled in all fields of the discipline as it existed during his lifetime.

Andrey Markov (Андрей Андреевич Марков, 1856-1922)

Russian mathematician who is best known for his work on stochastic processes (e.g., Markov-chains).

Sigmund Freud (1856-1939)

the father of psychoanalysis.

Pierre Curie (1859-1906)

French physicist, a pioneer in crystallography, magnetism, piezoelectricity and radioactivity, and Nobel laureate. In 1903 he received the Nobel Prize in Physics with his wife, Marie Curie, and Henri Becquerel.

Svante Arrhenius (1859-1927)

Swedish physicist and chemist. He is considered to be one of the founders of physical chemistry. He received the Nobel Prize in Chemistry in 1903.

George Washington Crile (1864-1943)

American surgeon. Crile is now formally recognized as the first surgeon to have succeeded in a direct blood transfusion.

Thomas Hunt Morgan (1866-1945)

American evolutionary biologist, geneticist and embryologist. He won the Nobel Prize in Physiology or Medicine in 1933 for discoveries relating the role the chromosome plays in heredity.

Jean Baptiste Perrin (1870-1942)

French physicist. He won the Nobel Prize in Physics in 1926.

Percy Williams Bridgman (1882-1961)

American physicist who won the 1946 Nobel Prize in Physics for his work on the physics of high pressures.

James Franck (1882-1964)

German physicist who won the Nobel Prize in Physics in 1925.

Niels Bohr (1885-1962)

Danish physicist best known for his foundational contributions to understanding atomic structure and quantum mechanics, for which he received the Nobel Prize in Physics in 1922.

Erwin Schrödinger (1887-1961)

Austrian-Irish physicist and theoretical biologist. A pioneer of quantum mechanics and winner of the 1933 Nobel Prize for Physics.

Sir Julian Huxley FRS (1887-1975)

English evolutionary biologist, the first Director of UNESCO, and a founding member of the World Wildlife Fund (WWF).

Hermann Joseph Muller (1890-1967)

American geneticist and educator, best known for his work on the physiological and genetic effects of radiation (X-ray mutagenesis). He won the Nobel Prize in Physiology or Medicine in 1946.

James Chadwick (1891-1974)

English physicist. He won the 1935 Nobel prize in physics for his discovery of the neutron.

Harold Urey (1893-1981)

American physical chemist whose pioneering work on isotopes earned him the Nobel Prize in Chemistry in 1934.

Igor Tamm (Игорь Евгеньевич Тамм, 1895-1971)

Soviet physicist who received the 1958 Nobel Prize in Physics, jointly with Pavel Alekseyevich Cherenkov and Ilya Frank, for their 1934 discovery of Cherenkov radiation.

Irène Joliot-Curie (1897-1956)

French scientist. She is the daughter of Marie Curie and Pierre Curie. Along with her husband, Frédéric Joliot-Curie, she was awarded the Nobel Prize for Chemistry in 1935.

Owen Chamberlain

Nobel Prize winner in Physics in 1959 ([AHA / Humanist Manifesto Signers](#))

Patrick Blackett (1897-1974)

Nobel Prize winning English experimental physicist known for his work on cloud chambers, cosmic rays, and paleomagnetism.

Frédéric Joliot-Curie (1900-1958)

French physicist and Nobel Laureate in Chemistry in 1935.

Ilya Prigogine

Nobel Prize winner in Chemistry in 1977 ([AHA / Humanist Manifesto Signers](#))

Henry Taube

Nobel Prize winner in Chemistry in 1983 ([AHA / Humanist Manifesto Signers](#))

Linus Pauling (1901-1994)

American chemist, Nobel Laureate in Chemistry (1954) and Peace (1962).

Paul Dirac (1902-1984)

British theoretical physicist, one of the founders of quantum mechanics, predicted the existence of antimatter, and won the Nobel Prize in Physics in 1933.

Sheldon Glashow

Nobel Prize winner in Physics in 1979 ([AHA / Humanist Manifesto Signers](#))

Dudley Herschbach

Nobel Prize winner in Chemistry in 1986 ([AHA / Humanist Manifesto Signers](#))

George Wells Beadle (1903-1989)

American geneticist. Along with Edward Lawrie Tatum, he won the Nobel Prize in Physiology or Medicine in 1958 for discovering the role of genes in regulating biochemical events within cells.

Thomas Edison

American inventor, patented more than 1,000 inventions, including the electric light, the phonograph, and the motion-picture camera.

Pierre-Gilles de Gennes

Nobel Prize winner in Physics in 1991 ([AHA / Humanist Manifesto Signers](#))

Mario J. Molina

Nobel Prize winner in Chemistry in 1995 ([AHA / Humanist Manifesto Signers](#))

George Wald (1906-1997)

American scientist who is best known for his work with pigments in the retina. He won a share of the 1967 Nobel Prize in Physiology or Medicine with Haldan Keffer Hartline and Ragnar Granit.

Hans Bethe (1906-2005)

German-American nuclear physicist, and Nobel laureate in physics for his work on the theory of stellar nucleosynthesis.

Nikolaas Tinbergen (1907-1988)

Dutch ethologist and ornithologist who shared the 1973 Nobel Prize in Physiology or Medicine with Karl von Frisch and Konrad Lorenz for their discoveries concerning organization and elicitation of individual and social behaviour patterns in animals.

Lev Landau (Лев Давидович Ландау, 1908-1968)

Soviet physicist who received the 1962 Nobel Prize in Physics for his development of a mathematical theory of superfluidity.

Hannes Alfvén (1908-1995)

Swedish electrical engineer and plasma physicist. He received the 1970 Nobel Prize in Physics for his work on magnetohydrodynamics (MHD).

Subrahmanyan Chandrasekhar (1910-1995)

Indian American astrophysicist known for his theoretical work on the structure and evolution of stars. He was awarded the Nobel Prize in Physics in 1983.

Jacques Monod (1910-1976)

French biologist who won the Nobel Prize in Physiology or Medicine in 1965 for discoveries concerning genetic control of enzyme and virus synthesis.

Yuan T. Lee

Nobel Prize winner in Chemistry in 1986 ([AHA / Humanist Manifesto Signers](#))

William Shockley (1910-1989)

American physicist and inventor. Along with John Bardeen and Walter Houser Brattain, Shockley co-invented the transistor, for which all three were awarded the 1956 Nobel Prize in Physics.

Konrad Zuse (1910-1995)

German civil engineer and computer pioneer. His greatest achievement was the world's first functional program-controlled Turing-complete computer, the Z3, which became operational in May 1941.

E. Donnall Thomas

Nobel Prize winner in Medicine in 1990 ([AHA / Humanist Manifesto Signers](#))

Alan Turing (1912-1954)

English mathematician, logician, and cryptographer; often considered to be the father of modern computer science. The Turing Award, often recognized as the "Nobel Prize of computing", is named after him.

Julius Axelrod (1912-2004)

American Nobel Prize winning biochemist, noted for his work on the release and reuptake of catecholamine neurotransmitters.

Paul Erdős (1913-1996)

Hungarian mathematician. He published more papers than any other mathematician in history, working with hundreds of collaborators. He worked on problems in combinatorics, graph theory, number theory, classical analysis, approximation theory, set theory, and probability theory. He is so famous that scientists in the area and neighboring fields compute their Erdős-number – the number of collaborators that separate them from Erdős. This author's number is 3.

Max Perutz (1914-2002)

Austrian-born British molecular biologist, who shared the 1962 Nobel Prize for Chemistry with John Kendrew, for their studies of the structures of hemoglobin and globular proteins.

Sir Peter Medawar (1915-1987)

British scientist best known for his work on how the immune system rejects or accepts tissue transplants. He won the Nobel Prize in Physiology or Medicine.

Francis Crick (1916-2004)

English molecular biologist, physicist, and neuroscientist; noted for being one of the co-discoverers of the structure of the DNA molecule in 1953. He was awarded the Nobel Prize in Physiology or Medicine in 1962.

Vitaly Ginzburg (Виталий Лазаревич Гинзбург, 1916-2009)

Russian theoretical physicist and astrophysicist who was awarded the Nobel Prize in Physics in 2003.

Herbert A. Hauptman (1917-2011)

American mathematician, who, along with Jerome Karle, won the Nobel Prize in Chemistry in 1985.

Richard Feynman (1918-1988)

American theoretical physicist, best known for his work in renormalizing Quantum electrodynamics (QED) and his path integral formulation of quantum mechanics. He won the Nobel Prize in Physics in 1965.

Johann Deisenhofer

Nobel Prize winner in Chemistry in 1988 ([AHA / Humanist Manifesto Signers](#)).

Paul D. Boyer (born 1918)

American biochemist and Nobel Laureate in Chemistry in 1997.

Peter D. Mitchell (1920-1992)

British biochemist who won the Nobel Prize in 1978.

François Jacob (born 1920)

a French biologist who, together with Jacques Monod, originated the idea that control of enzyme levels in all cells occurs through feedback on transcription. He shared the 1965 Nobel Prize in Medicine with Jacques Monod and André Lwoff.

Andrei Sakharov (Андрей Дмитриевич Сахаров, 1921-1989)

Soviet nuclear physicist, dissident and human rights activist. He was awarded the Nobel Peace Prize in 1975. The Sakharov Prize, which is awarded annually by the European Parliament for people and organizations dedicated to human rights and freedoms, is named in his honor.

Jérôme I. Friedman

Nobel Prize winner in Physics in 1990 ([AHA / Humanist Manifesto Signers](#))

Erwin Neher

Nobel Prize winner in Medicine in 1991 ([AHA / Humanist Manifesto Signers](#))

Paul J. Crutzen

Nobel Prize winner in Chemistry in 1995 ([AHA / Humanist Manifesto Signers](#))

Leon M. Lederman (born 1922)

an American physicist who, along with Melvin Schwartz and Jack Steinberger, received the Nobel Prize for Physics in 1988 for their joint research on neutrinos.

Philip W. Anderson (born 1923)

American physicist, and one of the recipients of the Nobel Prize in Physics in 1977.

Georges Charpak (1924-2010)

French physicist who was awarded the Nobel Prize in Physics in 1992.

Marshall Rosenbluth (1927-2003)

American physicist, nicknamed "the Pope of Plasma Physics".

David J. Gross

Nobel Prize winner in Physics in 2004 ([AHA / Humanist Manifesto Signers](#))

John McCarthy (1927-2011)

American computer scientist and cognitive scientist who received the Turing Award in 1971 for his major contributions to the field of Artificial Intelligence (AI). He was responsible for the coining of the term "Artificial Intelligence" in his 1955 proposal for the 1956 Dartmouth Conference and was the inventor of the Lisp programming language.

John Forbes Nash, Jr. (born 1928)

American mathematician whose works in game theory, differential geometry, and partial differential equations (coining the Nash-equilibrium). He shared the 1994 Nobel Memorial Prize in Economic Sciences with game theorists Reinhard Selten and John Harsanyi.

James D. Watson (born 1928)

1962-Nobel-laureate and co-discoverer of the structure of DNA.

Herbert Kroemer (born 1928)

German-American professor of electrical and computer engineering, was awarded the Nobel Prize in Physics in 2000 with Alferov.

Peter Higgs (born 1929)

British theoretical physicist, recipient of the 2013 Nobel Prize in Physics, known for his prediction of the existence of a new particle, the Higgs boson, nicknamed the "God particle".

Zhores Alferov (Жорес Иванович Алфёров, born 1930)

Russian physicist and academic who contributed significantly to the creation of modern heterostructure physics and electronics. He is an inventor of the heterotransistor and the winner of 2000 Nobel Prize in Physics.

Michael Smith (1932-2000)

British-born Canadian biochemist and Nobel Laureate in Chemistry in 1993.

Amartya Kumar Sen (born 1933)

1998 Nobel Laureate in Economics.

Steven Weinberg (born 1933)

American theoretical physicist. He won the Nobel Prize in Physics in 1979 for the unification of electromagnetism and the weak force into the electroweak force.

Richard R. Ernst (born 1933)

Swiss physical chemist. He was awarded the Nobel Prize in Chemistry in 1991.

Roald Hoffmann (born 1937)

American theoretical chemist who won the 1981 Nobel Prize in Chemistry.

John Horton Conway (born 1937)

British mathematician active in the theory of finite groups, knot theory, number theory, combinatorial game theory and coding theory. He is best known for the invention of the cellular automaton called Conway's Game of Life ↗.

Jean-Marie Lehn (born 1939)

French chemist who received the 1987 Nobel Prize in Chemistry, together with Donald Cram and Charles Pedersen.

Harold Kroto (born 1939)

1996 Nobel Laureate in Chemistry.

Stephen Hawking (born 1942)

arguably the world's pre-eminent scientist, advocates atheism in his book "The Grand Design".

John Sulston (born 1942)

British biologist. He is a joint winner of the 2002 Nobel Prize in Physiology or Medicine.

Richard J. Roberts (born 1943)

British biochemist and molecular biologist. He won the Nobel Prize in Physiology or Medicine in 1993 for the discovery of introns in eukaryotic DNA.

Robert Cailliau (born 1947)

Belgian informatics engineer and computer scientist who, together with Sir Tim Berners-Lee, developed the World Wide Web.

Paul Nurse (born 1949)

the 2001 Nobel Laureate in Physiology or Medicine.

Russell Alan Hulse (born 1950)

American physicist and winner of the 1993 Nobel Prize in Physics, shared with his thesis advisor Joseph Hooton Taylor Jr..

This list contains a large number of prominent biologists, physicists, and chemists who are atheist. Not all people listed here worked only for peaceful purposes. Some were instrumental in research for nuclear bombs – just like Albert Einstein himself. There were also many theists who won Nobel Prizes in the natural sciences, maybe even more than atheists. Yet, this list defies the claim that natural scientists in general would believe in God.

There are so many scientists in hell that it's probably air conditioned by now.

By the [Global Secular Humanist Movement](#)

Remark: We list some atheist artists in another article [↗](#), and some atheist advocates for ethics in some other article as well [↗](#). See [CelebAtheists.com](#) for a list of currently around 690 famous atheists.

Atheists & Society

Can atheists marry religious people?

In discussions about religion on the internet, we often find questions about love. "Can an atheist love a Christian?" asks Crazy Nurse on Yahoo Answers ([here](#)).

Atheists see no reason why they should not love a Christian or a believer. In fact, many atheists are in love with believers (as the responses on Yahoo Answers testify). Going further, nothing in the concept of atheism prohibits an atheist from marrying a religious person. Humanism, too, has no constraint whatsoever on marrying religious people [↗](#). On the contrary, the Human Rights stipulate that everyone has the right to marry, no matter their religious views or those of their partner ([Human Rights / Article 16 \(1\)](#)).

Things are different from a believer's perspective. Most religions urge their followers to marry within their own denomination. Some denominations even forbid interreligious marriage explicitly ([Wikipedia / Interfaith Marriage](#) [↗](#)). Therefore, a reason against an atheist-theist marriage is more likely to come from the believer's side than from the atheist side.

Can atheists go to church?

Whether an atheist may attend a religious ceremony or not is foremost the decision of the respective religious group. Some groups disesteem atheists and it is their natural right to forbid an atheist to participate in their

ceremonies. Other groups do not have an explicit opinion on the matter. Again others explicitly welcome foreigners (as "lost sheep").

Some religious ceremonies serve to express a certain intention. A public credo, for example, is a public expression of faith. A wedding ceremony expresses the desire of two people to marry. In general, it is reproachable to participate in these ceremonies if one does not share these intentions (as a false testimony, see my essay [Thoughts on Ethics / Lying](#)). Naturally, this applies also to atheists.

Other parts of religious ceremonies are uncritical. For example, an atheist can listen to sermons or sing religious songs – just as we can sing a love song not because we love somebody, but because we like the melody. In this respect, an atheist's attending a religious ceremony is much like your attending a Khonvoun ceremony at a Bambuti tribe ↗. You are interested in the ceremony and maybe you respect the believers' faith, but you do not share it.

Can atheists celebrate Christmas?

Yes, they can. To see why the most important Christian celebration can be enjoyed by atheists as well, let us take a look at the history of Christmas: Many cultures had a winter festival long before Christianity existed. One reason for this is the winter solstice on December 21st, which marks the turning point in the year, when days become longer again. Christmas, as the celebration of Jesus' birth, was placed in this time by the early Church in order to entice pagan Romans to convert to Christianity without losing their own winter celebrations. Later, the old pagan symbol of life and spring, an evergreen bough, found its way into the Christmas celebration as the Christmas tree. Thus, the origins of the festival are completely unrelated to Jesus' birth. ([Wikipedia/Christmas](#))

Today, Christmas is a mixture of several aspects – religious ones as well as pagan ones and secular ones. One religious aspect is certainly the celebration of Jesus' birth. This aspect is obviously of lesser importance to atheists. Another aspect of Christmas is a social one: The reunion of the family, the giving of gifts and the time spent together. This aspect can be enjoyed without any reference to religion. For many people, including many atheists, this is actually the most important aspect of Christmas. Another function of Christmas is to counterbalance the depressing fact that the days get shorter. Instead of thinking about the shorter days, people prepare for the celebration, they buy presents and they plan their holidays. This positive distractive effect gets artificially prolonged by the Advent season, which starts already 4 weeks before the actual festival. After Christmas, the darkest point of the year is overcome and people look forward to the spring. Thus, in principle, Christmas still serves the same purpose as the old pagan celebration at the end of the winter. It can therefore be enjoyed by believers, atheists, and pagans alike. Last, Christmas also has an economic function. Christmas makes people spend money and this makes it the largest annual stimulus for the economy in many countries. This aspect, likewise, can be enjoyed by atheists and believers alike.

Given this, and given that the origins of the celebration are not Christian at all, it would be a pity to leave Christmas to the Christians.

Hear what the Lord says to you, people of Israel. This is what the Lord says: "Do not learn the ways of the nations or be terrified by signs in the heavens, though the nations are terrified by them. For the practices of the peoples are worthless; they cut a tree out of the forest, and a craftsman shapes it with his chisel. They adorn it with silver and gold..."

By the Bible, Jeremiah 10:1-4

Remark: Churches often complain that the Christmas celebration is "hijacked" by the market economy, and that people care more about gifts than about Jesus. The pagans must have thought the same when their winter celebrations were hijacked by



The Christmas Tree – an old pagan symbol of the winter solstice

the Christians. Alas, nobody cared about the birthday of the Sun any more..

Chapter on Truth

Introduction

Introduction

The question of what is "true" and what is "false" is one of the most fundamental questions in philosophy. This chapter presents my own theory of truth. It consists of the following sections:

- [Introduction](#): Gives the running example of the ancient Greek mythological figure Persephone.
- [Theories](#): Defines statements, rules, and theories.
- [True theories](#): Tells us when a theory is true.
- [True statements](#): Tells us when a statement is true.
- [Theories in real life](#): Discusses how the theory of truth of this book translates to real life.
- [Common Mistakes](#): Lists common fallacies that people make when they search for the truth.
- [Mistakes in theological arguments](#): Lists common fallacies when discussing religion.
- [Truth and Atheism](#): Links the theory of truth presented here to atheism.
- [Questions](#): Answers objections to the theory of truth.

I wish to warn the reader that this chapter is rather theoretical. Should you be less inclined to such theory, you are invited to read just the "Summary on the Concept of Truth" [↗](#).

Strength of Belief

Some people think that truth is a matter of strength of belief. They would say that "God created the world in 7 days" and "Life took 4 billion years to develop on Earth" are both equally valid statements. Creationists believe in the first statement, and evolutionists believe in the second statement, but none is a priori more valid than the other.

And yet, there is a fundamental difference between these statements: While the first is based on belief, the second is based on evidence. This makes the first statement debatable, and the second statement verifiable, useful, and predictive. We will now discuss this difference in detail.

Persephone and the Seasons

As a motivating example for our study of truth, let us consider a story from the Greek mythology. To explain the seasons of summer and winter on Earth, the Greeks had the following story: Hades, God of the Underworld, kidnaps Persephone, the Goddess of Spring, and negotiates a forced marriage contract, requiring her to return regularly, and lets her go. And each year, she is magically compelled to return. And her mother, Demeter, Goddess of the Earth, is sad, and makes it cold and barren. ([David Deutsch @ TED talks](#))

This theory explains why winter is cold: Mother Earth is sad and shows her sadness by making it cold. Yet, is this the right explication? If not, then why is this explication wrong? Can we prove that it is wrong?

It turns out that it is very difficult to prove this explication wrong. To date, no proof has been found that Hades and Persephone do not exist. Also, the theory of Hades and Persephone makes astonishingly correct predictions to date: Every summer, the weather is hotter than in the preceding winter. Does this not prove that Persephone is still under the spell of Hades?

Remark: David Deutsch (from whom this example is taken) argues that what makes this theory bad is that it can easily be varied. He proposes one variation: Persephone wasn't released. She escaped, and returns every spring to take revenge on Hades, with her Spring powers. She cools his domain with Spring air, venting heat up to the surface, creating summer. That accounts for the same phenomena as the original myth. ([David Deutsch @ TED talks](#)) Deutsch argues that this variability makes the theory bad, and that true theories cannot be varied so easily. However, this argument can be countered: The Greek mythological canon of stories is a complex system that explains numerous other facts of life. Hades, for example, is mightier than Persephone, because otherwise he could not have kidnapped her. Since he is mightier, he could resist her revenge easily. Hence, Deutsch's story is not possible.



One of the rare color photos of Persephone in her twenties [Glogster]

Theories

Statements

For the purpose of this book, a statement is any declarative sentence. For example, the following sentence is a statement:

The Earth is flat.

Obviously, this is a false statement. However, it is still a statement. The following utterances are *not* statements:

- Questions ("Is the Earth flat?")
- Commands ("Go home!")
- Interjections ("Uh!")
- Incomplete sentences ("Well, you know...")

Rules

For the purpose of this book, a rule is a statement of the form

If blah and blah and blah ... then blah

...where the blah's are themselves statements. Usually, the statements are general statements about people, things, or events. Here are examples:

If it rains and it is sunny, then there is a rainbow.

If someone steals a car, then he is a thief.

If a stone is left in the air without support, then it will fall down.

The left part of the rule is called the premise of the rule, and the right part is called the conclusion of the rule. The rule says that if we find a case where the premise is true, then the conclusion will also be true. For example, if we find a day where it rains and it is sunny, then on that day there will be a rainbow. A rule can be wrong, too. The following rule is usually wrong:

If it rains for three days in a row, then it will be sunny for three days.

Remark: Note that we use the word "rule" here not in the sense of "moral rule", but in the sense of a "usually valid generalization".

A logical perspective on rules

(Readers who are not familiar with logic can safely skip this article.)

From a logical point of view, a rule in the sense of this book ↗ is a clause of first order logic with positive and negative literals, only universally quantified variables, and no function symbols. This means that any first order logic formula that has only universal quantifiers in its prenex form and that does not have function symbols can be translated into a set of rules. For this purpose, the formula has to be brought to disjunctive normal form. Then, one has to pick one literal in each clause. That literal becomes the conclusion of the rule, and all others are negated and go to the premise.

The advantage of such a system is that it is decidable. This holds because the logic is a subset of Bernays-Schönfinkel's decidable fragment of first order logic. This holds even if equality is added, because the result is the Bernays-Schönfinkel-Ramsey class ([Wikipedia/Bernays-Schönfinkel-Ramsey class](#)).

The disadvantage is that the system cannot express existential quantifiers in the conclusion. The system cannot deduce "There exists x such that...". There are the following exceptions, though:

1. If the x is an entity that does not depend on any other variables in the rule, then we can simply give a name to that entity and have it appear in the conclusion. This holds in particular if x is an entity for which we already have a name (such as "God").
2. If the x runs over a finite set of known entities (such as "the current presidents of all countries"), then the existential quantification can be replaced by a disjunction – and the system can have such a disjunction in the conclusion.

The system can deal with disjunctions in the premise and in the conclusion as follows:

$A \vee B \Rightarrow C$ can be transformed to $A \Rightarrow C \quad B \Rightarrow C$
 $A \Rightarrow B \vee C$ can be transformed to $A \wedge \sim B \Rightarrow C \quad A \wedge \sim C \Rightarrow B$

If we need existential variables that depend on other variables and that run over an infinite or unknown set, then we have to use Skolem functions ([Wikipedia/Skolemization](#)). We do not go that far in this book.

A pragmatic perspective on rules

For this book, a rule is a statement of the form "If A and B and C, then D" ↗. In everyday discourse, rules take much less strict forms. Examples are as follows:

- "Lions roar" is an abbreviation for "If something is a lion, then that something will roar from time to time"
- "When it rains, the street gets wet" is an abbreviation for "If at some point of time it rains, then the street will be wet in the moments after that point of time"
- "When it rains, you get wet" omits some conditions. We mean "If at some point of time it rains, and you are outside without anything above you, then you get wet."

Conclusions can also be negative, as in "If something is denser than water, then it will not float".

Our rules usually contain a number of implicit conditions in the premise. Consider for example the rule:

If I switch on the light, then the light bulb lights up.

This rule presumes that the light switch is not broken, that the light bulb is OK, and that the power is not turned off. We assume that the rule contains these conditions implicitly, because otherwise we would have to enumerate a large number of conditions each time we talk about a rule.

Examples for rules

A rule consists of a premise and a conclusion ↗. Many phenomena can be formulated in terms of rules. Here are examples:

Scientific theories

These include for example the law of gravity. This law can be stated as a rule as follows:

*If there are two physical bodies A and B
and the mass of A is $m(A)$
and the mass of B is $m(B)$
and the distance between A and B is r
then the force between A and B is proportional to $m(A)*m(B)/r/r$.*

Regulations

Regulations can likewise be formulated as rules. For example, the rule that someone is admitted to the A-levels if and only if they pass the exams in Math and English can be formalized as the following implications:

*If someone passes the exam in Math and the exam in English then they are admitted to the A-levels.
If someone does not pass the exam in Math then they are not admitted to the A-levels.
If someone does not pass the exam in English then they are not admitted to the A-levels.*

World knowledge

Common sense knowledge such as "every human will die" can likewise be formulated as rules. For this purpose, the implicit type assumptions of the sentence become the conditions of the implication:

If some entity is a human then that entity will eventually die.

Perceptions

For some statements I can immediately and incontestably say whether they are true. These are statements about my own perceptions and impressions. The following are examples:

- I feel hungry
- I have the impression of seeing something blue
- I hear a noise

These statements are not statements about the world. Rather, they are statements about my impressions. For example, I can have the impression of seeing something blue even if there is nothing blue. In that case, the statement about the impression will still be incontestably true.

My goal is now to structure and to predict these impressions.

*My universe is my eyes and my ears. Anything else is hearsay.
By Douglas Adams*

Auxiliary statements

Up to now, we have talked only about very basic statements, namely about perceptions ↗. We will now build more advanced statements on top of these perception statements. This works by definitions. A definition is a rule ↗ whose premise contains only perception statements and previously defined statements. Here is an example:

If I see sky above me, and I can feel water droplets coming from above, then it is raining.

This statement contains perception statements in its premise. It defines the statement "It is raining". This statement about rain does not necessarily correspond to the meteorological definition of rain. It could also be that I am being sprayed with water, for example. Thus, we should rather have defined the statement "I have the impression that it is raining". The point is, however, that it does not matter how we call this feeling of water droplets from above. We could equally well have used any of the following notions instead:

*It is sunny.
Es regnet.
ABCD.*

After such a definition, the state of water droplets falling from the sky would be called "ABCD". It does not matter how we call the state. This is why we will call such statements *auxiliary statements*.

Auxiliary statements allow us to simplify our rules. For example, the rule

If I see sky above me, and I can feel water droplets coming from above, then the street gets wet.

... can now be simplified to...

If it is raining, then the street gets wet.

A rose by any other name would smell just as sweet.

By Juliet in William Shakespeare's play "Romeo and Juliet"

The meaning of statements

We have seen that statements about perceptions have a very simple meaning ↗. We will now see what is the meaning of auxiliary statements ↗.

The meaning of an auxiliary statement is the set of all rules in which it appears in the premise. For example, the meaning of "It is raining" is

If it is raining, then the street gets wet.

If it is raining, and the sun shines, there will be a rainbow.

If it is raining, and I am outside, and I do not have an umbrella, then I will get wet.

...

The conclusions of these statements are again statements with a meaning. We can always ask for the meaning of a statement until we reach a perception statement. This way, each statement has to be grounded in reality. This definition of meaning corresponds to our everyday understanding of "meaning". When someone asks us what we mean by "It is raining", then we are likely to respond with a list of rules that characterize that particular state of the world.

Quite often, the definition and the meaning of a statement are just two sides of the same coin: If it rains, water falls from the sky, and vice versa, if water falls from the sky, then it rains.

From now on, we will assume that there is a set of rules that defines everyday English statements and gives them a meaning. You can think of this set as the rules that we learn during our childhood ↗. With this in mind, we can now start using auxiliary statements in our rules.

The paralysis of thought that comes to philosophers: One saying to the other: "You don't know what you are talking about!" The second one says: "What do you mean by talking? What do you mean by you? What do you mean by know?"

By Richard Feynman

Theories

In common understanding, a "theory" is a set of ideas. For the purpose of this book, a theory is a rule ↗, together with the necessary definitions ↗ and meanings ↗.

Examples for theories are:

- The rule "If it rains and the sun shines, then there is a rainbow", together with the definitions and meanings of the words
- The theory of gravity, with all its rules and formulas.
- The theory that God creates life, together with the necessary definitions.

The definitions are native to a theory. Thus, each theory can define its auxiliary notions in the way it wishes ↗

Remark: In the following, we will refer to a theory by its main rule, and assume that the theory contains the definitions and meanings of all common English statements.

Applying a theory

A theory consists of a main rule, together with the necessary definitions and meanings ↗. Consider, e.g., the following theory:

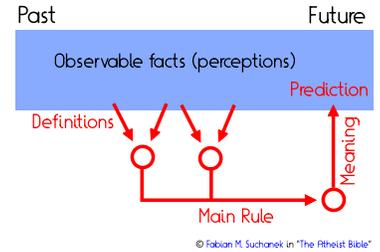
Main rule: If it rains and the sun shines, then there is a rainbow.

Def. 1: If there are droplets of water coming from the sky, then it rains.

Def. 2: If there is extremely bright round shape on the sky, then the sun shines.

Meaning of "rainbow": If there is a rainbow, then I can see colors in the sky.

Now let's see how we can apply the theory to a case at hand. Assume that it is raining and the sun is shining. Then, Definitions 1 and 2 will fire, allowing us to deduce "It rains" and "The sun shines". With that, we can apply our main rule, which allows us to predict "There is a rainbow". Finally, we can use the last rule to predict "I can see colors in the sky". Drawing this conclusion is called "applying the rule". From initial perception statements about rain and sun, we have deduced another perception statement, about a rainbow. The figure on the right illustrates this deductive process.



Grounded theories

We have seen that a theory ↗ can be used to make predictions ↗. This works only if

- all statements in the premise are well-defined, i.e., for every statement, there is a rule (or a sequence of rules) that allows deducing this statement from perception statements ↗.
- the conclusion is meaningful, i.e., there is a rule (or a sequence of rules) that allows deducing perception statements from the conclusion ↗.

If these two conditions are fulfilled, the theory allows predicting perception statements from perception statements. Thus, the theory always says

If I observe this, then I will observe that.

We call such theories *grounded*. A grounded theory always predicts perceptions from perceptions.

I never can catch myself at any time without a perception, and never can observe any thing but the perception.

By David Hume

Truth in a case

A theory can be applied to a particular scenario and yield a prediction ↗. If the theory is grounded ↗, this prediction can always be reduced to a perception statement ↗. There are two cases:

The predicted perception is correct

If the predicted perception corresponds indeed to our perception, we call the theory "true in this case".

The predicted perception is incorrect

If the predicted perception does not happen as predicted, we call the theory "false in this case".

Both notions of truth and falsehood apply only to one particular case at hand. It can also happen that we have a case where we cannot verify the prediction of the theory. Furthermore, it can happen that the theory makes no

prediction whatsoever – either because it is not applicable ↗ or because its conclusions are not grounded ↗. In all of these cases, the theory can be called neither true nor false.

True Theories

Truth of a Theory

A theory is a rule with accompanying definitions and meanings ↗. We have seen how to determine the truth of a theory in one particular case ↗. Now a theory is called "true" (in general), if it is true in all cases. This means in particular:

1. There are cases where the theory is applicable ↗ ↗.
2. The theory is grounded ↗ ↗.
3. All of its predictions in all cases are true ↗ ↗.

Thus, a true theory is basically a rule that will work in eternity. The truth, then, is simply the set of all true theories.

The problem is, of course, that we do not know which rules are true in eternity. Even if we have observed quite some number of cases in our lives, and others have also observed quite some number of cases, a theory that seems to be true can still turn out to be wrong one day. Take, e.g., the theory "If water is heated to 100 degrees Celsius, it boils". This theory is generally considered true. However, it may happen that the theory makes a false prediction. For example, in environments with higher air pressure or more gravity, the theory may turn out to be incorrect. There is no guarantee that reality behaves according to the theories that we build.

This is the main insight of this chapter: We do not actually know the truth. We just approximate it by our theories. Once a theory behaves nearly perfectly, we assume that it is the truth – but we can never be sure.

Proving the truth

A theory is true if it will always make correct predictions ↗. As an example, take the theory of gravity: If an object is not held in place, it falls down. This theory is most likely true – in the sense that it will most likely make correct predictions in eternity.

And yet, we cannot *prove* that the theory is true. The only way to prove the theory would be to use another theory – which we could again not prove. And the reason why we cannot prove these theories is that there could be a case, one day, where the rule makes a wrong prediction. For the theory of gravity, this has actually happened: Objects do not fall "down" in outer space. The theory is actually not true in general.

For this reason, scientists never "prove" a theory. They just "validate" it ↗.

No matter how many instances of white swans we may have observed, this does not justify the conclusion that all swans are white.

By Karl Popper

Remark: Mathematics actually proves theories. But it can do so only under the assumption that other theories are true ab initio – the so-called axioms ([Wikipedia/Axioms](#)).

Validation

We cannot prove that a theory is true ↗. All we can do is observing whether it makes correct predictions. If the theory has made a number of correct predictions in the past, and has made no incorrect predictions, we start to trust the theory ↗. We say that the theory is "validated". We assume that it is part of the truth ↗.

Consider an example: We hire a violinist to play at an art exhibition. The violinist says that all of her performances so far have been very well received. The theory is thus "If this violinist gives a performance, then that performance will be great". This theory predicts that the violinist will do a good job at the exhibition. However, even if all of the performances so far have been great, our trust in this prediction will depend on how many performances the artist already has already given. If, e.g., the artist has given only 2 performances so far, then it does not mean much that all of them have been well received. If, on the contrary, the artist has a long career of hundreds of performances (all of them great), then we are more likely to trust the prediction. The rule "This violinist gives great performances" is validated by a large number of correct predictions. (This works only if we are willing to trust the perceptions of the violinist.)

If a theory has delivered a large number of correct predictions in the past, we say that the theory has been validated. Even a validated theory may go wrong in the future. However, the performance in the past turns out to be the best predictor for the performances in the future.

The effort to understand the universe is one of the very few things which lifts human life a little above the level of farce and gives it some of the grace of tragedy.

By Steven Weinberg

Rejection

A theory can make correct and incorrect predictions ↗. If the theory makes lots of correct predictions, we call the theory "validated", and we assume that it is part of the truth ↗. If, on the contrary, the theory makes lots of incorrect predictions, then it cannot be part of the truth. We call the theory "false", and reject it. We have already seen that a theory cannot be "proven" true ↗. However, it can be proven false: False predictions mean that the theory is false.

In principle, a single wrong prediction shows that a theory is false. In practice, however, we know that all of our theories are mere approximations of the truth ↗. Thus, we are willing to accept some few wrong predictions. In the example of the violinist ↗, we are willing to tolerate some number of not-so-good performances of the violinist, and still say that "This violinist gives good performances" – if the vast majority of the performances were well received.

*Life can only be understood backwards
but it must be lived forwards.*

By Søren Kierkegaard

Unknown truth

If a theory always makes correct predictions, we assume that the theory is a good approximation of the truth ↗. Some theories have not yet made any predictions at all. Consider again the theory that a certain violinist would give only great performances ↗. Now assume that this violinist has so far not given any performances at all. In this case, the theory has not yet been applicable ↗. There has not yet been a case where we could see whether the theory makes true predictions or false predictions. Thus, we cannot say that the theory is true, because truth presupposes true predictions ↗. The theory is not false either ↗, because falsehood follows only from false predictions. Thus, it is just *unknown* whether the theory is true or not. A large number of theories are actually of unknown truth.

What are we to do in such cases? Allen Kardec responds:

In the absence of facts, the wise man suspends his judgment.

By Allen Kardec

Useless theories

One condition of a true theory is that it must be applicable, i.e., there must be cases where the it makes predictions ↗. The theory may not yet have made a prediction in the past, but it has to make a prediction at some point in time ↗. If the theory cannot make any prediction on principle, then the theory is useless.

As an example, consider again the violinist whom we wanted to hire for our art exhibition ↗. Assume that the violinist promises that "If she gives a public performance while in her shower, her performance will be great". This theory is not applicable. Under reasonable meanings of the words, there cannot be a case where she gives a public performance in her shower, because the public does not fit in her bathroom. Hence, this theory is not true (because it does not make true predictions). It is also not false (because it does not make false predictions). It is not of "unknown truth" either, because truth presupposes applicability ↗, and we know that the theory is not applicable. The theory is just useless.

Unfalsifiable theories

A theory can only be true if it is grounded ↗, i.e., if all premises of its rules are well-defined ↗, and if their conclusions are meaningful ↗. It is not always easy to see whether a theory is grounded. Consider again the example of the violinist whom we want to hire for playing at our art exhibition ↗. Assume that she says:

If someone is a true music connoisseur, he will love my performance.

That sounds fair enough. The problem is just that the violinist is unwilling to tell us whether the people in the audience are "true music connoisseurs" or not. So what will happen is that if nobody likes her performance, she will simply say that there are no true music connoisseurs in the audience.

Technically speaking, the premise is not well-defined ↗. We cannot determine whether someone is a "true music connoisseur" purely from known data. We cannot even arrive at this conclusion after the performance, because someone may like the performance even if he's not a music connoisseur. Thus, the premise of the rule is ill-defined. The rule is not grounded ↗.

A simple way of checking whether a theory is grounded is to see whether we can imagine a situation where the theory makes a false prediction. For a grounded theory, we can imagine a situation where the rule goes wrong: The theory of gravity, e.g., says that masses attract each other. We can easily imagine a situation where two masses do not attract each other – even if this is unlikely to happen. If there could be, at least hypothetically, a case where the theory makes a false prediction, we say that the theory can be *falsified*. Now consider the theory with the violinist. It cannot be falsified. If this theory ever predicts that someone loves the performance and it turns out to be wrong, then that person was simply not a true music connoisseur in the first place. The theory cannot go wrong.

Interestingly, every theory that can be falsified is grounded ↗.

Remark: The violinist's reasoning is known as the "No true Scotsman fallacy" ([Wikipedia/No true scotsman](#)). It appears in slight variations also in some religions. Consider "If you pray really wholeheartedly, then God fulfills your wish", or "If you are a righteous person, Allah will guide you", or "If you dance enough, it will rain". We discuss this in detail in the [Chapter on Criticism of Religion](#). Unfalsifiability is also related to the concept of illusory promises in law ([Wikipedia/Illusory promise](#)). This is a promise that is conditioned upon an event within the promisor's control, as in "I will give you 10 dollars if I feel like it."

Falsifiability explained

The concept of falsifiability was advocated by the philosopher Karl Popper ([Wikipedia/Falsifiability](#)). A theory is falsifiable, if we can imagine a case where the theory makes a wrong prediction ↗. If a theory is falsifiable, then it is grounded ↗. To see this, consider the rule "If A then B". We are looking for a statement X such that

If X then the rule "If A then B" is wrong.

By a logical transformation, this leads to:

If X then A.

If B then X is wrong.

This means that we are actually looking for a statement X that tells us when the premise of the rule is true. In other words, we are looking for the definition of the premise ↗. In the example of the violinist ↗, we are asking for the definition of "true music connoisseur". The statement X tells us when someone is a true music connoisseur.

The second rule, "If B then X is wrong" asks for what we can deduce when B becomes true. In other words, it asks for the meaning of B ↗. Falsifiability is thus equivalent to having (1) a well-defined premise and (2) a meaningful conclusion. Thus, falsifiability is a way to ensure that the theory is grounded in perceptions ↗.

If a theory is not falsifiable, it is not grounded, and thus not meaningful. Such meaningless theory typically take one of the following forms:

- If someone is a real hero/Christian/American/..., then... ↗
- If you do it right, then...
- If ..., then something that cannot be seen/understood happens.

Such unfalsifiable theories have 3 properties: (1) They cannot be proven wrong. (2) We can come up with several non-falsifiable rules that contradict each other, and we cannot find out which one is wrong. (3) They cannot make any prediction about the real world, because either we do not know when they fire or we do not know what it means when they fire. In other words, such rules are just nonsense.

Testability

A theory is testable, if we can trigger its premises at will. Consider for example the theory that Peter has a crush on Sarah. This theory says:

Whenever Peter sees Sarah, he will blush and start talking silly.

This theory can be tested, as follows: We put Peter in a room without Sarah. Peter does not blush. Then we ask Sarah to come in. Suddenly, Peter blushes and starts talking nonsense. We could thus trigger the conclusions of the theory at will. In other words: while grounded theories say "If I observe X, then I will observe Y" ↗, testable theories say "If I do X, then I will observe Y".

Testable theories have a huge advantage over non-testable ones: We can repeatedly trigger the premises, and thus see whether we can validate the theory ↗. If a theory is testable, we commonly say that there is a *causal relationship* between the premise and the conclusion. In the example, we would say that Peter blushed *because* Sarah entered the room.

Compression

So far, we have only talked about the truth of a theory. However, there is something more that we expect from a good theory, other than being true. To see this, consider the high tides of the ocean as an example. There was a high tide in New York on Saturday the 3rd of June 2017 at 17:02, and at 5:16 the next day. Hence, we build the following theory:

If it is Saturday the 3rd of June 2017 at 17:02, or the next day at 5:16, then there is a high tide in New York.

This theory makes two predictions, and both of them were true. Hence, the theory is part of the truth. However, the theory just expresses 2 events. It cannot make any predictions beyond these 2 dates. Knowing the theory is no better than knowing the 2 events themselves. Thus, the theory is unsatisfactory.

Now consider the following theory instead:

Whenever a part of the ocean is in line with the moon and the Earth, that part experiences a high tide.

If a part of the ocean is in line with the moon and the Earth at some time X, it will also face the moon at 12:25 hours after X.

If it is Saturday the 3rd of June 2017 at 17:02, then the ocean close to New York faces the moon.

This theory consists of 3 rules, and it predicts all high tides ever to come in the near future. Thus, the theory *compresses* the information about the high tides.

A theory compresses information, if it talks about events in a way that is shorter than listing all the events. In that case, the theory generalizes the events. It captures a pattern whose significance goes beyond the cases at hand.

Compression is the key to making a theory satisfactory. If a theory compresses events, we do not have to memorize the events, but just the theory. If needed, the events can be reconstructed from the theory. Compression is the basis of good predictions ↗ and explanations ↗. It is so quintessential to a good theory, that it has been suggested that it is tantamount to comprehension.

Comprehension is compression.

By Gregory Chaitin

Remark: The more a theory compresses, the higher its explanatory value. For example, the above theory of the moon can be slightly generalized to state that the moon (or, in fact, any other large mass) attracts large masses. Then the theory predicts not just the high tides, but also the fact that the Earth crust itself rises when it faces the moon ([Wikipedia/Earth tide](#)).

True Statements

Evidence

For some statements, we can immediately see or feel whether they are true. These are perception statements ↗. For others, we cannot. For example, the truth of the statement "There will be an solar eclipse in 2030" cannot be decided in the year 2014. For these statements, we have to use evidence.

Evidence for a statement is a true theory ↗ that predicts this statement. In the example: If we have a true theory that tells us how the Earth orbits around the sun, and how the moon orbits around the Earth, and if this theory predicts that moon, sun, and Earth will be in line in 2030, then this theory counts as evidence for the statement that 2030 will see a solar eclipse. If a true theory predicts the statement, we say that the statement is true.

Whatever is not deduced from the phenomena is to be called a hypothesis.

By Isaac Newton

Counter-Evidence

A statement is true if it is predicted by a true theory ↗. Now let us see how we can determine whether a statement is *false*.

A statement is false if there is a true theory that predicts the negation of the statement. Take for example the following theory:

If someone has been vaccinated against Hepatitis A, then he will be resilient against Hepatitis A.

As far as we can see, this theory is true. Now assume that some guy, Bob, is noticing red dots in his face. His wife, Alice, has read on the Internet that this is an indication of Hepatitis A. Hence, she fears that Bob suffers from Hepatitis A. But Bob was vaccinated against Hepatitis A. Hence, our theory predicts that he is resilient against Hepatitis A. Thus, our theory is counter-evidence to Alice's hypothesis. The hypothesis is false.

There is an alternative way to prove a hypothesis false: A hypothesis is false, if it appears in the premise of a true rule, and if that rule makes a false prediction. As an example, take the following rule:

If someone has Hepatitis A, he will show symptoms of flu.

Now assume that Bob observes no symptoms of flu. Then he cannot have Hepatitis A. This is because, if he had Hepatitis A, he would show symptoms of flu. Thus, the rule serves as counter-evidence for the statement "Bob has Hepatitis A". Hence, he statement is false. The technical term for this reasoning is Modus Tollens ↗.

Modus tollens

Suppose that the rule "If it rains, the street gets wet" is true. Then the following rule is also true:

If the street is dry, it does not rain

This is because if the street is dry and it rains, our original rule would be false. Hence, we can turn around any rule in this fashion: We negate both the premise and the conclusion, and swap the two. This way of reasoning is called "Modus Tollens". Technically speaking, Modus Tollens is a rule. It goes like this: "If a rule of the form "If A then B" is true, then the rule "If B is false then A is false" is also true".

If the original rule has several conditions in the premise, then we obtain as many rules as there are conditions.

Joint inference

A statement is true if it is predicted by a true theory ↗, and it is false if its negation is predicted by a true theory ↗. Now assume that there is a theory that predicts the statement, and another one that predicts its negation. By definition, this cannot happen if all theories are true ↗. However, in reality, we do not know which theories are true. Therefore, we often find ourselves in situations with contradictory evidence. In that case, we can only hypothesize about the truth of the statement ↗.

If, on the contrary, two theories predict the same thing, then the conclusion is more likely to be true. Sometimes, a more special theory overrides a more general theory. For example, birds can generally fly. So the theory is "If something is a bird, it can fly". Penguins, however, cannot fly. Here, a more special theory overrides a more general one. We see that if we want to believe in a conclusion, it is not sufficient that one theory predicts it. We also have to check that no other theory contradicts or overrides it.

This means that predicting the future is a complicated business. We have to know lots of theories, weigh them against each other, and combine their conclusions. This is why few people can look into the future. Those who say they can usually can't.

The Unknown

A statement is true, if it is predicted by a true theory ↗, and it is false if its negation is predicted by a true theory ↗. Now suppose that no theory predicts the statement or its negation. For example, assume that we have theories about physics, chemistry, and biology. These theories contain the law of gravity, the chemical reactions of substances, and the functioning of human organs. Now suppose that our question is "How does Sarah feel about Peter?". None of our theories can deliver a conclusion that would be remotely relevant.

In such cases, something very simple happens: The answer to the question is unknown. This means that there could be an answer, but that we do not know it. Thus, the right thing to say is "I do not know". That is nothing to be ashamed of. In fact, the vast majority of things are unknown to us.

I was gratified to be able to answer promptly. I said I don't know.

By Mark Twain



The Salviati Map of 1526 was revolutionary because it did not fill the border with monsters, but with white space – admitting that there was something unknown to be discovered.

Falsifiability

The concept of falsifiability was advocated by the philosopher Karl Popper ([Wikipedia/Falsifiability](#)), and we have already seen how to apply it to theories ↗. It can also be applied to statements: A statement of a theory is falsifiable if we can imagine a situation in the present or future that contradicts the statement or its meaning ↗. The following statements are falsifiable:

The Earth has only one moon.

Let us imagine that one day we see two moons orbiting the Earth. Then this situation would prove the statement wrong. Therefore, the statement is falsifiable.

4 + 2 = 6

Let us imagine that I have an empty table, and that I put 4 matches on that table. Then, I put 2 more matches on the table. If I count the matches on the table, and the number is not 6, then the statement is wrong. Thus, the statement is falsifiable.

Bob is angry.

If Bob actually appears to be very happy and, when asked, says that he is not angry, then this statement is wrong.

From these examples, it appears that every statement is falsifiable. Yet, this is not the case. Take for example the following statement:

Reality does not exist, everything is just a dream that you cannot quit.

What could prove this statement wrong? What would have to happen so that we see that reality is not a dream? Since we cannot "wake up", there is no way to show that the statement is wrong – even hypothetically. Thus, the statement is not falsifiable.

Falsifiability is about the possibility that a counter-argument could be found. Thereby, falsifiability is a purely theoretical property of a statement – it does not actually require proving or disproving something.

Now let's look at the statements that are not falsifiable, such as "Reality is a dream". These statements cannot be proven wrong. This has an interesting consequence: It means that we can come up with several contradictory non-falsifiable statements. For example, I can say "Reality is a dream", and you can say "No, reality is a trick that is being played to our mind by extra-terrestrials". These statements are contradictory. However, since they are both non-falsifiable, there is no way to show that one of them would be wrong. Hence, we have two statements that cannot be true together, and yet none of them is wrong. Therefore, each of us can defend our respective statement without ever giving in. We can literally argue forever. This is indeed what people do ↗.

Fortunately, any such dispute is completely useless, as we shall see in the next article ↗.

Remark: Many philosophers hold mathematical truths for absolute truths that cannot be false. Thus, they would consider "4+2=6" unfalsifiable, because there is no way we can imagine that 4 plus 2 does not yield 6. Personally, however, I can imagine that 4 plus 2 does not yield 6, as follows: Take 4 matches, add 2 more, and count. Although it is extremely unlikely, I can at least imagine that I count not 6 but 5 matches. Thus, "4+2=6" is falsifiable. If this does not convince you, consider the equation on the right. It is a tautological formula, i.e., it is provably true for all numbers n. So the philosophers would say that it is impossible to imagine that the formula does not hold for some n. And yet, it is very easy to imagine. Just imagine that you compute both sides of the equation for n=1, for n=2, etc. You can probably imagine that for some value of n, the left hand side of the equation gives a different value from the right hand side. The fact that you can imagine this makes the formula falsifiable.

$$\forall n: n! = \int_0^{\infty} x^n e^{-x} dx$$

Falsifiability and Meaning

A statement is falsifiable if we can imagine a situation that would prove it wrong ↗. Falsifiability asks for a perception statement X, such that the following rule holds:

If X, then the statement is wrong.

By Modus Tollens ↗, this rule becomes

If the statement is true, then X is wrong

Now assume that the statement is not falsifiable. This means that there is no such X. In other words, there is no rule of the form

If the statement is true, then...

So there is no rule where the statement appears in the premise. This means that we cannot deduce anything from the statement. For example, from the fact that "Reality is a dream that we cannot quit", we cannot learn anything about reality. We cannot predict what will happen or what will not happen. Since we cannot deduce anything from the statement, the statement is literally meaningless ↗. It has no meaning. We are not any wiser about this world if we assume that the statement is true. The statement does not help at all in explaining ↗ or predicting anything ↗. Falsifiability and meaningfulness are but two sides of the same coin.

Non-falsifiable statements typically take one of the following forms:

- It is claimed that something is the case, but this something cannot be seen, understood, or verified ↗.
- It is claimed that something is the case in a very abstract form ↗.
- It is claimed that something is the case, but not in the usual meaning of the word ↗.

These statements have 3 properties: (1) They are not falsifiable, i.e., they cannot be proven wrong. (2) We can come up with several non-falsifiable statements that contradict each other, but none can be proven wrong and (3) the statements do not allow any conclusion about the real world. They are thus literally meaningless.

Falsifiability in a nutshell:

If it cannot be false, then it cannot be true.

Explanation

We can now formally define what constitutes a good explanation for a fact. We say that a theory *explains* an event of the past if (1) the theory is true ↗, (2) the theory predicts the event ↗, and (3) the theory is compressive ↗. As an example, consider again the theory about the high tides ↗.

Whenever a part of the ocean faces the moon, that part (as well as its antipode) experiences a high tide.

If a part of the ocean faces the moon at some time X, it will also face the moon at 24:50 hours after X.

This theory predicts the high tides in New York on the 3rd of June 2017, and in all following instances. It does so without explicitly listing these events. Therefore, we say that the theory *explains* the high tides. If someone asks us "Why was there a high tide on the 4th of June at 5:16?", we can answer: "There was a high tide, because New York faced the moon at that point of time."

Now consider the following theory:

If it is Saturday the 3rd of June 2017 at 17:02, or the following day at 5:16, then there is a high tide in New York.

This theory is true, but it does not compress the events ↗. Hence, it is not a valid explanation. If someone asks us "Why was there a high tide on the 4th of June at 5:16?", we cannot answer: "There was a high tide, because it was 5:16 on the 4th of June 2017". That is not a good explanation. A theory is an explanation only if it compresses the information, i.e., if it generalizes beyond the case at hand.

Prediction

We can apply a theory to known cases, and thus get an explanation ↗. We can also use the theory make predictions of which we do not yet know whether they are right or wrong. This is the interesting case where the theory predicts something unknown. For example, take again the theory about the high tides, and assume we're in New York ↗. We look at our watch, and we see that it's 17:55 on June 4th, 2017. So the theory predicts there should be a high tide. We don't know yet, but we walk to the waterfront to see that, indeed, there is a high tide. The theory has made a correct prediction.

Just as with explanations, compression plays a crucial role here ↗. If the theory just gives us a finite list of times when there are high tides, then it cannot predict any high tides beyond that list. Only if the theory compresses information, it can make satisfactory predictions.

Prediction is very difficult, especially about the future.

By Niels Bohr

Theories in real life

Learning theories

When we wander through life, we see things, we hear things, and we feel things. That is: we perceive ourselves in a continuous stream of perceptions ↗. We would like to structure these perceptions, to understand them, and (most importantly) to predict them.

And so we start to build theories about these perceptions ↗. These theories are rarely verbal and explicit. Rather, they are a body of knowledge about the patterns that we observe in this world. For example, we pretty quickly build the theory that if we touch a hot oven then we will feel pain. This theory helps explaining past instances of pain, and is very effective in preventing future instances of pain. And this is the goal: We want to build theories that explain past experiences ↗, and that predict future experiences ↗.

We build theories about everything around us, possibly starting as a baby. The baby's job [...] is to [...] discover the patterns that govern how the physical world works, and encapsulate them in theories that can be used to predict what will happen in new situations [Ian Witten: Data Mining]. One of the first theories a baby builds could be about objects. Objects always move around as a whole. If there is a face, a body, legs, and arms, then these form a whole and move around as a whole. This theory separates the continuum of sensations around us into distinct entities. Then we build basic physical theories: Objects fall down if they are not supported. If it is dark, we cannot see. We also learn theories about the consequences of our own actions. If I touch an object, I can feel that object. If I collide with an object, I feel pain. Then we build theories about people. When I smile, the other person smiles back. When I cry, people come and help me. Then we build theories about words and language. Whenever we eat, people say "food". Whenever we meet, people say "hello". Later in life, we build theories about what we learn in school: If I multiply two negative numbers, I get a positive one. If someone says "bonjour", he is speaking French and wants to say "hello". We learn the basic rules of human interaction. By the time we are adult, we have built up a corpus of theories. These theories can pretty accurately give a structure to our past and predict much of the immediate future.

Wisdom is not the product of schooling, but of the lifelong attempt to acquire it.

By Albert Einstein

Fundamental theories

This book argues that all we do is learning theories about our perceptions ↗. This means that, in principle, there is no universal truth. It could even be that the universe does not exist, that I do not exist, or that other people do not exist. It could all just be happening in my head.

During my learning process ↗, I have relatively early built the theory that if I see a solid physical object (including the Earth, myself, or other people), then I cannot walk through it. This rule has proven correct over and over again. I call this property of the physical object "existence" – but you can call it in any other way if you like ↗. The theory of existence has made so many correct predictions in the past (I could never walk through a person) that I assume it to be the truth. Another fundamental theory of mine is that the people around me perceive similarly to myself. They see what I see. They hear what I hear. Again, this theory has made so many correct predictions in the past that I believe it to be the truth. Now comes the trick: If other people hear and see what I hear and see, then my definition of truth ↗ implies that they hold true what I hold true – at least in the physical world. Thus, truth is universal.

There are a number of other theories that I (and my fellow humans) hold true. These include the laws of nature, or the identity of objects. These have made so many correct predictions in the past, that we all believe that they are

the truth. We would be willing to revise that assumption only if we are shown cases where they make a prediction that does not correspond to our perception.

Science

This book argues that throughout our life, we build up theories that help us structure our experiences. We seek those theories that are "true", i.e., that will eternally make correct predictions. The more correct predictions a theory makes, the more likely it is that the theory is true. In that sense, science is an extrapolation of that process: Science continuously builds theories and tests them to see if their predictions are consistently correct. When scientists propose a new theory, they conduct experiments to show that the theory makes predictions that correspond to reality. Other scientists try to build experiments that show that the theory makes false predictions. If a theory turns out to make consistently correct predictions, it is accepted into the corpus of scientific truth.

This does not mean, however, that the theory would be the real truth. A theory can always make a wrong prediction one day. This is why scientific theories are called "theories". Even universally accepted laws, such as the law of gravity, are still called theories. If, one day, any theory is found to make a false prediction, then the theory will no longer be considered an approximation of truth.

This entails that science never "proves" anything. Science just builds models of reality.

Physics is like sex. Sure, it may give some practical results, but that's not why we do it.

By Richard Feynman



[Found in: Progressive Secular Humanist]

Correction

Theories yield explanations and predictions ↗. If a theory has consistently yielded correct explanations in the past, we trust its predictions also for the future. Now what happens if a theory has made thousands of correct conclusions in the past, but then one day, it delivers a false prediction? For example, consider the theory that speed adds up. If I walk at 6km/h in a train that runs at 100 km/h, then my speed relative to the ground is 106 km/h. This theory makes lots of true predictions. Now assume that there is a screen at the end of the rails, some kilometers down in the direction of travel. Assume that I point at that screen with a laser pointer from the train. You stand at the station and also point at the screen with a laser pointer. Then my laser beam should travel faster than yours. If we both switch on the laser pointer at the same time, in the very moment the train passes the station, then my dot should show up on the screen slightly earlier than yours. Yet, it does not. Both dots appear at the same time. The speed of both laser beams is the same, no matter whether it is measured relative to the ground or relative to the train. This is confusing and contradictory.

In such a case, the prediction of the theory is wrong. This is surprising, because the theory has made zillions of correct predictions in the past. Still, its prediction in the case of the laser beam is wrong. No matter how plausible this theory sounds, and no matter how many correct predictions it has made in the past, it is wrong. Importantly, it is not reality that is wrong. It is the theory that is wrong. Thus, it has to be abandoned ↗.

This is indeed what happened to the theory. Albert Einstein had the courage to say that, if the theory does not correspond to the facts, then it had to be changed. He set up a new theory that permits light to always have the same speed. This theory entails all kinds of weird things, such as objects gaining infinite weight when they approach the speed of light. Despite its ridiculous conclusions, this theory turned out to make consistently correct predictions. It is the special theory of relativity.

The ability to see that a theory is wrong, and the readiness to abandon it if it does not correspond to the facts, is one of the cornerstones of rational thinking.

I would never die for my beliefs because I might be wrong.

By Bertrand Russell

Remark: In philosophy, the fact that a validated theory may turn out to be false is known as the "Problem of induction". David Humes illustrates it with the story of a rooster, which is fed every day by friendly humans. Every day, the rooster receives confirming evidence for his theory that "Humans are friendly animals who want my best". This theory is correct until Christmas, when the humans have him for dinner.

The theory of truth

This book argues that we constantly build theories to explain our past perceptions and to predict our future perceptions ↗. In this view, we humans have a rather humble position in this universe: We perceive, and we try to model what we perceive. At any moment, our theories may turn out to be wrong. Then we have to abandon what we thought was true ↗. That is all there is to truth.

Interestingly, this view of truth is itself nothing else than a theory. This theory says that we judge the truth of a theory by comparing its conclusions to our experiences. If the conclusions consistently correspond to our experiences, we trust the theory – and we assume it to be part of "the truth". In such cases, we will just say "The theory is true". This theory of truth predicts what a person on the street calls "true". This theory is true, because by and large, this is indeed what the person on the street calls "true". Then again, the theory is only true by its own definition.

Science may be described as the art of systematic over-simplification – the art of discerning what we may with advantage omit.

By Karl Popper

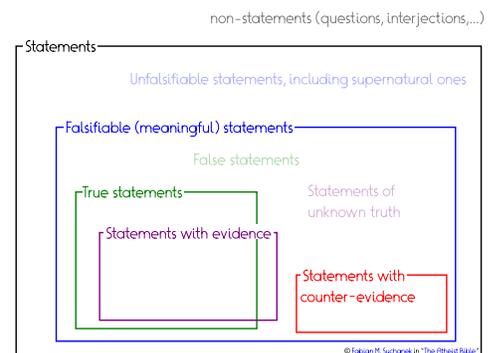
Beliefs

A statement is true if we have evidence for it – i.e., if it is predicted by a true theory ↗. A statement is false if we have counter-evidence for it – i.e., if there is a true theory that predicts its negation ↗. In real life, our evidence for or against a statement is often very weak: We do not have a set of theories at hand that predicts our hypothesis. And even if we had, we would probably not have the statistics to show that these theories are validated ↗. And even if we did, a validated theory is not necessarily true ↗. So we would have to perform careful joint reasoning to arrive at the most likely conclusion ↗. Since we usually cannot do all of this, we often just believe a statement ↗.

This does not mean, however, that the Theory of Truth ↗ elaborated in the present chapter would be useless. On the contrary. The first thing that the Theory of Truth allows us to do is to exclude unfalsifiable statements ↗. These can never predict anything, and they are thus meaningless in the sense of this book ↗. If we accepted such statements, we would open the door to accepting all other kinds of meaningless statements: religious fanatics' arguments, conspiracy theories, and pseudo-science. They all have in common that we would never be able to find out whether they are wrong. Falsifiability is the bulwark against such nonsense ↗.

The second thing that the Theory of Truth allows us to do is to exclude theories that have consistently clashed with our perceptions – these are the wrong theories ↗. In our search for truth, wrong theories are as important as correct theories. Knowing them allows us to dismantle bogus claims and to avoid drawing wrong conclusions.

Finally, and most importantly, the Theory of Truth tells us at least what we would have to do if we wanted to check the truth of a hypothesis: We know that we have to find evidence ↗, i.e., we know that we have to find a true



A taxonomy of statements. The rectangles are not to scale.

theory that predicts the statement. This is a fundamental insight: It allows us to weigh our confidence in a statement by the evidence that we have for it. We should not believe strongly in a statement for which we have only weak evidence. In particular, we should not make life-changing decisions based on weak evidence ↗ ↗.

From an evolutionary perspective, humans are not a kind of smarter two-legged antelope, but the species that outsmarts the antelope. Thus, there is a strong selection pressure for humans to develop explanations that are true.

By Stephen Pinker in "Enlightenment Now", paraphrased

Common Mistakes

Common Mistakes

In the previous articles, we have elaborated a theory of truth ↗. Humans build hypotheses to describe and to predict what happens around them. The perfection of this endeavor (the hypotheses that always make correct predictions) is what we call "the truth".

We will now look into common mistakes that people make when trying to approach the truth. We will illustrate each mistake by an example. We will then apply the theory of truth to find out what the problem is in the example scenario. As we will see, the theory of truth allows us to identify and rebuke the mistakes reliably.

The examples that we will use are quite abstract – even absurd, you may say. And yet, they appear in very similar form in the world's major religions. We will make this link in a footnote in each article, thereby anticipating the discussions in the later chapters of this book.

Unclear theories

The Inkas had an elaborate system of myths and collective wisdom. One of their omens was as follows: "And that day will be a great day. After that day, no one will be as they were before. And that day will show the grandness and glory of the God of the Sun." This theory seems to be making predictions. Yet, it is completely unclear when the theory fires. Was today a great day? Should we expect the God of the Sun? And if so, what does it mean that the day will "show the grandness" of that god? Will he actually appear? Or is the grandness rather shown implicitly? The theory is just not clear.

The criterion that helps us here ↗ is falsifiability: The theory is not falsifiable. There is nothing that we would accept as a proof that the theory is wrong ↗. Therefore, the theory is nonsense. Such theories can be poetic and beautiful, but they cannot be true.

Science is the journey to the truth.

Religion is pretending you're already there.

By anonymous

Remark: What an idiotic theory the Inkas had, you will say. And yet, many spiritual people like adhering to such theories. For example, many people believe that "For every bad event, something good will eventually happen". As we will discuss in the [Chapter on Proofs for Gods](#), such a belief is as unclear as the Inka Omen.

Postdictions

Consider the story of the seer in the book of Asterix (illustrated on the right). The seer finds shelter in the village of Asterix during a thunderstorm. He says that he knew that the thunderstorm would be coming, and he knew that he

would find shelter in that village. Asked how he knew all of this, he replies "I'm a seer".

However, the seer just claims he foresaw whatever happened. He waits until something happens, and then says he knew that it would happen. Therefore, the seer is not actually making "pre-dictions". He is making "post-dictions".

The real challenge is to build theories that predict not just the known, but also the unknown. The essential quality of a true theory is that it is true not just for the case at hand, but for all cases in the future ↗.

Remark: Who would fall for the seer, you will say. And yet, many people fall for such theories, believing that their religious book saw something coming. However, these books only ever saw it coming after it happened. We discuss this phenomenon later, in the [Chapter on Proofs for Gods](#).



- "I knew that a storm would come"
- "How did you know?"
- "I am a seer."
[Asterix: Le Devin]

Counting the Hits

Chelsea drives to work this morning. Her dad warns her that he has the bad feeling that Chelsea might have an accident. Indeed, that day, Chelsea has an accident. Predictably, his dad says that he told her so. Chelsea reminds him that he has been warning her about accidents every morning for the past 2 years. Thus, the theory that her dad can predict accidents was correct in only 1 out of 712 cases. That ratio is too bad to call his theory true. The theory is just false.

Technically speaking, the theory has failed the test of validation ↗. It has delivered numerous false predictions in the past, and has hence to be rejected ↗. Even a false theory can make a true prediction from time to time, but that still does not make the theory true. Looking only at the cases where the theory makes a true prediction is a fallacy called "Counting the hits".

Remark: Isn't this obvious? You may think so, but many people don't. When it comes to religious predictions, many people are willing to count the hits only. Take, e.g., the theory that "If you do evil, then something bad will happen to you". People can cite lots of examples where this theory is true, but for some unknown reason, they do not want to see the cases where it was not. We discuss this in the [Chapter on Proofs for Gods](#).

Closely related is the human tendency to investigate only the hits, even if given the chance to investigate also the misses. The psychologist P. C. Wason told subjects that the sequence "2, 4, 6" was a "valid" sequence of numbers. Participants could ask whether other sequences are also "valid" (e.g., "Is 10, 12, 14 also valid?"), and they had to guess the rule that makes sequences valid. What Wason found was that participants settled pretty quickly on the rule "a sequence of 3 numbers in increments of 2", and asked exclusively positive examples. They never took the pain to ask "Is 3, 4, 5 also a valid sequence?". It was a valid sequence – the rule was simply "Three arbitrary numbers in increasing order". But since participants asked only for the positive examples of their own rule, they were unable to find the real rule (Example taken from Nassim Taleb's book "The Black Swan").

Bad compression

Your superstitious friend Sara has the theory that on Friday the 13th there will be car accidents. This theory has made correct predictions in the past, and it continues to do so. Is Sara finally right with her superstitions?

Yes and no. The theory that there are car accidents on Friday 13th is true ↗, but it is unsatisfactory for a different reason: The prediction "There are car accidents" is true no matter whether it is Friday 13th or not. The premise of the theory does not add any insight. For such theories, we can develop arbitrary variations. For example, we can construct the theory that "On Tuesday 17th, there will be car accidents". This theory is a true as the Friday 13th theory – or indeed as true as the theory "There are car accidents". Consequently, some countries take 17 as the unlucky number, and others take 13. It is clear that with this argument, we can take any number as an unlucky number – or as a lucky number, for that matter.

Technically speaking, the theory does not compress as well as it could ↗. The following theory, e.g., compresses many more events:

On any given day there will be car accidents.

This theory predicts all days with car accidents (which are all days of the year). Thus, it compresses more events than the theory of Friday the 13th. Therefore, the more general theory is more satisfactory than the theory of Friday the 13th.

In the Central Park in New York, a man jumps around on one foot.

People ask him why he's doing that.

"To scare away the rhinoceroses!", he answers.

"But there are no rhinoceroses here!", people tell him.

"You see", he says, "it works!"

By anonymous

Wishful thinking

Bill is a very happy person. One day you talk to him, and you ask him why he is always so happy. He pulls you aside and whispers: "It's because I am rich!" You are surprised, because Bill doesn't look particularly rich, and from what you can tell, he seems to possess only a single pair of trousers. You ask "What do you mean, you are rich?". Bill whispers: "Look, I believe that I have a treasure hidden in my garden!". You say that this is great, and you ask him whether he checked. He says no, he didn't check. You ask then why he believes he has a treasure in the garden if he didn't even check. Bill replies: "Would you want to be poor? No, right?".

You are perplexed. From the fact that Bill does not want to be poor, it does not follow that there is a treasure in his garden. Such a rule is just plain wrong ↗, meaning that it produces conclusions that do not correspond to reality. Such thinking is called "Wishful thinking".

Remark: Obviously, wishful thinking does not make something true. And yet, it has played a role in the popularity of religions. People believe just because they wish it would be true. We discuss this in the [Chapter on Following Religion](#).

Happy thinking

Your friend Bill believes that he has a treasure hidden in his garden ↗. As this is obviously very unlikely to be true, you are worried, and you talk with a common friend of yours. He tells you: "So what, if this makes Bill happy, just let him believe he has a treasure in the garden!". You ask: "So if that makes him happy, is it true that he has a treasure in the garden?". And your friend is wise enough to say: "If a belief makes you happy, it doesn't mean it's true".

While you are still pondering this wisdom, your friend suggests: "You look as if you could use some happiness in your life, too! Why do you not also start believing that there is a treasure in your garden?". You are perplexed: It does not make sense to believe something wrong or unknown just to be happy. Believing something that is wrong will lead to wrong conclusions. Such belief is thus ultimately treacherous.

The prettiness of a falsehood does not make it any less false.

By [Atheisme.ca](#)

Remark: What an idiotic proposal, you may say. And yet, this argument is frequently brought forward in favor of faith: Belief makes people happy, so why don't you start believing? We discuss this in the [Chapter on Proofs for Gods](#).

Meaningless statements

You are inviting your friend Sandra over for dinner. Sandra is very happy to join you. However, as soon as she steps into your place, she starts looking around and seems to be worried. You ask whether everything is alright. Sandra replies yes, everything is alright, but: "There is something here". You ask: "What do you mean, there is something here?". Sandra says "I don't know, I just feel there's something here". She continues to walk around, looks behind the door, checks the kitchen sink, and verifies the place under the table. You are worried and ask her "Sandra, what is it? Are you OK? Do you need anything? Did you see anything? Is there a smell?". But she just says that yes, she's OK, she doesn't need anything, she didn't smell anything, and she didn't see anything. It's just that "There is something here". Later, to your relief, she seems to have forgotten about it and the evening turns out to be really nice.

After she left, you still wonder what she meant by "There is something here". It did not mean that she was uncomfortable, that she would need something, or that she would smell or see something particular. In fact, the statement didn't seem to mean anything.

You try to fit Sandra's statement into the theory of truth that you read in this book, and you find that, from the fact that "There is something here", you cannot deduce anything. There is no rule that has this statement in its premise ↗. Thus, the statement is literally meaningless ↗. It does not have any sense.

Remark: What a strange story, no? And yet, there are many people who believe in such meaningless statements. Consider for example "There exists a universal principle of the universe" ↗, "There is something greater than us" ↗, "There is a conscious being behind everything" ↗, or "God is the first cause of the universe" ↗. We discuss all of these in the [Chapter on Proofs for Gods](#).

Pumpkin statements

Andy is your friend from highschool, and you still meet him from time to time. One day, Andy pours out his heart to you, and tells you how he suffers in his relationship. You listen attentively, and comfort your friend. Andy is very grateful, and tells you that you are really the best friend he has. You are happy that you could help, and that he appreciated it.

A week later, you meet another acquaintance, and you find out that you both know Andy. The other person tells you that he gets along really well with Andy, and that Andy calls him his best friend. You are surprised, but do not say anything. A few days later, you go with Andy to a bar. Andy is still sad, and orders a beer. The waitress sees that Andy is having a difficult time, and pities him. She brings peanuts on the house and tells him to cheer up. Andy smiles at her, and tells her that she is really the best friend he has. She smiles back. Later that evening, a client who has drunk too much gets rude and aggresses the waitress. Andy seems visibly uncomfortable and proposes that the two of you should leave the bar quickly.

At this point of time, you understand two things: First, Andy actually calls everybody "best friend". Second, this word does not mean anything to him, as he does not even consider helping the waitress. Technically speaking, you cannot deduce anything from the fact that Andy calls you best friend. Neither that you are the only "best friend", nor that Andy will do anything more for you than he does for a random person on the street. There is no rule that has "X is Andy's best friend" in its premise ↗. Thus, the statement "you are Andy's best friend" is technically meaningless ↗.

This is different from the usual semantics of the word "best friend". If a normal person calls you "best friend", then you can deduce a number of things from this. First of all, you are the only best friend. Second, that person will give you special treatment, and help you when you are in trouble. Andy, in contrast, uses the word in another way. The way Andy uses the word is like the merchant who gives you a hollow pumpkin. It looks like a pumpkin, but it is empty inside.

Using a statement or word in another meaning than the common meaning is treacherous. It will mislead any listener. It may even mislead the speaker. To see this, assume that Andy decides to call everybody "the greatest idiot" in the same way that he called everybody the greatest friend before. In both cases, the statement does not have any meaning, because Andy simply applies it to everybody. And yet, Andy will probably hesitate much more to tell people they are "the greatest idiot" rather than "his best friend". This is because, in his heart, Andy knows what the statements mean and how they are understood. It's just that he uses them in a different way. This makes his use deceptive.

Remark: The reader is very welcome to compare this to a religious statement such as "God loves you", "Every person is a sinner", or "When a person has cancer, he deserves it". These carry a very strong meaning, but as soon as we start questioning them, the people who defend them will explain that they do not have the usual meaning. We criticise this in the [Chapter on Criticism of Religion](#).

Mistakes in theological arguments

Theological Mistakes

In this section, we will continue our journey from the previous section [↗](#), and list more mistakes that people commonly make in their search for the truth. We shall now concentrate on mistakes that are more frequently encountered in arguments about religion and gods.

We will use the same schema as before [↗](#). We will illustrate a mistake by an example, we will debunk the error, and we will make the link to religious arguments in a footnote.

It makes sense

We have a tendency to accept theories if they "make sense" to us, i.e., if they appear somehow plausible. This, however, does not make a theory true. As an example, consider the practice of bloodletting ([Wikipedia/Bloodletting](#)): In historical times, people thought that certain illnesses were caused by "bad blood". Hence, they reasoned, the illness could be cured by removing the bad blood. Therefore, they punctured the arm of the ill person, and let the blood come out. This practice was widespread from the ancient Greeks to the 18th century. It made a lot of sense to people. However, it did not have any positive effect. On the contrary, in the overwhelming majority of cases, the historical use of bloodletting was harmful to the patients [ibid].

This shows us that a theory can be wrong even if it "makes sense to us". A theory does not become true if "it makes sense". It becomes true if it makes correct predictions. The failure to see this, and the reliance on the intuitive "sense" instead of on concrete and correct predictions is one of the bedrocks of religious belief, as we shall see in the [Chapter on Proofs for Gods](#) and in the [Chapter on Gods](#).

Know how to rank beliefs not according to their plausibility, but by the harm they may cause.

By Nassim Taleb in "The Black Swan"

Narrative Fallacy

The narrative fallacy, according to Nassim Taleb, is the human tendency to add causality to unrelated events. Consider the following example: When the US captured Saddam Hussein in Iraq in 2003, the oil price initially fell. Hence, newspapers ran stories explaining that the capture gave confidence that the war would be over, which would lower the price of oil in the long run. Shortly thereafter, however, oil prices rose. Hence, newspapers ran stories explaining that the capture has created new conditions for the mission in Iraq, and that this insecurity has driven up oil prices. In reality, there was possibly no causal relation whatsoever, as oil prices tend to fluctuate in any case. However, humans tend to add causality to unrelated events (Daniel Kahneman: "Thinking fast, thinking slow").

This tendency to "storify" may have a very simple reason: It is easier to remember events if they are connected in some way. As an example, consider the sentence "The king died and then the queen died". Now compare it to "The king died, and then the queen died of grief". It is somehow easier to remember the second story, because it seems to contain just a single piece of information with its consequence, rather than two unrelated events. Rephrasing the initial story as a causal sequence may thus be a technique of "dimensionality reduction", i.e., of data compression. This may explain why people have a tendency to consider the second sequence more probable than the first – even though the second actually implies the first (Nassim Taleb: "The Black Swan").

Remark: Why on Earth would people add causality where there is none, you may ask. In fact, we happily add supernatural causality to whatever events happen to us, as we will discuss in the [Chapter on the Founding of Religion](#) and in the [Chapter on the Sense of Life](#).

Ghostification

Many ancient peoples believed that inanimate objects were inhabited by spirits ↗. They might well have believed, e.g., that fire was kept alive by fire demons. Based on this, they could have built the following theory:

If you pour water over a fire, the fire demon is chased away.

If the fire demon is chased away, the fire dies.

This theory is true ↗. It makes correct predictions about how we can extinguish a fire. There is, surprisingly, indeed nothing wrong with this theory. The "fire demons" are just an auxiliary notion ↗ – much like "molecules", "energy", or "grammatical gender" are auxiliary notions of the respective sciences. These auxiliary notions can be called by any name we want. For example, we could have said that water tickles the fire fairy, and when the fire fairy is tickled, the fire dies. Today, we would rather say that the fire is deprived of oxygen, and that such a deprivation kills the fire. It really does not matter how we call that auxiliary state, as long as its meaning ↗ is that the fire dies. The theory becomes problematic only when we start making additional assumptions about those fire demons:

Fire demons are evil creatures.

If you are not kind to them, they may refuse to be chased away.

There is no evidence ↗ for the statement that fire demons are evil. The claim that we have to be kind to them in order to be able to extinguish the fire is even outright wrong ↗. Thus, by adding such suppositions, we leave the ground of validated theories, and venture into the domain of falsehood ↗ ↗ and nonsense ↗. We "ghostify" the theory.

Remark: Why would anybody want to add nonsense claims to an otherwise sound theory, you may ask. The reason is that many of these theories were first developed really with demons, gods, and spirits in mind. People tried to explain nature by personifying it ↗ ↗. Then these personifications developed a life of their own. Still today, religions piggy-back on otherwise reasonable theories by this strategy: Prayer works because it helps us reflect our lives – not because there would be a god who listens ↗. Faith healing works because of the placebo effect – and not because of some magical connection with the supernatural ↗. Religion lives from the ghostified versions of these theories.

Religion is not alone with this. Some people ghostify "civil rights", "justice", or "nature" – building up theories that essentially personify these concepts beyond what can be deduced reasonably from observation ↗ ↗ ↗.

Abductive Reasoning

A rule is a statement that allows us to draw certain conclusions if certain conditions are true ↗. For example, we can have a rule such as

If someone wins in the lottery, then that person is rich.

This rule is generally true ↗. Now let us swap the premise and the conclusion of this rule. Then we get:

If someone is rich, then that person won the lottery.

This rule is in general not true. People can be rich for a variety of reasons. Thus, concluding for example that Bill Gates won the lottery is a fallacy. Assuming that a person is rich because they won a lottery is nothing but speculation.

This type of reasoning is called abductive reasoning. In general, abductive reasoning does not lead to true rules. That is, conclusions drawn by abductive reasoning usually do not correspond to reality ↗. Abductive reasoning can only help us find possible reasons for a fact.

John F. Kennedy

John F. Kennedy was the president of America from 1961 until 1963, when he was assassinated. The murderer could never be found, and the case remains one of the greatest mysteries of modern history ([Wikipedia/John F. Kennedy](#)).

Nobody knows who killed Kennedy.

Now, Robert has long been suspecting the Russians behind the assassination. He comes up with the following rule:

If Russian spies kill someone, then this person dies.

This rule is true. Robert uses this rule (wrongly) to deduce that Russian spies killed Kennedy. Such reasoning is abductive, and hence faulty ↗. It is nothing more than speculation. Hence, people will say that Robert's reasoning is wrong. However, he will answer as follows: "You need evidence for my theory? Well look at it: Kennedy is dead. Isn't that the evidence? Nobody can explain how Kennedy died. Only I can explain it! Therefore, my reasoning must be right!"

It is true that nobody can explain how Kennedy died. It is also true that the theory "Russian spies killed Kennedy" could explain why Kennedy died. However, this reasoning is still false. It could be Russian spies, Chinese spies, or American spies who killed Kennedy, and nothing tells us it was the Russians. In order to accept a hypothesis as true, we need a rule that has the hypothesis in conclusion, and not in the premise. In other words: We need evidence for the hypothesis ↗.

Until then, the correct answer to "Who killed Kennedy" is "We do not know" ↗.

Remark: The attentive reader will have remarked the subtle similarity to the question "Who created the world?". From the fact that we do not know, believers of all types of religions deduce that it was their particular god who did it. Such reasoning is as faulty as the one with JFK. We discuss this in the [Chapter on the God of Gaps](#) ↗.

If you wish to bring this example in a discussion, choose as nationality of the spies the nationality of the listener (or, if American, the ethnicity, religious community, or city of the listener). This will make them ask for evidence.

Contradictory conclusions

Nobody knows who assassinated John F. Kennedy ↗. Robert, a US citizen of Chinese descent, came up with the rule

If Russian spies kill someone, then this person dies.

Robert uses this rule (wrongly) to deduce that Russians killed Kennedy. Such reasoning is abductive and hence faulty ↗. Now, Vladimir, a US citizen of Russian descent, has long suspected the Chinese behind the assassination. Hence, he comes up with the rule

If Chinese spies kill someone, then this person dies.

Vladimir uses this rule (wrongly) to deduce that Chinese spies killed Kennedy.

Now, something very interesting happens: When Robert and Vladimir meet, they will start arguing about who killed Kennedy. Since both of them believe in abductive reasoning, neither can invalidate the claim of the other. The line of reasoning used by one of them can be used to support the hypothesis of the other. Each of them has an equally convincing argument, but the claims are contradictory.

Of course, neither argument is correct, because in order to assert a hypothesis, we need a rule that implies it ↗. In other words, in order to believe that any spies killed Kennedy, we would need evidence for this hypothesis. However, if people do not subscribe to the necessity of evidence for hypotheses, they can go on arguing forever.

Remark: The attentive reader will have remarked the similarity of the dispute about Kennedy to any religious dispute. There are several different hypotheses as to who created the world. It could be the Christian God, a Hindu god, or extraterrestrials. Abductive reasoning can (wrongly) be used to justify any of these hypotheses. We discuss this in the [Chapter on the God of Gaps](#).

Unfalsifiable conclusions

In the wake of the terrorist attacks of September 11, 2001, Chris has come to the conclusion that all Arabs are terrorists. When Chris is confronted with lots of friendly Arab people, Chris argues:

These people are friendly, and they may be really nice people, but in their heart they still love terrorism. It's just that they don't show it, and they would never say so. But they still do.

We show Chris statistics about 500 million Arabs who are not involved in terrorism whatsoever. Chris will argue that these people may behave peacefully, but that they harbor terrorism in their feelings. Let's assume that we conduct interviews and find that the majority of Arabs are actually scared of terrorism. Chris will reply saying that, of course, these people would never admit that they have terrorist intentions, even in polls. But they still do have these feelings. Chris asks: "Prove me wrong". Since people would never admit their terrorist feelings, that is hard to do.

Does that mean that Chris' hypothesis is right? After all, it cannot be proven wrong... As the attentive reader will have noticed, this immediately makes the hypothesis unfalsifiable ↗. That is, we cannot find a condition X such that

If X then Chris is wrong.

This means, by Modus Tollens ↗, that we cannot find a rule with

If Chris is right, then X is false.

Indeed, we cannot find any rule of the form

If Chris is right, then ...

This means that when Chris is right, he will not be able to conclude anything from his hypothesis. He knows that Arabs have terrorist intentions, but this does not tell him how Arabs will behave, whether Arabs will commit terrorist acts, or whether Arabs are more dangerous than Germans. By assuming his hypothesis, Chris is no wiser than anybody else.

In the terminology of this book, the phrase "Arabs have terrorist intentions that cannot be seen" has no meaning ↗. There is no perception statement that follows from this hypothesis. The phrase is literally meaningless. A meaningless phrase does not help at all in understanding this world, in explaining the past, or in predicting the future. It is just not worth debating.

Remark: Unfalsifiable statements are the bedrock of religions, as we shall see in the [Chapter on Memes](#). All religious statements such as "God exists but you cannot see him", "Heaven will punish you in the afterlife, but you cannot prove it", or "You will be reborn, but you cannot know it" are unfalsifiable.

Disputes

In our example ↗, Chris believes that all Arabs have terrorist intentions, but that they hide them so that they cannot be detected. We have seen that this hypothesis is nonsense, because it cannot be falsified ↗. One day, Chris meets Mohammed. Chris explains his world view to Mohammed, and Mohammed gets very offended. He counters that, in fact, all Arabs are friendly and peaceful people. Chris objects that the terrorists of September 11, 2001, were Arabs. Mohammed explains that these terrorists are not real Arabs. Real Arabs would never kill innocent people.

The attentive reader will have observed immediately that this hypothesis is as non-sensical as Chris' hypothesis. Both cannot be falsified ↗ ↗ ↗.

However, Chris is unable to see that Mohammed's hypothesis is nonsense. This is because if he were able to see this, he would have to accept that his own hypothesis is nonsense, too. This means that both Chris and Mohammed are falling prey to the same fallacy – a bit like in the case of abductive reasoning ↗. The case of unfalsifiable claims, however, adds an interesting twist: The claims are contradictory, but on principle, neither of them can be proven wrong. This means that neither Chris nor Mohammed can ever show that the other's claim is mistaken. At the same time, the nature of their hypotheses also forbids them to ever predict anything about the real world. Thus, their argument is futile, and their hypotheses are nonsense.

Remark: This type of argument is what underlies theological disputes: They are disputes about unfalsifiable hypotheses. This explains why they go on forever. We will look into this in the [Chapter on Criticism of Religion](#).

Truth and Atheism

Revisiting Persephone

We started our discussion of truth from the ancient Greek story of Persephone ↗. Persephone is the Goddess of Spring, and she returns to Hades each year. This leaves her mother sad and so she makes it cold. This explains why winter is cold.

Now let's look at the story of Persephone in detail. It goes roughly as follows:

Hades forces Persephone to come back to him every winter.

If someone is forced to go somewhere, then that person goes there.

If Persephone is in Hades, her mother Demeter is sad.

If Demeter is sad, then it is cold.

We now understand that this story is a ghostification ↗ of the seasons: As long as the only meaning of "Hades forces Persephone to come back to him" is that it is cold in winter, the story is true. In that case, "Persephone" would just be another name for "summer heat", and the story just says that in summer, there is no summer heat. That is correct. However, we usually associate more meaning with Hades and Persephone: We assume that they are gods, that they have feelings, that Hades loves Persephone, etc. – all of which is unfalsifiable ↗. Therefore, the story is a ghostification ↗ of the fact that winter and summer alternate.

Remark: For a scientific theory that explains the seasons, see the [Chapter on the Universe](#).

Summary on the concept of truth

This book argues that we perceive ourselves in a continuous stream of perceptions. Our goal is to predict these perceptions ↗. For this purpose, we build theories ↗ of the form

If I observe X, then I will observe Y.

or

If I do X, then I will observe Y.

These theories can be scientific theories, such as "If I throw a stone at this angle, then it will fall down at this position" ↗. However, the theories can also be about perceptions, such as in "If I do not eat breakfast, then I am hungry around noon" ↗. Theories can also be about everyday common-sense, such as "If it is midnight, and I wait for 10 hours, then the sun has risen" ↗. Of course, we are interested only in theories that actually predict perceptions ↗. If the theory has made a large number of correct predictions, we come to trust the theory. We say it is validated ↗. In the ideal case, we test the theories ↗. However, neither testing nor validation guarantees that the theory will always make correct predictions. In the example of the theory about the rising sun, we may be mistaken about the sun in winter in the Arctic. Therefore, we constantly refine our theories until they correspond as well as possible to our observations ↗. Those theories that will always correspond to our observations are what we call "the truth" ↗.

The problem is, of course, that we never know whether a theory will *always* correspond to our observations. This is why we humans take a rather humble position in this universe: We try to describe our reality by theories, we validate the theories, and we hope that they are the truth – but in the end we have no guarantee that nature behaves as we predict. Therefore, we find ourselves in a continuous process of improving our theories ↗.

When a true theory makes a prediction, we call that theory "evidence" for the prediction ↗. Evidence distinguishes myths from facts ↗. But our theories cannot predict everything. Some things are just unknown ↗. In that case, it does not help to just invent an explanation ↗. Even if the explanation is beautiful, that does not make it true ↗. It is better to believe only the validated theories, and continue searching for validated theories in what is the unknown today ↗. In everyday life, our evidence for or against a statement is often weak. In such cases, we tend to just believe the statement. This is fine, as long as our confidence in the statement is proportional to the evidence ↗.

Believing in truth

This book defines truth as the set of validated theories ↗. The question remains why we should believe in these theories and not in others.

The reasons why it is advantageous to believe in this theory of truth are as follows:

If this book calls a theory "true", then you can use it to predict parts of the future.

This is an immense advantage over alternative definitions of truth. It is a very constructive and useful property ↗.

Given two theories, it is easy to see which theory is more likely to be true.

Any theory is measured by what it predicts. Thus, there is a clear yardstick for the quality of theories. This implies that two people who search for truth will converge onto the same theories – which is what happens in science ↗.

The criterion of validated evidence helps us distinguish between myths such as Persephone ↗ (whose existence is not predicted by a validated theory), and objective facts such as the spherical Earth (whose truth is established by many validated theories).

*You are entitled to your own opinions.
But you are not entitled to your own facts.*

By Daniel Patrick Moynihan

Non-True Statements

Believing theories that are true in the sense of this book has a number of advantages ↗. At the same time, believing in theories that are not true in the sense of this book has a number of disadvantages. If we abandon the requirement for validated evidence for theories, we run into the following problems:

We make wrong predictions.

If we no longer judge a theory by the proportion of correct predictions, then we may make predictions that do not correspond to reality. If our mental model of the world is not accurate to predict what happens in the world, then we simply cannot achieve our goals effectively ↗.

We open the floor for arbitrary theories.

If we abandon the need for evidence, then we can come up with arbitrary theories. For example: To guarantee the survival of humanity, we should all become Scientologists. There is no evidence for this, but, hey, who needs evidence? ↗

We can easily claim the opposite of a theory.

If our theory is non-falsifiable, or if we abandon the need for evidence, then anybody can claim anything. For example, instead of claiming that the abrahamic God created the world, I can also claim that the goddess Gayatri created the world ↗. The result is endless disputes (and sometimes even war), because if we abandon the requirement for falsifiability and evidence, then no theory can be shown provably superior to any other theory ↗.

We blur the distinction between reality and nonsense.

If we accept wrong or unfalsifiable theories as readily as true theories, then this is a sign that we are unable to distinguish the two. This means that we will accept other wrong theories, too. We develop justifications, explications, reinterpretations, or view points to justify the false theories ↗.

We inhibit the search for truth.

If we accept a wrong or unfalsifiable theory as an explanation, we block the way for scientific enquiry. If we do not know something and assume we know it, then we will never know ↗.

We give undeserved credit to the inventor of such a theory.

If we believe in theories not because they are validated, but because they are presented convincingly, then we give a blank cheque to any charlatan to tell us whatever he wishes. He may use this trust for his own advantage and/or for our disadvantage ↗.

We risk curtailing our freedom.

If the faulty theory requires us to do or abandon something, and if we follow, then we are needlessly wasting our time, restricting our liberty, renouncing part of our property, or worse ↗.

We risk harming others.

If the faulty theory requires us to reprimand other people, to harm them, or to attack them, then we are unjustly causing damage to other people. This is where it's no more fun ↗.

We perpetuate the problem for our children.

If we do not teach our children to distinguish between validated evidence and myths, then the very same problems will be perpetuated in the next generation ↗ (← this is a recursive reference).

Therefore, rather than believing something false, we should acknowledge that we do not know the answer ↗, and take this as the first step towards finding it.

*It is always better to have no ideas than false ideas;
to believe nothing than to believe what is wrong.*

By Thomas Jefferson

The Supernatural

Based on our theory of truth ↗, we can now formally define the supernatural: A supernatural statement is any statement that, on principle, cannot be validated by a direct observation, and that cannot be predicted by a validated theory. Note that, with this definition, being supernatural is a property of statements, not of entities. Supernatural statements can be "God exists", "There is life after death", or "We will be reborn after death".

A statement about the supernatural is unfalsifiable ↗. However, not every unfalsifiable statement is about the supernatural. For example, the statement "A true music connoisseur will love this violin performance" is unfalsifiable, but not a statement about the supernatural ↗. A statement is supernatural only if it is, on principle, shielded from our observations and from grounded theories ↗. In this sense, communism, too, is not a religion. Some people may adhere to it with almost religious fervor, and they may accept nothing as a proof that communism is wrong, but it remains an ideology that is, in principle, open to our observations.

Truth and Atheism

This book has laid out a theory of truth that is based on perceptions ↗. Now what has this to do with atheism?

Atheism is the rejection of belief in the supernatural ↗. Before, we only had a very vague description of "the supernatural" ↗. With our definition of the supernatural ↗, we can now explain what that means: When we say that atheists do not believe in the supernatural, we mean that atheists will not believe supernatural statements.

Based on this, this book will build up a set of validated statements about the natural world. Most notably, how this world came into existence ([Chapter on the Universe](#)), how moral values developed ([Chapter on Morality](#)), and how religions work ([Chapter on Memes](#)). This book will also argue that believing non-validated statements can be dangerous ([Chapter on Criticism of Religion](#)).

Questions

Is truth subjective?

The definition of truth put forward in this book says that we judge the truth of a theory by comparing its conclusions to our experiences ↗. If the conclusions correspond to our experiences, we call the theory "true". Since nothing

guarantees that other people have the same perceptions as I, this means that someone else can have a completely different truth from my truth ↗.

Indeed, it is a long-standing philosophical conundrum whether truth is absolute or subjective. There is no reason to assume a priori that other people perceive like I do. The idea that truth is objective is just a theory ↗. This theory, however, has made an impressive number of correct predictions in the past. In fact, for every single case that I have come across in my life, other people have perceived physical input just the way I did. There may be people with different perceptual capabilities or incapacities (such as color blindness or deafness), but while I may observe different sensitivities to stimuli, I rarely observe contradictions: When I cannot walk through a wall, other people cannot, either. When I see a mountain, other people also see a mountain. When I hear noise, they hear noise. These experiences continue every hour of my life. Therefore, I consider these observations a validation ↗ of the theory "Other people perceive physical observations the way I do".

Now comes the interesting part: If my assumption is true, then other people will evaluate the truth of a given theory in a given case in the same way as me. For example, if some theory predicts a rainbow and if I observe that the theory makes a correct prediction on a given day, then other people in my vicinity will also make this observation. Thus, if we wanted to determine whether a given theory is true, we would just have to validate or reject the theory together by making the same observations together. My assumption then tells me that we will come to the same conclusion. This, in turn entails that truth itself, as defined in this book, is objective ↗.

The claim "Everything is subjective" must be nonsense, for it would itself have to be either subjective or objective. But it can't be objective, since in that case it would be false if true. And it can't be subjective, because then it would not rule out any objective claim, including the claim that it is objectively false.

By Thomas Nagel in "The Last Word"

Science is not everything!

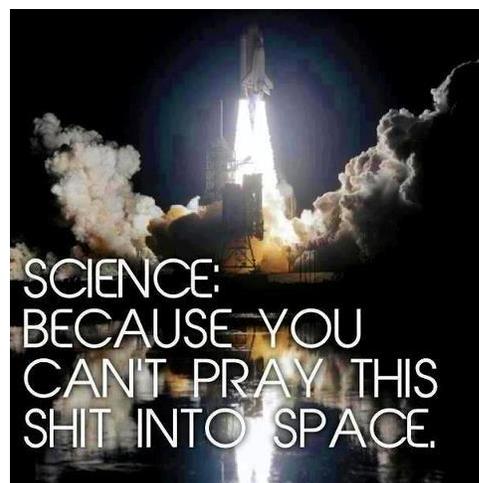
The approach to truth that this book puts forward may look rather scientific. It is based on theories, evidence, and testability ↗. Indeed, this book's notion of truth is just an extension of the scientific principle itself. And yet, as the reader might object, science is not everything.

This book does not claim that everybody would have to follow the proposed way of thinking, let alone that it would be the only one. It does claim, however, that most people consider trustworthy that which has made true predictions in the past. And that most people mistrust that which has made no predictions, or bad predictions in the past. To see this, consider an example: In a casino, someone tells you that he can predict the outcome of the roulette. You trust him and bet the money as he says. It does not work. You try again. Again, it does not work. You have already lost a substantial amount of money. Would you trust his predictions again? Probably not. This guy was just plain wrong. But by not trusting him, you act "scientific". Shame on you!

The bottom line is that we all work mostly according to this principle whenever it comes to trusting people or theories ↗. It is true that we are vulnerable to bias and error. However, clearly not all of us are vulnerable all the time – otherwise we would not even be able to say that we are vulnerable to bias and error. The human brain is capable of reason, given the right circumstances. The goal is to identify those circumstances, and to put them more firmly in place (Stephen Pinker: Enlightenment Now) ↗.

By nature, I am an engineer. I am more interested in solving problems than in wallowing in the emotions that they incur.

By Edward Snowden



[Free Thinking Society]

You can't prove everything!

This chapter proposes that evidence for a hypothesis is a true theory that predicts this hypothesis ↗. Now, unfortunately, we do not have evidence for all hypotheses that we make. In fact, for the vast majority of hypotheses, we do not have any evidence at all. Even if we have evidence, there may be counter-evidence ↗. This means that, strictly speaking, we would have to go through a process of joint reasoning ↗ before deciding the truth of that statement. And yet, in everyday life, we rarely do that. Thus, is the theory of truth put forward in this book not just absurd?

Everyone is free to believe what they want ↗. People can believe what is true, what is false, or what is unknown. There is, in a Humanist world view, indeed no necessity to prove anything.

However, we rarely believe just "anything". Rather, we usually judge the likelihood of a hypothesis by our experience – as in the previous example of the roulette player ↗. Technically speaking, this "experience" is nothing else than the set of theories that we have accumulated in our life time ↗. It's just that we rarely make these theories explicit. When we are asked why we believe in something, then we will certainly have our reasons. Again, technically speaking, these reasons are explanations in the sense of this book ↗. Thus, by and large, we do use the methods of this book – just in a watered down variant that is way less formal than presented here ↗.

That is all fine, of course. Things are different when it comes to more serious questions: When it comes to constructing a sky scraper, for example, it would be foolish to rely just on the "experience" of the architects. You would want engineers to thoroughly verify that the building is stable and safe. In that case, you would insist on formal methods. The same is true when it comes to anything that influences your life. Say, for example, that your doctor prescribes you a new medicine. If he tells you that this medicine has never been tested, you would certainly hesitate to take it. It would be of poor comfort to you if the doctor assures you that "If you really deserve the healing, this medicine will not be lethal". Even if you are not familiar with the principle of falsifiability ↗, you would realize that there is something wrong with this doctor. You would insist on taking only medicine that has been tested thoroughly beforehand. And so this is the compromise that we use: In our everyday lives, we use some informal methods to decide what we believe in. These informal methods are vaguely related to the theory of truth of this chapter ↗. For anything that engages our lives crucially, we insist on formal methods – as presented in this book.

This book will argue in the [Chapter on Criticism of Religion](#) that anything that restricts people's lives drastically, anything that impacts the lives of others, and anything that claims absolute truth falls in the second class of cases: It requires the formal type of methods ↗. At the very least, it should be falsifiable. That is the minimal condition for even just being considered in earnest ↗.

It's in the very nature of an argument that people stake a claim to being right. As soon as they do, they have committed themselves to reason – and the listeners they are trying to convince can hold their feet to the fire of coherence and accuracy.

By Steven Pinker in "Enlightenment Now"

I don't want theories, I want facts!

This book puts forward the idea that everything we do is building theories about our perceptions ↗. The reader might wonder where this view accommodates facts.

If you wish, you can see your elementary perceptions as facts. Statements such as "I feel hungry", "I see red color", or "I feel happy" are undoubtable facts ↗. This book says that everything that goes beyond these elementary perceptions are theories that we build to explain these perceptions: The concepts of hunger, of red objects, and of happiness are theories that we build on top of these perceptions in order to structure them and to predict them.

What about moral truths?

This book says that truth is whatever makes correct predictions ↗. This leaves us to wonder whether a moral statement such as "Theft is wrong" is true.

In fact, according to this book, such a statement is not true. It is not even wrong. This is because it is not falsifiable ↗. (It took my quite some time to put moral statements into the framework, but here we go:) For this book, moral statements are not absolute truths. Rather, they are subjective opinions about behaviors. Thus, we can never say "Theft is wrong". We can only say "I find theft wrong". That makes sense: There are cultures where theft is not considered wrong. In an ideal communist world, for example, the notion of theft is entirely meaningless ↗. Thus, "I find theft wrong" is on the same level as "I find Alice beautiful". Such theories do make predictions: For example, if you steal something from me, I will get angry, because I think that theft is wrong. Thus, these theories are falsifiable ↗.

On this insight, we can build an entire moral theory, which we discuss in the [Chapter on Morality](#).

What is the meaning of love?

The meaning of a statement is the set of rules in which it appears ↗. So here we go:

If you love someone, you want to always be with that person.

If you love someone, you feel happy when that person is around.

If you love someone, you want to help that person wherever you can.

etc.



In Lima/Peru

Remark: Compare this meaning of "love" with what believers call God's love. Does this concept have the same meaning as interhuman love, i.e., can you draw the same conclusions from the fact that God loves you? We discuss this in the [Chapter on the Abrahamic God](#). The case of Islam is discussed in the [Chapter on Islam](#), and the general case in the [Chapter on Criticism of Religion](#).

What is the meaning of mathematical concepts?

Mathematical concepts are labels for real-world phenomena. For example, when I say "There are 5 apples", I mean "There is one apple for each finger of my right hand". Thus, "5" is simply an abbreviation for the fact that a group has as many elements as we have fingers. When we say " $5+5=10$ ", then this is an abbreviation for "When you have as many apples as you have fingers on your right hand, and you have as many bananas as you have fingers on your right hand, then you have as many fruits as you have fingers on both hands". It is way more convenient to say " $5+5=10$ ".

Based on this, we can come up with plenty of rules in which these labels appear:

If $x+y=z$, then $y+x=z$

*If $x+x=y$ then $2*x=y$*

etc.

Based on these, we can define square roots, complex numbers, logarithms, and everything else.

These theories make predictions. In the simplest case, they make predictions about the real world, as in "If you have 2 apples and you add 1 more, you will have 3 apples". In the cases of more abstract mathematics, the theories still make predictions. However, these may concern the process of calculus only. As an example, consider the rule "If $x=\log(y)$, then $10^x=y$ ". This rule predicts that if x is the logarithm of y , and if I compute 10^x , then I will obtain as result y . This prediction rarely finds its uses in everyday life, but it is undoubtedly a prediction – and a true one.

You can't believe in math. You have to understand it.

You can't understand religion. You have to believe it.

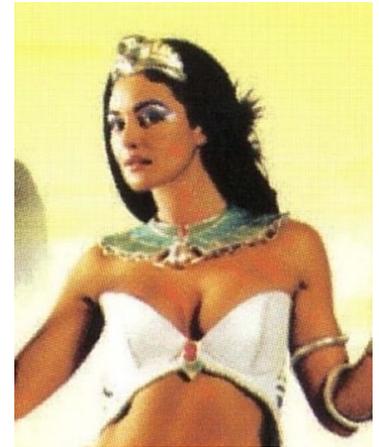
By Daniel Montano on Quora.com

What about historical facts?

How do we know that Cleopatra was queen of Egypt ([Wikipedia/Cleopatra](#))? Is that falsifiable?

Historians reconstruct past events from human artefacts, written accounts of events, archeological sites, and other sources. Technically speaking, they have a number of theories ↗, such as "If a person appears on a coin, then that person was a ruler of a state", or "If a contemporary historian wrote a book, then things happened as written in that book.". These theories are not always correct. They may make wrong predictions. For example, a person on a coin could be a deity instead of a ruler. However, in a large part of the cases, the theories are known to be correct ↗. Thus, historians basically have a set of imperfect rules. From these, they try to deduce what most likely happened in the past. If several rules predict the same thing, and no rule predicts the contrary, then the historian accepts this thing as the most likely course of history ↗.

This thing, however, may turn out to be wrong. For example, it was widely assumed that Cleopatra committed suicide by an asp bite. Nowadays, some historians are questioning this version of history, based on the fact that an asp bite could not have caused the quick death claimed by most sources ([Wikipedia/Cleopatra](#)). As the reader may have noticed, we have just presented evidence that could suggest that the common assumption about Cleopatra's death is wrong. Thus, we have shown that a historical conviction can be falsified ↗. Therefore, historical facts are not meaningless. They have their role in the physical course of time.



Cleopatra
[Picture taken from the Asterix movie "Mission Cleopatra"]

This limits your view of the world

This book defines truth by building on perception statements ↗. It cuts away anything that does not ultimately talk about perceptions ↗. This raises the question whether this view of truth is not too limited. All metaphysical concepts, for example, are cut off.

It turns out that there are theories that are grounded in perceptions and theories that are not. The first class of theories can make tangible predictions, whereas the second one cannot. This holds no matter how you define truth. The first class of theories is the stuff of science. This holds by definition, because science is what is concerned with the natural world ↗. Science encompasses not just physics. It encompasses also psychology, biology, history, or sociology ↗.

The second class of theories is not about perceptions. This does not mean that this class of theories would be useless. Such theories can make up stories, metaphors, or poems. These can provide entertainment, consolation, or inspiration. Most atheists enjoy such products of human culture. Several atheists produce them, and a few atheists are even extremely successful at it ↗. So an atheist's view is not limited to what can be falsified. It's just useful to keep the distinction in mind.

*There is no society in human history
that ever suffered because its people became too reasonable.*

By Sam Harris

There is divine truth!

Some people define truth through God ↗. Truth is what God says.

The problem with this definition is that it never allows to make any tangible predictions. If you assume that God is the truth, then you do not know anything more about this world than if you don't. To see this, assume that God is the truth. Now, who killed John F. Kennedy? You don't know. How many species exist on Earth? You don't know. Who will win the lottery? You don't know. It turns out that you know exactly as much as everyone else, as far as concrete

predictions are concerned. And what everyone else knows is what we commonly call "the truth" ↗. No need to use God for this.

We may say that you know at least that the Earth was created by God. That the species were created by God. And maybe that the lottery winner was chosen by God. However, you can know this only after the fact. Whatever happens, you say that it was God's will. But you can never know in advance what will be God's will. Thus, such a theory of truth is useless. It is just a story that is put on top of whatever happens. Technically, it is non-falsifiable ↗, and thus literally meaningless ↗.

If the test tube turns green, God wanted it. Oh, sorry, it actually turned blue. No worries, God decided that in the first place.

By Jean-Louis Dessalles

Truth is a false concept

It has been argued that we cannot be sure whether the physical system in which we perceive ourselves really exists (most famously in the movie "The Matrix"). There could be no physical system at all. There could be also multiple such systems. Then, our sensations would be just impressions that have nothing to do with any physical world. We could be living in a dream world.

We observe that this assumption cannot be falsified ↗. There is no way to prove that we are not living in a dream. This entails that the theory does not tell us anything about our perceptions. When we assume that we are living in a dream, we are no wiser than before. Thus, the theory is literally meaningless. It is completely irrelevant for our life. I could as well claim that you are dead and what you think is your life are in fact just hallucinations of some surviving neurons in your brain ↗. Such theories lead nowhere. They do not talk about our perceptions, and thus do not even qualify to be considered for being true.

*This theory is not only not true.
It is not even false.*

By Wolfgang Pauli

Chapter on the Universe

Introduction

This chapter describes the current scientific view of the universe, including the Big Bang, the genesis of life, and the evolution of humans ↗. The chapter consists of the following sections:

- **The Universe:** Describes the universe and the Earth.
- **Life:** Explains the genesis of life.
- **Evolution:** Explains how organisms evolve.
- **Humans:** Traces the evolution of humans.
- **Complexity:** Explains the nature of complex systems.
- **Questions:** Treats common objections to this view on the universe.

The Universe

The Earth

We call "the Earth" the planet on which we perceive ourselves ↗. The Earth is spherical. It takes the form of a huge ball. Evidence for this hypothesis is as follows [[Wikipedia/Spherical Earth](#)]:

1. When at sea it is possible to see high mountains or elevated lights in the distance before lower-lying ground and the mast of a boat before the hull. It is also possible to see further by climbing higher in the ship, or, when on land, on high cliffs.
2. The sun is lower in the sky as you travel away from the tropics. For example, when traveling northward, stars such as Polaris, the north star, are higher in the sky, whereas other bright stars such as Canopus, visible in Egypt, disappear from the sky.
3. The length of daylight varies more between summer and winter the farther you are from the equator.
4. The Earth throws a circular shadow on the moon during a lunar eclipse.
5. The times reported for lunar eclipses (which are seen simultaneously) are many hours later in the east (e.g. India) than in the west (e.g. Europe). Local times are confirmed later by travel using chronometers and telegraphic communication.
6. When you travel far south, to Ethiopia or India, the sun throws a shadow south at certain times of the year. Even farther (e.g. Argentina) and the shadow is always in the south.
7. It is possible to circumnavigate the world; that is, to travel around the world and return to where you started. Travelers who circumnavigate the Earth observe the gain or loss of a day relative to those who did not.
8. An artificial satellite can circle the Earth continuously and even be geostationary.
9. The Earth appears as a disc on photographs taken from space, regardless of the vantage point.

We have thus found several theories that predict a spherical Earth (7, 8, 9) ↗. We have also found that the hypothesis of the spherical Earth makes correct predictions (1-6) ↗. Hence we assume that the Earth is spherical. I have also personally verified the implications of this hypothesis by traveling around the world (see my ([Trip around the world](#))).



The Earth is spherical
[[Wikicommons/Earth](#)]

The Church says that the Earth is flat, but I know that it is round. For I have seen the shadow of the Earth on the moon and I have more faith in the shadow than in the Church.

The Sun

We observe that there are other things in space than just Earth ↗. We can, e.g., see the Sun and the Moon. We have the theory that if we can see something, then this something has physical existence ↗, and hence we assume that the Sun and the Moon exist physically.

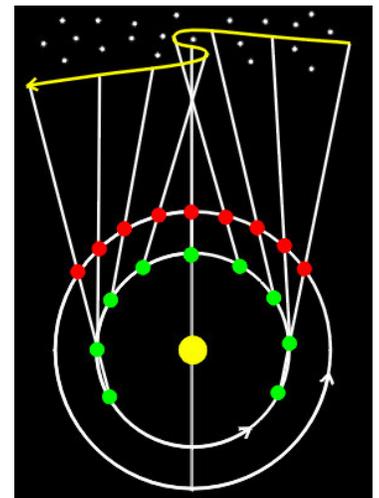
People first believed that the Sun revolves around the Earth. This theory, however predicts certain things that do not coincide with our perceptions. For example, planets change their position relative to the other planets. They seem to slow down, reverse their direction, and then accelerate again in the original direction (see picture).



Mars traces a loop in the sky
[Tunç Tezel]

This was one of the observations that prompted Galileo Galilei to doubt the geocentric theory. A similar thing happens to the stars: A star that was first left of another star appears right to the other star a few months later. Again a few months later, it walks back to its original place. This contradicts the geocentric theory ↗. If, however, we assume that the Earth revolves around the Sun, we can explain both phenomena. The picture on the right shows how Mars appears against the star background. Since the heliocentric theory predicts more correct perceptions than the geocentric one, we have accepted the former ↗. This theory has made numerous true predictions in the past, among other things solar eclipses, lunar eclipses, and the shape of the moon at different times of the month. Hence, we assume it to be true ↗.

Technically speaking, the Earth and the Sun attract each other through gravity. They revolve around each other, like two people who hold hands and dance around each other. However, Earth has a diameter of "only" 12,700 km. The Sun is 100 times larger than the Earth, and much heavier. Hence, the center of gravity lies entirely within the Sun. Thus, the Sun merely wobbles around this center, while the Earth follows a much larger circumference. It is more like a parent dancing with a child. (Io9: [the Earth revolves around the Sun – prove it](#))



The Earth (green) overtakes Mars (red) while both turn counter-clockwise. In this process, Mars seems first right, then left, then right again, and then left.
[ThinkQuest]

Elizabeth Anscombe: I can understand why people thought that the Sun revolves around the Earth.

Ludwig Wittgenstein: Why?

Elizabeth Anscombe: Well, it looks that way.

Ludwig Wittgenstein: How would it look if the Earth revolved around the Sun?

The Spinning Earth

We have come to the conclusion that the Earth revolves around its own axis ↗. This is why we have day and night: When our part of the Earth faces the Sun, we have daylight. When we turn away from the Sun, we enter into the

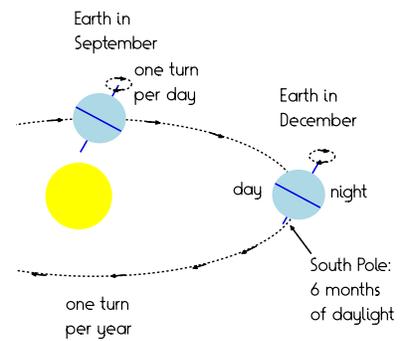
night. The axis of the Earth is slightly tilted with respect to the axis of the movement around the Sun. In summer, our hemisphere is tilted towards the Sun. Hence, we spend longer in the illuminated half of the ball, and our days are longer. In winter, our hemisphere is tilted away, and we spend more time during night. At the poles, the story is different: In June, the northern pole is entirely in the illuminated part of the ball, and hence the Sun never sets. The southern pole is in long darkness. In December, it is vice versa.

In summer, our hemisphere is tilted towards the Sun. Hence, the Sun rays arrive almost vertically. This is why the Sun appears high in the sky in summer. Also, we receive much more energy per square meter – it is warm. In winter, our hemisphere is tilted away from the Sun. The Sun appears low in the sky, and we receive less energy per square meter, because the surface is at an angle to the Sun rays – it is cold. At the Equator, the effects are minimal, because the Sun rays arrive nearly vertically throughout the year. Hence, there are no seasons. Thus, this theory offers not just true predictions ↗, but also a surprising compression of different natural phenomena ↗.

You might wonder why we do not feel the spinning of the Earth. This is because the atmosphere moves with us. When you are in an airplane and you close your eyes, you do not feel that you are moving at 1000 km per hour. You do not even feel when the plane flies in a curve. The same is true for our journey on Earth. There is one way to feel the spin, though: At the equator the centrifugal force is larger than at the poles. Hence, we are just a tiny bit more heavy at the poles. Since gravity remains the dominant force, this change is small: You gain 0.3% of your weight. But it is still measurable.

The Sun, with all the planets revolving around it, can still rapen a bunch of grapes – as if it had nothing else in the Universe to do.

By Galileo Galilei (ascribed)



The Earth revolves around the Sun with one turn per year. It also spins around its own axis, with one turn per day.

The Universe

There are not just the Earth and the Sun in the Universe. There are other planets and stars. These objects emit or reflect light that we can see. We can even estimate their distance to our planet. This works as follows: We measure the angle at which the star is visible in December. Then we measure the angle again in June. Since the Earth has traveled around the Sun in these 6 months, the angles are slightly different. From these two angles and the distance of the Earth to the Sun, we can compute the distance of the star. This technique works for stars that are rather "close" (300 light years away).

For the other stars, we proceed as follows: Astronomers are able to spread out the white light into its constituent "rainbow" of colors. This is called the stellar spectrum. With the stars within the 300 light year range, astronomers have shown that stars with similar spectra have similar intensity of brightness. This allows them to predict the distance of stars beyond the 300 light year range. The spectra of the star is photographed and compared with the spectra of nearby stars whose distance is known. This will tell the actual brightness of the star. Measuring the apparent brightness (the farther it is, the less bright it will seem) the astronomer can then determine the distance of the star needed to give it that level of brightness. This method can be used for stars up to tens of thousands of light years away from the Earth. [\[Rejection of Pascal's wager / Age of the universe\]](#).

In recent times, more technology has become available: We can emit radio waves, and measure how they are reflected by celestial bodies. We can launch satellites and have them send back data. We can even send people to space and have them take pictures.

These techniques have led to the following conclusions: the Earth orbits the Sun at a distance of 150 million kilometers ↗. The light needs 8 minutes to reach us from the Sun. We know that there are more planets orbiting the Sun than just Earth. The farthest objects orbiting the Sun are around 50 times farther from the Sun than Earth. To reach these objects, the light from the Sun needs around 7 hours (Kuiper belt; Pluto lives there). The Sun's field of

gravity reaches much farther though. The Sun's gravity gives way to that of surrounding stars around 2 light years away from the Sun. This area makes up the Solar System.

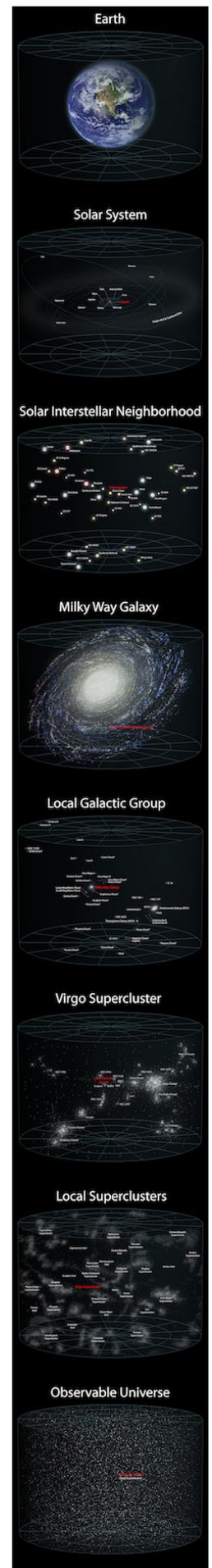
The Solar System is just one of many such systems. Each system revolves around a star. The Solar System and its neighboring systems span a few hundred light years. This neighborhood is embedded in the Milky Way – our galaxy. The Milky Way spans 100,000 light years. This means that even if we travel at the speed of light, we would need half the time that humans exist to cross it. The Milky Way has between 200 and 400 billion stars like our Sun. So there are roughly 50 stars for every person on Earth.

The Milky Way lives in the "Local Group". This group is not so local after all. It spans 10 million light years. The group lives in the Virgo Cluster, which spans 100 million light years. With its neighbors, the Virgo Cluster spans some billion light years. Since the Earth is roughly 5 billion years old, this means that the light that reaches us from there was sent before the Earth existed. Together with many such neighborhoods, it makes up the observable universe. It is around 100 billion light years across. This means that if a star at the fringes of the observable universe dies, it would take 50 billion years for us to notice that the light is gone. This means that the universe that we see is the universe that existed billions of years ago. According to the current scientific opinion, we cannot know how the universe is now, because no information can travel faster than light.

The Earth is at the center of the observable universe because what we can observe is 50 billion light years around us in all directions. This does not mean that the Earth would be at the center of the entire universe, of course. We do not know how big the universe is beyond what we can observe ([Wikipedia/Earth's location in the universe](#)).

The discovery that we are just one particular species on one particular planet in one particular galaxy in our universe is making me much more humble than any burning bush ever could.

By Christopher Hitchens, paraphrased from a television debate on 2010-11-26

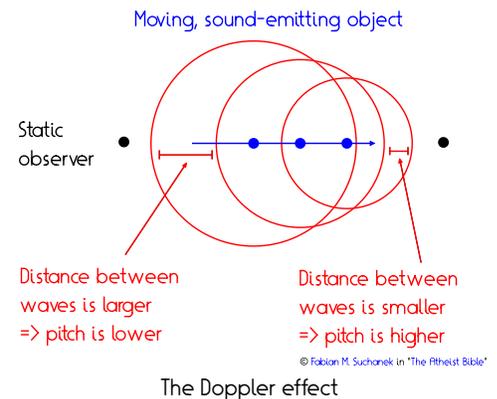


The location of Earth in the Universe

The Big Bang

We all know the Doppler effect: When a firefighter car passes, the pitch is higher when the car approaches, and lower when the car has passed. This is because sound is a wave. When a sound-emitting body moves towards us, the waves arrive in a compressed form, which makes them sound higher. When the body moves away from us, the waves are dilated and the sound appears lower.

The same observation can be made for light. Light can be understood as waves. When these waves are delated, they do not turn "low-pitch" (as sound waves), but they turn slightly more red. Since light travels extremely fast, these effects are only visible when the light-emitting body moves away from us at an extremely high speed. We know roughly what should be the color of stars, because we know which color the nuclear reactions in them produce to emit the light. Now here is the surprise: All stars are slightly more red than they should be. This means that they are all moving away from us – at the speed of billions of kilometers per hour. This holds no matter where we look in the universe. Everything is moving away from us!



Does this mean that we are the center of the universe? Not necessarily. When you draw dots on a balloon and you inflate it, all points will move away from each other, and yet no dot is in the center any more than the others. This means that the universe is continuously expanding at incredible speeds. Ever since Edwin Hubble and his colleagues made this observation, the hypothesis of the expanding universe has been confirmed by a large number of other arguments. Among others, these are a cosmic background radiation, and predictions from Albert Einstein's relativity theory.

Now, if the universe is expanding, this means that if we go back in time, the universe was smaller. If we go back really far, then the universe has most likely been a single dot. If this is true, then this single dot must have been very dense. This theory is commonly known as the "Big Bang theory". Based on how fast the stars move away from us, the "big bang" must have been roughly 14 billion years ago.

Scientists have since been investigating the conditions of matter at the time after the big bang, and they have come up with theories to explain the composition of quarks, electrons, atoms, and molecules. These theories are continuously being developed, confirmed, rejected, and adjusted, as is usual in science [↗](#). We can replicate the conditions near the beginning of the expansion in large particle accelerators. These studies confirm that the hypothesis of the big bang can explain today's composition and proportion of matter in the universe. Therefore, the theory of the Big Bang is currently accepted as the best theory we have about the birth of the universe – although this may change if more evidence comes to light.

Space is big. Really big. You just won't believe how mindbogglingly big it is. I mean, you may think it's a long way down the road to the chemist's, but that's just peanuts to space...

By Douglas Adams in "A Hitchhiker's Guide to the Galaxy"

Before the Big Bang

We have seen that the universe most likely started by a sort of Big Bang [↗](#). The crucial question is, of course: What was before the big bang? Unfortunately, we do not have an answer to this question. Several theories have been proposed, including an oscillating universe, parallel universes, or a halt of time.

A halt of time is not completely illogical. To see this, consider Albert Einstein's relativity theory. As everything in science, this theory is a set of rules [↗](#). This theory predicts that time runs slower in a field of large gravity. For example, time runs slower in the center of Earth than in the sky. Absurd as this theory may sound, it has always

made true predictions: Time runs indeed slightly slower close to the Earth than far away from it. The GPS satellites are a living proof. Their clocks are continuously adjusted in order to be in sync with the clocks on Earth. This is because their time runs differently from time on Earth. Now if the single dot of mass really existed at the beginning of the Big Bang, its mass must have been extremely large. This could have entailed that time did just not move at all. Then the question of "before" would not make any sense.

Still, this leaves open the question of "why" the Big Bang happened. The problem with science is that it can only propose theories that produce verifiable predictions ↗. As long as no such theory has been found, science keeps searching. Until then, the answer to the question of why the Big Bang happened remains unknown ↗.

Birth of the Earth

The current scientific hypothesis is that the Big Bang produced a large amount of interstellar dust and gas called the solar nebula ↗. Gravity, inertia, and centrifugal forces formed the nebula into a rotating cloud. Gravity pulled the center of the cloud together to form a ball: The Sun was born. The compression heated the center, and this caused the start of nuclear fusion. This is a process in which two hydrogen atoms are forced so close together that their nuclei meet. The nuclei resist being forced together because they are all charged positively. If they do meet, they fuse together to a helium nucleus. This releases a large amount of energy in the form of heat. Such a fusion can be repeated in the laboratory, as Mark Oliphant showed in 1932. This is the same principle that hydrogen bombs use. The Sun fuses 620m tons of hydrogen each second. ([Wikipedia/History of the Earth](#))

The rest of the nebula was still rotating around the Sun. Again, gravity pulled together parts of the cloud, and clumped them together to form planets – a process called accretion. This process formed the Earth and the other planets. Much like for the Sun, the accretion heated up the center of the ball. However, the Earth attracted much less debris, was smaller, and hence did not start nuclear fusion. Still, the Earth was very hot. It was so hot that the metals in the debris melted, and fell to the center of the Earth. The outer layer cooled down and formed a crust. This process gave the Earth its layered structure: The inner core of the Earth is solid. It consists primarily of an iron-nickel alloy and is approximately 5000 °C hot. Its size is roughly 70% of the moon ([Wikipedia/Inner core](#)). The inner core is wrapped in the outer core, a liquid mix of iron and nickel with a temperature of about 4000 °C. The outer core is not under enough pressure to be solid. The outer layers of the Earth are cooler, and hence again solid.



How the early Earth might have looked
[\[Arguing with Atheists\]](#)

At the time of the formation of the Earth, volcanism was rampant, and heat and materials from the inside of the Earth were spit out to the surface. These included water vapor. As the planet cooled, this vapor turned to water and formed the oceans. The crust of the Earth consisted of tectonic plates, and these moved around, floating on the liquid layers below. The plates moved several times before forming the continents that we know today.

The Age of the Earth

After having discussed the birth of planet Earth ↗, we now turn to its age. Naturally, Earth has to be younger than the universe, i.e., younger than 14 billion years. Based on biblical sources, people have estimated the age of Earth to be around 6000 years. Biblical sources also tell us that the stars were created after the Earth (on the fourth day, see Bible /Genesis 1:14-1:19). Now here is the problem: Given that some of the stars are billions of light years away, and that we can see them, they must be billions of years old. Since the Bible tells us that the Earth is older than the stars, the Bible tells us that the Earth is billions of years old. At the same time, the Bible tells us that it is 6000 years old. Hence, the Bible contradicts itself.

Ancient trees tell us a lot about the age of the Earth. A tree adds one ring to its trunk every year. If we count the rings in a tree cross section, we can know when the tree was born. Some trees are thousands of years old. For example, we have found Bristlecone Pines aged over 5000 years ([Wikipedia/Bristlecone Pine](#)). But the rings also tell us more: In a year with good climate conditions, rings are thicker than in years with bad climate conditions. Thus, the thickness of rings gives us a pattern. Trees in the same geographic region experience the same climate

conditions. Thus, all trees in the region exhibit the same pattern of ring thickness. Now let's say we find a tree that died this year and that is 4000 years old. In its first 100 years, it exhibits a particular pattern of ring thickness. Let's assume that we find another tree that died long ago, and that exhibits the very same pattern of ring thickness. However, this pattern now appears on the outer rings, closer to the death of the tree. Then we assume that the death of this tree coincides with the first 100 years of the first tree. Thus, we can calculate backwards when the second tree was born. We have found trees that were born 8000 years ago. Thus, the Earth must have existed 8000 years ago.

In the meantime, scientists have developed much more sophisticated methods of dating objects. The most common is so-called radiometric dating: Many atoms are unstable and will spontaneously decay into other kinds of atoms. While the moment of decay of each individual atom is completely random, in a large sample the rate of decay has been shown to be constant. The rate of decay of the radioactive atoms is specific to that particular element. This decay is normally given in terms of half-life, which is the time it takes for half the original amount of atoms (the "parent" atom) to decay to another type of atom (the "daughter" atom). The decay rate of the various particles had been determined experimentally. Thus by comparing the relative amount of "parent" and "daughter" atoms in a rock sample, a geologist can determine the age of that particular sample. There are many naturally occurring radioactive elements, with known "half-lives", in the Earth. These can be used, when found together, to cross check the dating given by each other. One example of a radioactive element which is used for the dating of rocks is the element Potassium-40. Potassium-40 decays to Argon-40 with a half-life of 1.25 billion years. By using these radioactive clocks the oldest rock yet found in the Earth (from western Greenland) is dated at 3.9 billion years. Some moon rock samples, brought back to earth by the astronauts have been dated at 4.5 billion years. Analysis of these and other geologic and astronomical evidence led scientists to conclude that the solar system was formed about 4.6 billion years ago. Thus, the scientific estimate of the age of the Earth is larger than the one given by the Bible by a factor of a million. [[Rejection of Pascal' Wager / The Creation Myths](#)] ([Wikipedia/Radiometric dating](#))



Cross section of a Sequoia Tree
[\[Web Exhibits\]](#)

Young earth creationism is essentially the position that all of modern science, 90% of living scientists and 98% of living biologists, all major university biology departments, every major science journal, the international academy of sciences, and every major science organisation of the world, are all wrong regarding the originals and development of life.... but one particular tribe of uneducated, bronze aged, goat herders got it exactly right.

By Chuck Easttom

Life

Life

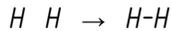
One of the characteristics that distinguishes our planet ↗ from the others we know is that there is life. Different from inanimate entities, living beings can grow, reproduce, and exchange substances with the environment. This applies both to complex life forms (such as mammals and humans) and to more simple ones (such as bacteria, algae, or fungi).

According to the current scientific consensus, life started relatively early on Earth, but evolved relatively slowly. Life started "already" a few hundred million years after the birth of the Earth ↗. Just for comparison: The time it took for life to start is 1000 times longer than the time that humanity exists. Some of the earliest forms of life that we can still see are fossils of some microorganisms on a sandstone discovered in Western Australia. These are 3.5 billion years old. These organisms consisted of only a few cells ([Wikipedia/Abiogenesis](#)). These evolved into multicellular organisms, into algae, then into plants, fish, land animals, and finally into humans.

We will now trace this process step by step.

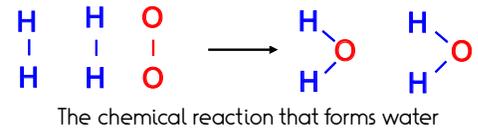
Chemical Reactions

All matter is made of atoms. For the formation and the composition of atoms, the reader is referred to [Wikipedia/Atom](#). Atoms can be plugged together, and the resulting structure is called a molecule. For example, two hydrogen atoms (abbreviated by "H") attract each other by their electrical charge. Hence, they plug together and form a molecule of two hydrogens. We denote this process by



The left-hand side of this equation says that we have two separate hydrogen atoms. The right-hand side says that we still have two hydrogen atoms, but that these plugged together to form a molecule. This molecule is sometimes abbreviated as "H2", because it consists of 2 hydrogen atoms.

Such molecules can again plug together to form larger molecules. They can also split up to atoms, or get transformed into other molecules. For example, water is formed when one oxygen-pair combines with two hydrogen pairs into two water molecules, as shown on the right.



In general, any process that transforms molecules or atoms into other molecules or atoms is called a chemical reaction ([Wikipedia/Chemical Reaction](#)). The chemical reaction may require heat or energy in order to proceed. In the example of water, the process requires energy to split the oxygen pairs and the hydrogen pairs. However, a chemical reaction may also emit energy. Reactions can also require the presence of other molecules (so-called catalyzers or reagents) to proceed ([Wikipedia/Catalysis](#)).

For this book, a chemical reaction is a theory that says that if certain chemical substances are brought together, and if energy and reagents or catalyzers are present as required, then a new chemical substance will form. These theories have validated themselves zillions of times. In large parts, they are testable ↗, i.e., they can be reproduced in the laboratory. Chemical reactions also happen in real life all around us (for example, when wood burns, when soap cleans out stains, or when we cook meals).

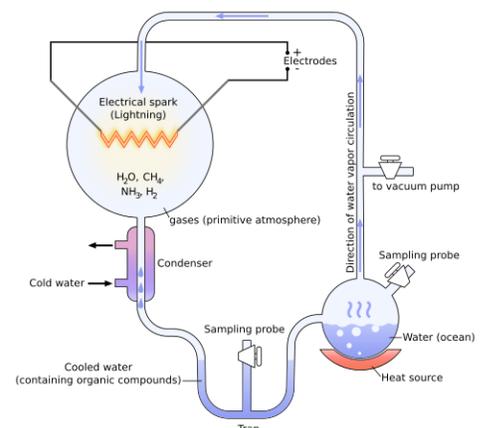
A physicist is an atom's way of studying itself.

By Niels Bohr

Molecules

We have seen that atoms can plug together to form molecules ↗. The current theory goes that when the Earth was born ↗, volcanic eruptions released large amounts of carbon dioxide (CO2), nitrogen (N2), hydrogen sulfide (H2S), and sulfur dioxide (SO2) into the atmosphere. Lightning released heat energy, and hence there were many chemical reactions all around. Molecules just got plugged together randomly by chemical reactions from atoms and from previously assembled molecules. Some molecules would immediately dissolve thereafter, others would chemically react with other molecules, and again others would stay.

This theory can be experimentally verified, as Stanley Miller and Harold Urey showed in 1953. For this purpose, they simulated the early atmosphere of Earth by a gas mixture of methane (CH4), ammonia (NH3), and hydrogen (H2). They simulated the water vapor from the early oceans by pumping steam into this mixture. The steam was then allowed to condense back to water, the water was heated again to steam, pumped into the gas, and so on. Within a day, the mixture had turned pink. Miller and Urey showed that over 20 different forms of molecules had formed, many of which are basic components of living beings. Later analyses of the original experimental material showed that even more molecules had formed than those reported by Urey and Miller. Today, we know that the circumstances of the early Earth were probably different from what Urey and



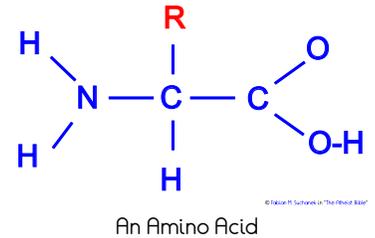
The Miller Urey Experiment
[\[Adrian J. Hunter @ Wikipedia\]](#)

Miller assumed. If this experiment is repeated with gas mixtures that resemble more what we think was the original atmosphere of the Earth, then even more diverse molecules can be produced.

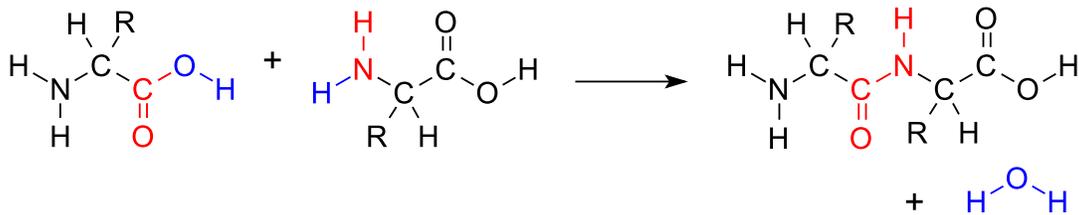
The Miller Urey experiment gives us a testable theory ↗. Whenever a certain gas mixture is exposed to lightning, certain molecules form. This means that, if the early Earth had this gas mixture plus lightning, then the very same molecules formed. Interestingly, such molecules have since also been found on a comet ([The Guardian: Rosetta mission lander detects organic molecules on surface of comet, 2014-11-18](#)).

Proteins

The Miller Urey Experiment produced a variety of molecules ↗. Among these were also amino acids. Amino acids are molecules that consist of one amine (-NH₂) and one carboxylic acid (-COOH), along with a side-chain of atoms that is specific to each amino acid. The figure on the right shows the generic form of an amino acid, where the side-chain is abbreviated by "R":



These molecules can plug together to form peptides ([Wikipedia/Peptide](#)). This works through a chemical reaction that creates a bond between the carboxyl group of one amino acid and the amino group of another, as shown here:

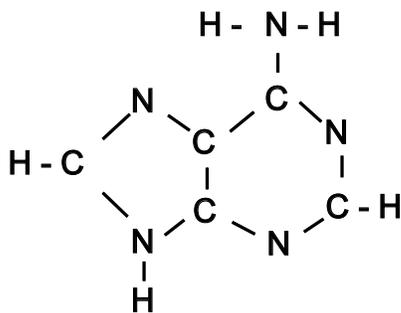


Connecting two amino acids to a (small) peptide
[V8rik @ Wikimedia]

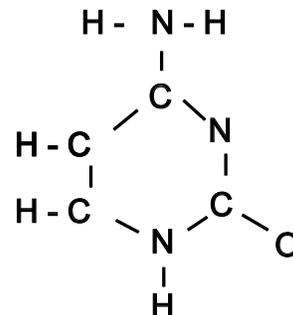
Longer peptides are called proteins. Both peptides and proteins can perform a number of functions, if put together with other peptides, proteins, or molecules. For example, they can attach to each other through chemical bonds, alter their composition upon reacting with another molecule, decompose into smaller pieces, or aggregate to even larger molecules. All of this happens through chemical reactions ↗. We will see a few of these in the sequel.

RNA

The Miller Urey Experiment produced a variety of larger molecules ↗. Some of these molecules were amino acids, which can give rise to proteins ↗. Later variants of the experiment could produce even more molecules. In particular, later experiments were able to produce nucleobases (also called nitrogenous bases). These are molecules that make up our DNA. There are 5 nucleobases, called adenine (A), guanine (G), thymine (T), cytosine (C), and uracil (U). Two of them are shown here:



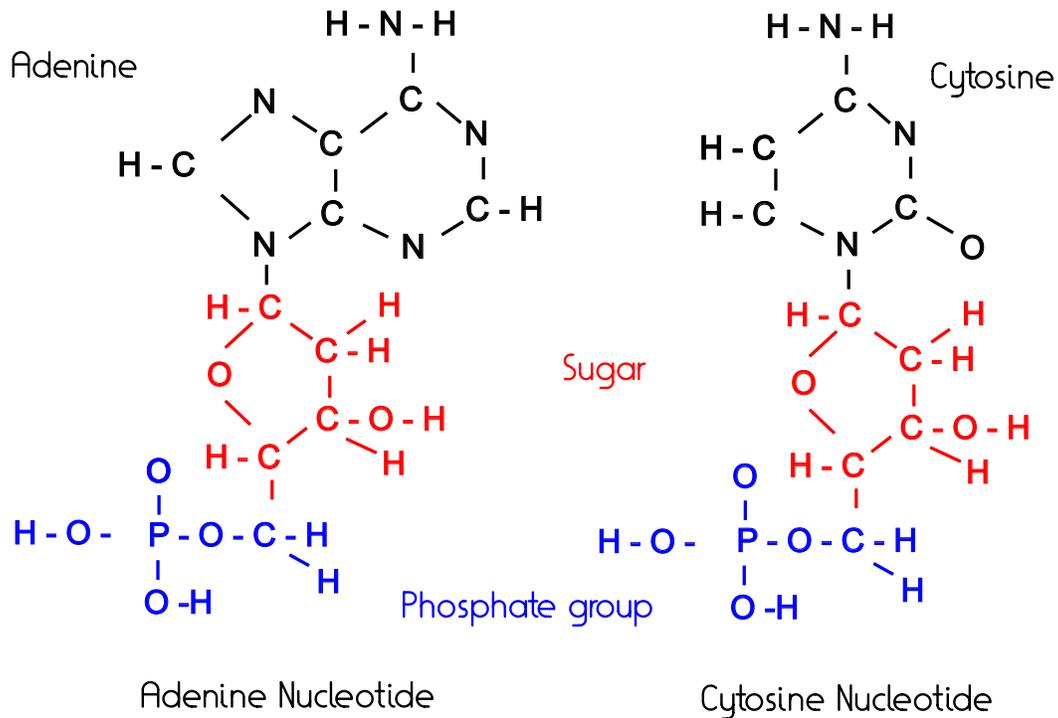
Adenine (A)



Cytosine (C)

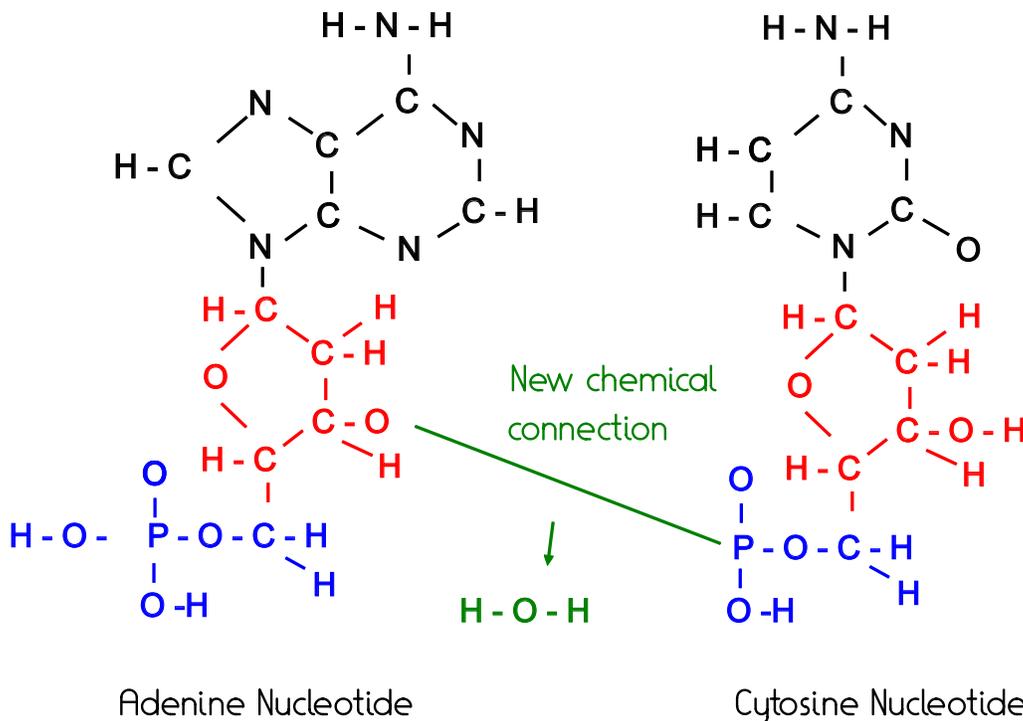
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Each of these nucleobases can connect by chemical reactions to a five-carbon sugar and to a phosphate group. This yields a molecule called a nucleotide. The nucleotides for adenine and cytosine are shown here:



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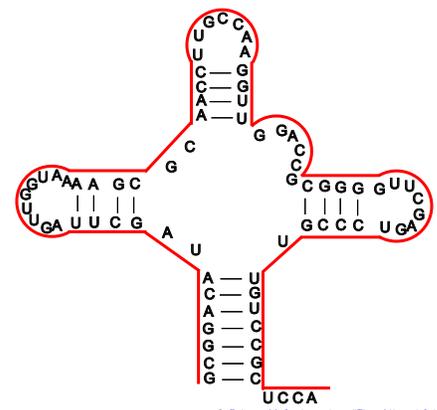
Two nucleotides can connect together by chemical bonds. This chemical reaction releases water, as shown here:



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Other nucleotides can bind to the free ends of this connection, so that we obtain a chain of nucleotides. Such a chain is called a Ribonucleic acid molecule (RNA). Often, the nucleotides are denoted by their initial letters, so that an RNA molecule could be, e.g., GGGAUUGUCAA. In reality, the backbone of an RNA molecule is not straight. Bases at different points on the chain attract each other, so that the RNA forms loops (shown on the right). This gives RNA molecules a complex 3-dimensional structure.

RNA chains can be assembled in the laboratory. This gives us a theory, which basically says that if nucleotides are brought together, they form an RNA chain. This theory is testable ↗, and has indeed been validated in the laboratory.



An RNA Molecule

Chance

We have seen that certain molecules can plug together to form RNA chains – the precursor of DNA ↗. However, only certain RNA sequences have biological functions. The others are just random sequences. Now the question is how likely it is that one particular RNA sequence got assembled by chance on the early Earth ↗.

There are several such calculations on the Web (e.g., [Ian Musgrave: Lies, Damned Lies, Statistics, and Probability of Abiogenesis Calculations, 1998](#), [The Truth About Abiogenesis And Probability](#), or the [Fermi Paradox](#)), but I could not find one that I would find convincing. Many of the variables in the game are just unknown. Hence, I cannot give a precise calculation here either. I can just show how such calculations usually proceed, and which factors are usually taken into account. For this purpose, I am using rather arbitrary quantities.

So here we go. Let's say that we want to grow one particular RNA sequence, which contains 50 bases (50 is a reasonable number for an RNA sequence, but in the end it is an arbitrary choice). We start with one base. At each point of time, a new base attaches. There are 4 different bases. However, there are also other, competing molecules that can attach to our sequence, thus spoiling the entire thing. Let's say that in total there are 10 types of molecules that can attach to our chain, and only one of them is the right one (again, 10 is an arbitrary guess). Then this gives us a chance of 1 in 10^{50} of assembling that RNA sequence. This a huge number. It is roughly the total number of atoms on Earth. So is a chance of 1 in 10^{50} too small to be ever met?

Several factors come into play here. First, there would not only be one RNA sequence growing, but billions of them in parallel. For comparison, one liter of water contains 10^{25} molecules of water. Today's oceans have a volume of roughly 10^{21} litres of water. This means we had (and have) 10^{46} molecules of water available on Earth. Assume that we have 1 base molecule per million water molecules (this is again an arbitrary guess, based on references in [Ian Musgrave: Lies, Damned Lies, Statistics, and Probability of Abiogenesis Calculations, 1998](#)). Then this gives us 10^{40} chains that could start in parallel. So we have a chance of 1 in 10^{10} that one of them is the one we're looking for. 10^{10} is still a huge number. However, we also have a large amount of time: If it takes a day to grow such a chain (which is again an arbitrary guess), then it takes 27 million years to grow the chain we want. In comparison: Life started roughly 500 million years after the formation of the Earth.

Several additional factors come into play: Chains may be destroyed while they grow. Conditions may change during these millions of years, making it harder or easier to assemble the chains. For example, clay can speed up the formation of RNA molecules significantly ([Discover Magazine: What Came Before DNA?, 2014-06](#)). The charged clay surface attracts the nucleotides and the increased local concentration of nucleotides leads to more chemical reactions ([Exploring Origins.org / Nucleic Acids](#)). Another factor is that additional molecules may form over time, and these can hamper or speed up the process. Furthermore, there may be several RNA molecules that are different from the one we want to assemble, but which have the same functions. Then it is sufficient to assemble any of them. Note also that the experiment was not constrained to Earth. There are 10^{22} stars in the visible universe alone. If only 1 in a million has an Earth-like planet (which is again an arbitrary guess), then this gives us 10^{16} places in the universe to assemble RNA chains.

These calculations do not prove anything, because they are based on arbitrary numbers. They serve just to illustrate the magnitudes of the values involved. They also serve to illustrate that new data points may actually

make the chances of life much bigger than we thought (take the example of clay). Some time ago, people thought that the chances of life were much smaller (see [here](#) for a "historical" perspective from 1996).

Be that as it may, we do know that we can build chains of amino acids to form peptides ↗. Experiments in the laboratory show that we can build chains of 55 amino acids in 1-2 weeks ([Ian Musgrave: Lies, Damned Lies, Statistics, and Probability of Abiogenesis Calculations, 1998](#)). This gives us a testable theory ↗ for amino acids. It is assumed that RNA assembled in a very similar way. Experiments show that RNA chains of up to 50 nucleotides can indeed be assembled ([Wikipedia/Protocell](#)).

Replication

We have seen that RNA molecules can assemble by chance ↗. It is assumed that some of these RNA molecules have the ability to replicate themselves. The figure on the right shows how this could work.

Thus, there could be RNA chains that were able to reproduce themselves. This is just one hypothesis. There are several laboratories in the world that work on self-replicating RNA chains, but as of now, none has succeeded in creating an RNA molecule that can replicate itself from individual nucleobases. As of 2016, the state of the art is:

- An RNA chain called R18 can assemble other RNA chains of around 40 nucleobases ([Wendy K. Johnston et al: RNA-Catalyzed RNA Polymerization: Accurate and General RNA-Templated Primer Extension. Science Magazine, 2001-05-18](#)).
- An RNA chain called tC19Z can assemble RNA chains of up to 96 nucleotides. This is half its own length ([Holliger Lab: Ribozyme-catalyzed transcription of an active ribozyme, 2011](#)).
- Certain RNA chains can work in pairs to replicate each other from smaller RNA chains ([Royal Society of Chemistry: Chemists edge closer to recreating early life, 2009-01](#); [Scripps Institute: Self-sustained Replication of an RNA Enzyme, 2009](#)).

1. An RNA floats around

GCAUGCAUGCAU

2. Complementary nucleotides attach by chemical reactions

GCAUGCAUGCAU
CGUACGUA C G

3. The new chain splits off

CGUACGUA

4. Complementary nucleotides attach to the new chain

GCAUGCAU G C
CGUACGUA

5. The two chains separate

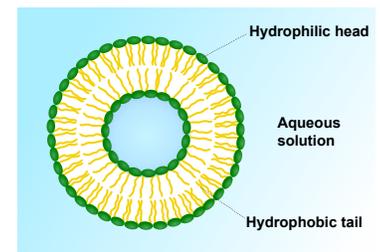
GCAUGCAUGCAU

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How RNA replication might work according to [A. R. Hernández and J. A. Piccirilli: Chemical origins of life, Prebiotic RNA unstuck. Nature Chemistry, 2013](#)

Cells

So far, we have discussed how RNA molecules form ↗. It is assumed that some of them are able to replicate ↗. Now let us see how the first cells formed. A cell is basically a bubble-shaped membrane, which separates the inside from the outside (shown on the right). It usually consists of molecules whose head is hydrophile, i.e., it is chemically attracted to water. Its tail is hydrophobe, i.e., it is chemically pushed away from water. When large quantities of such molecules are poured into water, they spontaneously form bubbles, because this is one of the ways in which all heads face the water and all tails are protected from water. Such a structure is called a vesicle, or liposome ([Wikipedia/Liposome](#)).



A liposome
[SuperManu @ Wikipedia]

There are several molecules that have this property, and they are called lipids ([Wikipedia/Lipid](#)). One particular subclass of lipids are fatty acids. These are molecules that have a rather long tail. As other lipids, they spontaneously form vesicles when poured into water. When combined with clay (or, more precisely, montmorillonite), the process occurs even more quickly. Some of the vesicles form around the clay molecules. Since RNA attaches to the clay molecules, it is sufficient to mix fatty acids, clay, and RNA in order to get RNA chains inside vesicles. This means that we have cells that contain RNA chains ([Discover Magazine: What Came Before DNA?, 2004-06](#)). The theory is that these constellations would have formed the first protocells ([Wikipedia/Protocell](#)).

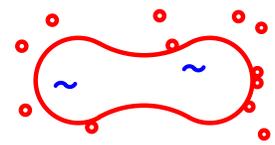
Cell walls are relatively stable in their shape, but their individual fatty acids move around a lot. They enter the wall, leave the wall, or flip around from the inside to the outside and vice versa. This entails that the cell walls are

permeable to certain molecules. Depending on the size, some peptides are able to walk through the cell wall. This gives us a structure that protects the RNA from larger molecules and from physical impact, and that allows other molecules to float in and out.

Cell Division

We have seen that vesicles (the ancestors of cells) are basically balls of fatty acids ↗. Due to chemical reactions, such vesicles form spontaneously when fatty acids are in contact with water, and this process can be replicated in the laboratory. Clay plays a special role in this process, as it accelerates both the formation of vesicles and the formation of RNA ↗ ↗. On the early Earth, storms, water movements, heat turbulences, and volcano eruptions would have mixed the elements, so that some RNA strains ended up in vesicles. Such a vesicle is called a cell. This process, likewise, can be replicated in the laboratory. The cell walls are permeable to certain molecules, and so nucleotides can enter and exit the cell. Some RNA strains are able to replicate themselves ↗. They wait until the right molecule floats into the cell, and add it to the copy of themselves that they are currently assembling. When the copy is ready, it splits off.

At the same time, other vesicles would be floating around in the water. The cell ball continues to attract these vesicles, and integrate them into its cell body. Experiments in the laboratory show that vesicles grow continuously when they come in contact with other vesicles or "single" fatty acids. When cells grow, their surface increases, but their volume does not (as shown in the figure on the right). This gives the cell a prolonged shape, and makes it unstable. Eventually, it will break apart into two pieces. Now remember that we had an RNA strain and its copy floating around in the cell. If the two RNA strains happen to be in the same part of the splitting cell, then they will continue sharing that cell. However, if the cell keeps splitting, then the strains will eventually end up in two different cells. We have witnessed a cell replication and division.



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Cell division.
In red: vesicles.
In blue: RNA strains.

At this point of the evolution, the life cycle of a cell is governed mainly by random fluctuation and random chemical reactions. Only a small fraction of the cells would actually be functional. Large numbers of cells would be empty, handicapped, mutilated, or destroyed by other chemical or physical interactions. It is possible that the entire cell population was destroyed at some point of time, and then re-formed through the same processes.

Mutation

We have seen that cells can form and replicate ↗. The cells contain RNA strains, and these can interact with the cell wall and with other molecules or peptides in several ways. For example, we can imagine that a certain RNA strain has a subsequence of nucleotides that binds to fatty acids. Then this RNA strain would attach to the cell wall. When this RNA strain replicates, all of its copies would also attach to the cell wall.

We can also imagine that an RNA strain has a sequence that binds to certain peptides ↗. When such peptides float into the cell, the RNA strain would accumulate them. Certain types of peptides can bind to other types of peptides, so that one particular RNA strain can end up accumulating ternary molecules in its cell. Certain peptides can interact with the wall of the cell, and either fortify it or disrupt it. If the RNA strain attracts such peptides, then the cell will behave very differently from other cells. Whenever the RNA strain replicates, it will copy this behavior to its clones.

Now we might wonder how such different behaviors come about when there was initially just one type of RNA strains that was able to replicate ↗. The answer is that the copy mechanism of RNAs does not work 100% correctly. When one RNA assembles another RNA, it may occasionally introduce additional nucleotides or leave out others. Thus, each copy is usually slightly different from the others.

This process is called mutation. A mutation can completely destroy the behavior of the RNA. For example, if the mutation fails to maintain the subsequence that attaches to the cell wall, then the copy will lose this behavior. The mutation can also destroy the self-replication ability of the RNA. Then this particular copy will not continue to replicate. However, the mutation can also introduce new behaviors – simply because new subsequences may appear.

Early Life

At this point of our discussion, we have seen how molecules form ↗, how peptides form ↗, how RNA strains form ↗, how cells form ↗, and how cells divide ↗ and mutate ↗. All of these processes happen purely by chemical reactions ↗. Many of these processes can be replicated in the laboratory, giving us testable theories about them ↗.

We have now arrived at little cells that replicate themselves, and we may discuss whether to call this "life". Whether you want to call this "life" or not depends on how you prefer to use this word ↗. However, the organisms that we have seen have all the ingredients that we usually require to call something "life":

- a cell structure that distinguishes one being from another being
- the ability to "ingest" certain molecules while blocking or ignoring other molecules
- the ability to replicate with mutations

Darwinism

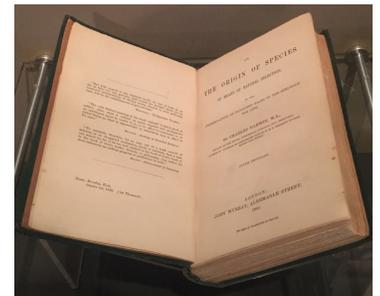
We have now arrived at a point where we can introduce the principle of Darwinism. This principle basically says:

If there is an organism that can replicate with mutations, and if this process continues for a long time, then those mutations that ensure the most successful replication will prevail.

Let us take an example. Let's suppose we have one RNA strain that curls up, and another RNA strain that takes the form of a long string ↗ (this example is made up). When the cell divides, the division cuts the cell space into two random compartments ↗. While the "curls" will most likely end up in one compartment, the "strings" may be cut in two. Now let's say you take 100 cells with curls and 100 cells with strings. Let's say they all replicate, so that each cell contains two of them. When the cells divide, the curls will end up unharmed. However, let's say that half of the strings are cut in two by the cell division. Thus, we have 200 curls and 100 strings. Now the RNAs replicate again, giving us 400 curls and 200 strings. Again, all 400 curls survive, but only 100 strings survive. We see where this is going: While the curls will become more numerous, the strings will stay at 100 individuals. Now let us say that 10% of the cells suffer random destruction by mutation, chemical reactions, and physical impact in each cycle. Then the curls will double in each cycle, and then lose 10% of its individuals. The strings, in contrast, will be reduced in 50 steps to 0 individuals. Thus, the curls prevailed. After 50 steps, there will be only curls.

If you think about it, the principle of Darwinism is trivial: Whatever works best prevails. Whatever else there is dies out. Technically, the principle of evolution is a rule ↗. Given a certain population of individuals, and given knowledge about which mutations ensure that the copies will survive, the rule predicts which population will prevail. The process of a changing and thereby surviving population is called *evolution*.

Darwinism was first developed by the British scientist Charles Darwinism in his 1859 book "On the Origin of Species" ([Wikipedia/Darwinism](#)).



Darwin's original book on the origin of species
[Picture taken in the Melbourne Museum of Natural History/Australia.]

Ribosomes

At this stage of the early Earth, we have a number of cells that divide randomly, and that copy their RNA ↗. Through the process of mutation, the cells formed variants ↗. Some variants would be crushed by the elements, others would prove more stable. This process would favor variants that are more resistant to the environment, and faster in their replication cycle ↗.

Over time, cells became more complex. Some cells would start interacting with proteins ↗. Some RNA strains would attach certain proteins to their cell wall, others would collect certain proteins in the interior of the cell, and again others would use proteins to shape the cell. Thus, the population of cells with proteins would become much more varied. Eventually, one random mutation would create a protein called a ribosome ([Wikipedia/Ribosome](#)). Ribosomes can assemble other proteins from RNA strains. The ribosome maps each sequence of 3 nucleotides in

the RNA strain to one amino acid in the protein. Thus, the RNA can essentially dictate which proteins to create ([Wikipedia/Translation](#)).

RNAs with a ribosome are able to create almost arbitrary proteins with arbitrary chemical properties and functions. These proteins can be free-floating, or they can attach to each other. They can be built so that they attach exactly to one particular other protein. This allows the cell to build up complex structures. It is as if you owned a 3D printer. The best thing about it is that the RNA encodes which proteins to produce. Thus, any copy of the RNA will build the same proteins. A sequence of nucleotides in an RNA that fulfills such a function is called a gene. The genes determine the build-up and the operations of a cell.

From now on, we will no longer speak in terms of atoms or molecules ↗, but in terms of proteins ↗. The proteins in real cells consist of hundreds of amino acids. They take complex 3-dimensional forms, and they can have complex, yet well-defined interactions with other proteins. Today, the RNA strains can be selectively modified in the laboratory, so that cells produce certain proteins or inhibit others ([Team Heidelberg: Phips in the Page / Technical Background, 2008](#)).

Evolution of cells

Simple cells are just a vesicle plus an RNA ↗. Later, ribosomes allowed the cells to produce almost arbitrary proteins ↗. It is clear that RNA strains that teamed up with ribosomes had an evolutionary advantage. Over time, they would replace the strains that did not have this capability ↗. Such cells would actively produce all types of proteins that fulfill all kinds of functions. Later, RNA strains would get replaced by DNA strains. These fulfill similar functions, but reproduce much more reliably.

This way, cells evolved into prokaryotes – simple single-celled beings. Prokaryotes continue to exist today. In fact, prokaryotes are the most diverse and abundant group of organisms on Earth and inhabit practically all environments where the temperature is below +140 °C. They are found in water, soil, air, animals' gastrointestinal tracts, hot springs and even deep beneath the Earth's crust in rocks. Practically all surfaces that have not been specially sterilized are covered by prokaryotes. The number of prokaryotes on Earth is estimated to be around five million trillion trillion, or 5×10^{30} , accounting for at least half the biomass on Earth. [[Wikipedia/microbe](#)]

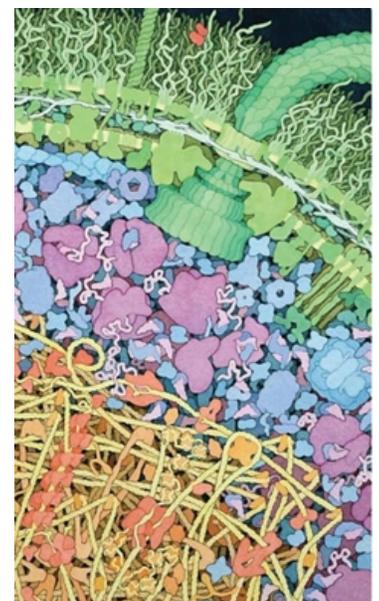
Prokaryotes include for example bacteria. Bacteria can be seen under the microscope. They are a reasonably well-understood form of life. Many of the proteins in a bacterium have been identified ([Wikipedia/Bacterial cell structure](#)). They are a proof that life can go on just by chemical reactions. Other types of single-celled life include fungi and algae. All of these are just collections of molecules, which continuously react with each other. These continuous reactions are what we call "life" ↗.

It might be surprising to see what complexity a single cell brings with it. Yet, the process of cell evolution did not happen over night. Cells evolved over 2 billion years of time. This means that half of the time of the existence of Earth was needed just to get complex cells working.

Locomotion

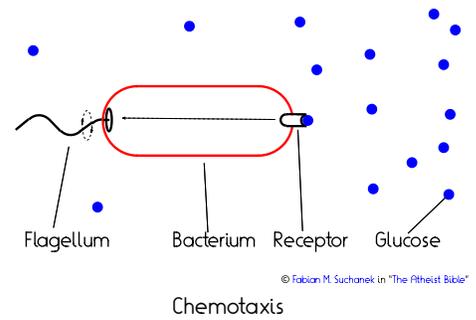
A bacterium is a complex cell ↗. The flagellum is a string of proteins that comes out of bacterium like a tail. It actually rotates. This rotation is powered by a chemical reaction: There is a concentration gradient in protons (not: proteins) between the interior and the exterior of the cell. This causes a constant flow of protons across the cell membrane. This flow, in turn, rotates the flagellum. The flagellum can rotate up to 10,000 times per minute.

This process moves the bacterium forward – up to a speed of 17cm per hour. This does not seem much, but is 60 times the length of the cell per second. The speed of the process can be regulated by changing the concentration gradient and thus the flow of protons. The direction of the rotation is controlled by a protein at the stem. When the



The cell wall of an e. coli bacterium, colored
[David Goodsell]

flagellum turns counter-clockwise, the bacterium moves in one direction. When it turns clockwise, the bacterium just tumbles in place. The swimming of a bacterium is a sequence of tumble moments and swimming moments.



Bacteria need glucose (a molecule) to power these motions. This is their food. The bacterium swims in a liquid in which glucose is solved. The higher the concentration of glucose, the faster the bacterium can work and reproduce. The bacterium finds glucose as follows: It has a glucose receptor on the side opposite to the flagellum. Whenever a glucose molecule attaches, the bacterium switches to "swim" mode. Since the receptor is at the opposite side of the flagellum, the swimming happens in the direction of the glucose ([Team Heidelberg: Phips the Phage / Background, 2008](#)). After some time, the glucose molecule detaches, and the bacterium switches back to "tumble" mode. It tumbles and changes direction until a new glucose molecule attaches. Thus, when it swims in the direction of increasing glucose concentration, it will swim more often and tumble less. If it swims in the other direction, it will swim less and tumble more. This leads to a random walk, which is slightly biased towards the direction of higher glucose levels. If this process is repeated, the bacterium will eventually swim to the source of the glucose ([Wikipedia/Chemotaxis](#)). That is: Those bacteria that managed to do this reproduced faster than those that did not have this capability. Therefore, they eventually prevailed ↗.

It might seem close to unbelievable how such a complex mechanism evolved. However, remember that the DNA can encode and produce nearly arbitrary proteins. Through mutation ↗, the cells would "try out" different proteins. Any design that gives a bacterium just the slightest advantage over other designs would have dominated the others. In fact, the flagellum is built up from the stem. New proteins are produced, and these assemble at the tip of the stem, thus prolonging the tail until it becomes a full flagellum (see [Biologos: Self assembly of the bacterial flagellum](#) for an explication by believers for believers; see [Biologos: Complexity of life](#) for a refutation of the concept of irreducible complexity). All in all, the evolution from cells to bacteria took 1 billion years – 5 thousand times longer than humans exist.

Today, the mechanism of locomotion in bacteria is reasonably well understood, down to the level of proteins, molecules, and atoms. The exact proteins involved in this process are catalogued here: [Seesandra V. Rajagopala et al: The protein network of bacterial motility. Molecular Systems Biology, 2007](#).

Intention

We have seen how a bacterium moves towards higher concentrations of glucose ↗. The process seems kind of intelligent, because the bacterium manages to swim towards the glucose even though it has only limited steering capacity. And yet, the process is entirely chemical. It would be easy to build a robot that shows the same behavior, and moves, say, towards the light. It is all just a purely mechanical procedure with no kind of thinking involved.

And yet, we have a tendency to say that the bacterium "wants" to move towards the glucose. What we mean is: Moving towards the glucose is beneficial for the reproduction of the bacteria. Therefore, those bacteria that moved towards the glucose prevailed over those that did not. Hence, any bacterium that we see today is hardwired to show this behavior. The behavior is no more voluntary than water flowing down a river: Both processes are entirely driven by physical and chemical laws, and are predictable. Still, we have a tendency to say that the water "wants" to flow downhill. Therefore, we shall now use the word "to want" to mean that a system is hardwired to show a certain behavior.

Multicellular organisms

We have seen how cells evolved, and how they became complex enough to become autonomous and self-moving organisms ↗. The more complex organisms that we know consist of several cells. In particular, multicellular organisms consist of several types of cells, which each fulfill a particular function. The question is now how these came about.

Science has not yet found a conclusive answer to this question. All we know is that multicellularity evolved several times independently in several organism species. Not all of these evolutionary paths led to functional organisms.

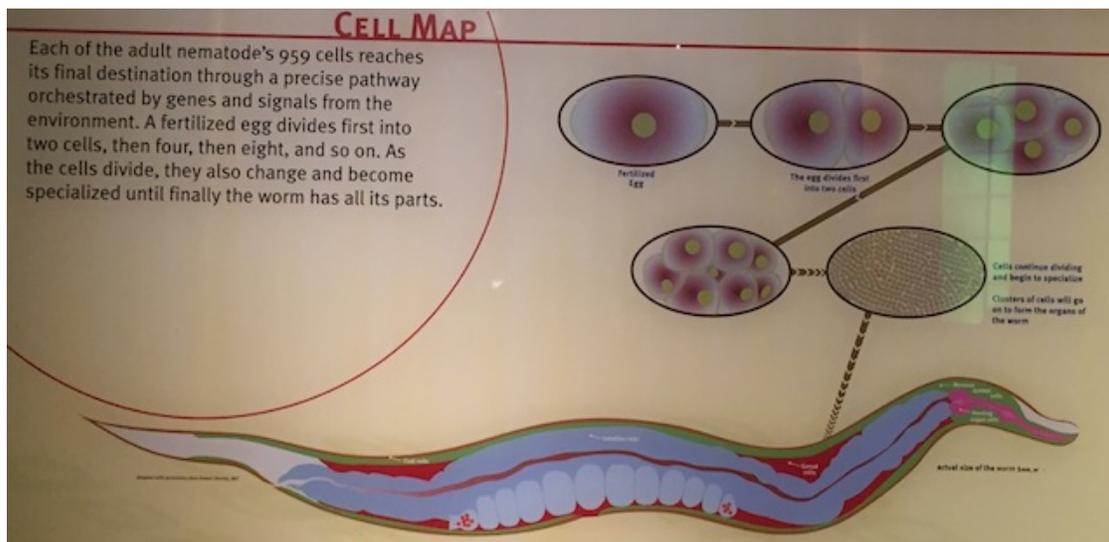
There are several hypotheses as to how cells first started grouping together ([Wikipedia/Multicellular organism](#)). The one that is considered most plausible is that multicellularity evolved from several cells of the same species that cling together. This may happen either because the cells fail to separate, or because separate cells of the same species attach to each other. Over time, the cells specialize: Some cells lose some functionality, and concentrate on one particular functionality instead.

This process can be observed in dictyostelids. Dictyostelids are amoeba, i.e., unicellular organisms. When food is readily available, they are individual amoebae, which feed and divide normally. However when the food supply is exhausted, they aggregate to form a multicellular assembly, called a pseudoplasmodium, grex, or slug. The slug has a definite anterior and posterior, responds to light and temperature gradients, and has the ability to migrate ([Wikipedia/Dictyostelid](#)). This composite organism then moves towards areas of higher food concentration ↗. Different cells take different roles in this process, and so we have a truly multicellular organism.

The question is now how this multicellular organism reproduces. For this to happen, the organism must duplicate, and make sure that all different cells are formed in their respective places. The amoeba does this as follows: Under the correct circumstances, the slug matures and forms a sporocarp (fruiting body) with a stalk supporting one or more sori (balls of spores). These spores are inactive cells protected by resistant cell walls, and become new amoebae once food is available ([Wikipedia/Dictyostelid](#)). That is: The multicellular organism serves as a host for baby amoeba. These baby amoeba are independent unicellular beings. However, when they are released, they may cling together and form again a multicellular being, in which they specialize to take one particular function. Thus, the amoeba by themselves are kind of the stem cells of the multicellular organism.

This process is an entirely chemical process, which has been discovered and analyzed. When an amoeba is stressed, it sends out a Cyclic adenosine monophosphate (cAMP) molecule. When another amoeba detects this molecule, it moves towards the concentration of this molecule ↗. This leads to an aggregation of amoeba. Each of these also starts sending out cAMP molecules, thus calling even more amoebas. The entire DNA of the dictyostelid amoeba has been mapped and published. It contains around 12,500 genes. Thus, the entire process of how this multicellular being evolves has been catalogued.

Other organisms have developed more direct ways of replicating. The Nematode, e.g., is a worm that consists of 959 cells. These are generated in the egg, and each of them is specialized to take a certain function. The cells then move to their spot in the worm, forming the animal.



[Picture taken in the Science Museum in Chicago/US]

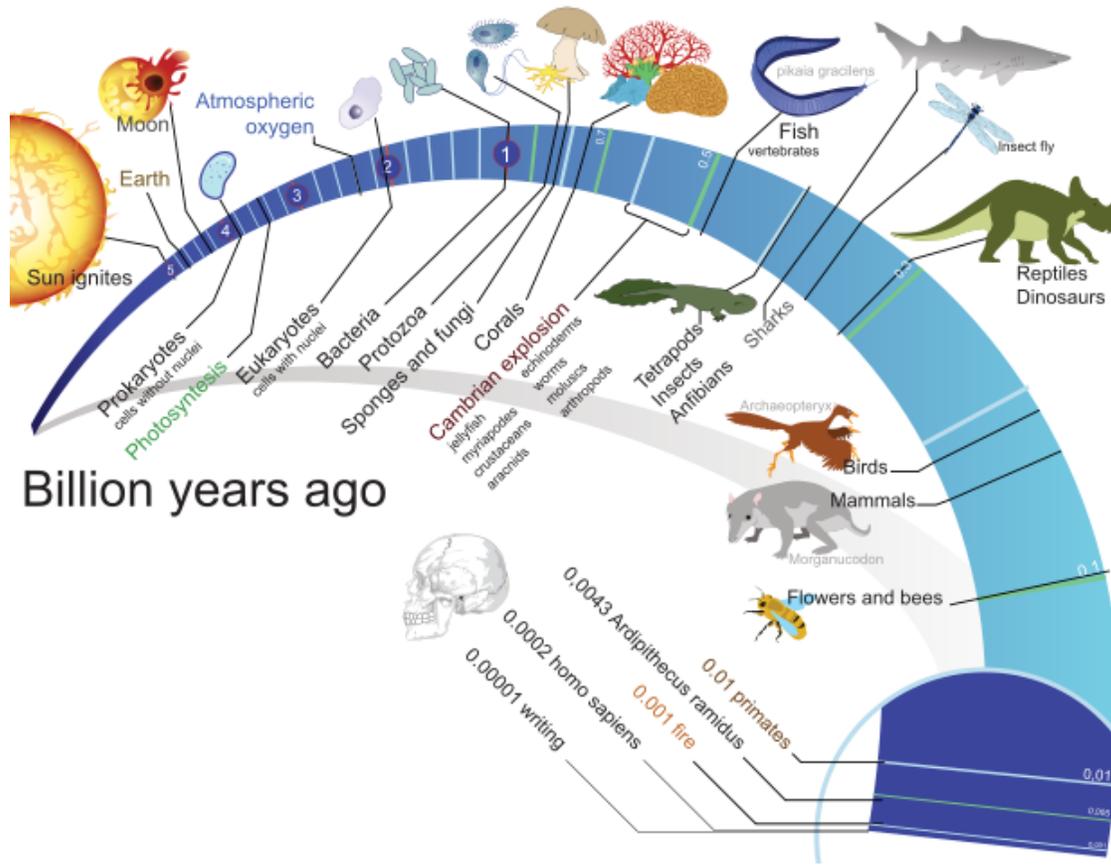
Evolution

Evolution

We have seen how multicellular organisms evolved from simple molecules ↗. The theory of evolution says that this process continued, and that all living beings evolved from these basic beings. In the form of a rule ↗, the theory of evolution is:

For any species (contemporary or ancient; simple vesicles excluded), there is a previous species from which this species evolved through gradual mutation.

The theory says that we can trace the path from all contemporary species back down to simple vesicles ↗. Vice versa, the theory predicts that simple beings evolved into more complex beings, and finally into the plants and animals that we know today. Living beings first evolved in the water, and later conquered also the land. Gradually, the beings became more complex: Fish, insects, dinosaurs, birds, and mammals evolved. The figure below illustrates the process of evolution on a timeline.



The timeline of life
[LadyofHats @ Wikimedia]

But why would this be so? The principle that governs this process is *natural selection* ↗.

Natural Selection

The principle of Darwinism ↗ says that, given a species that reproduces with mutations, the most beneficial mutations will prevail. This principle applies not just to cells, but to any species. The following traits can play a role:

Speed

If one individual can move faster than another individual, and if both are chased by a predator, then the slower individual will be eaten and the faster one will survive. Thus, the faster one has a higher chance of passing his genes on to the next generation. Thus, the next generation will, on average, be a tiny bit faster, too. Then the same effect happens in the next generation, and so on.

Adaptation

If one individual has a slight advantage over another individual (say, it has slightly longer fingers and can cling slightly better to tree branches, or it has a bit more fur and is protected better against the cold), then this individual will fare slightly better in life. It will have more chances to find food and to escape predators. Thus, it will have a slightly greater chance of passing on its genes, meaning that the next generation will also have this

trait. If this is iterated for millions of individuals and for millions of years, eventually this trait will become even stronger.

Mating

If one individual is slightly better at mating than another individual (in whatever form), then the former will reproduce more often than the latter. Thus, its genes will prevail.

Resistance to illnesses

If one individual happens to have a mutation that makes it resistant against a certain fatal virus, and if this virus strikes the group, then only this individual will survive. Thus, any following generation (if any) will inherit this particular mutation. Note that this applies only to illnesses that appear *before* mating. Illnesses of age (such as Alzheimer) will not be eradicated this way, because they do not influence the reproductive success of the individual.

Every single individual and every single mutation is just a very small component in the game. A given individual with a disadvantageous mutation may still have more reproductive success than an individual with a better trait. However, if this experiment is repeated over millions of individuals, and millions of years, then the advantageous traits will prevail. It's just like when two teams play football, and the ground is slightly sloped towards one of the goals. Of course, the downhill team can still win. However, when the teams play a dozen matches, it is more likely that the uphill team wins a bit more often. Now, evolution is actually more unfair than this: If a species is better adapted, it reproduces more frequently. In the analogy with the football game, this means: With every match that the uphill team wins, we make the slope just a tiny bit steeper. Of course, this will accelerate the process. The more the team wins, the steeper the slope will become, and the easier it will be to win again. In the end, the place will be vertical, and the downhill team has no chance whatsoever to win.

This process is called natural selection. It is powerful enough to change an organism completely. A species can grow wings, develop fur, gain more brain mass, learn certain behaviors, or adapt to certain climates. This is the process of evolution ↗.

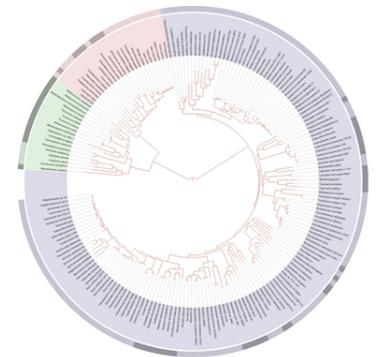
Remark: For a computer simulation of evolution by natural selection, see [Evolved Virtual Creatures](#), a 1994 video by Karl Sims. As a simulation, this video does not prove that evolution did take place. It just illustrates the process in a rather entertaining fashion on a computer.

The Tree of Life

The theory of evolution says that all beings evolved by gradual change from previous beings ↗. This does not mean that there would be one string of beings, in which each comes later than the other. When one population of beings becomes so different from the others that they do not reproduce with them any more, then this population forms a separate branch. This branch evolves on its own without interference from the other branches – it becomes a species. This process yields a tree-like structure, in which one branch evolves, eventually splits up into several branches, and these evolve again, only to eventually split up again. This structure is called the “phylogenetic tree”, or simply the “tree of life”.

Somewhat counter-intuitively, the major branches are not, say, birds, mammals, and plants. Rather, the branches are Bacteria, Archaea, and Eucaryota – rather obscure life forms, which are mostly invisible to the naked eye, but highly diverse and extremely numerous. It is estimated that bacteria and related life forms alone make up half of the biomass on our planet. Animals are in the branch of Eucaryota. In this branch, we find birds, insects, and mammals. Further down the branch of mammals, we find humans. In the figure, the root of the tree is in the middle. Humans are in the segment of Eucaryota (upper left, in pink), second from the right.

This tells us that evolution is not a linear process. Birds are not in any way “less developed” than humans. Both humans and birds evolved on their respective branch. The fact that they coexist today means that they are both equally well adapted to the environment of today.



The tree of life, based on the [Tree of Life web project](#) (click to enlarge)
[LadyofHats @ Wikicommons]

Evolution is also not finished. It goes on and on. Every newborn animal has some slight mutations in their genes when compared to their parents. Animals develop resistance to bacteria, develop capabilities to compete with newly arriving competitor species, or change their physical traits to adapt to the environment. Humans, too, continue to evolve. For example, Europeans have evolved a tolerance for dairy products into adulthood, whereas people in China and most of Africa have not ([NBC News: 7 Signs of Evolution in Action](#)).

Remark: The [Tree of Life Web Project](#) aims to draw the entire tree of life from the available data. You can click through the tree starting from the root up to animals and humans.

The fossil record

The theory of evolution says that all living beings evolved gradually from previous beings ↗. Why should we believe this theory? Basically because it has made only true predictions so far. For many organisms, alive or extinct, we have found fossils or other remains. These include traces of multicellular organisms in stone, imprints of plants, insects enclosed in amber, skeletons. Fossils can also consist of the marks left by an organism, such as tracks or feces. Over time, scientists have found thousands of fossils. Wikipedia maintains a list of the discoveries ([Wikipedia/List of transitional fossils](#)). These include animal fossils, plant fossils, and also fossils of more basic life forms.

Fossils tell us a lot about an organism. From the skeleton of an animal, we can tell whether it moved on two legs or on four legs. From the shape of the feet, we can tell whether the animal lived on the trees. From the teeth, we can tell what the animal ate. From the size of the skull, we can tell the brain size. From the shape of the joints, we can determine the possible movements that the animal could perform. From the size of the bones, we can determine the amount of muscles that the animal had. The fossils can also be dated. One of the techniques to do that is radiometric dating ↗. We date the rock layers above and below the fossil and thus estimate its age. We can also use nearby fossils with a known age to estimate the age of a fossil.

Fossilization is a rare occurrence. The conditions must be just right in order for an organism that dies to become fossilized, and for somebody to find later, which is also a rare occurrence. The theory of evolution does not actually say that we will find fossils of all species (some have not been found yet). It just says that if we do, its age will fall between the less and more evolved species. This theory is falsifiable ↗, because if we find a species outside the time range, the theory is false. J.B.S. Haldane famously stated that "fossil rabbits in the Precambrian" would disprove evolution ↗. So far, we have not found a fossil that would break the principle. This is a strong performance: We have discovered thousands of fossils, which span 4 billion years. Not one has been found that contradicts the theory. On the contrary, the theory of evolution correctly predicts the properties of the fossils that we find. The theory is thus validated in millions of cases ↗. Therefore, scientists assume the theory of evolution to be true ↗. The more fossils they find, the more they complete our picture of the entire process of the development of life – from the first single-celled beings up to the predecessors of humans.



Fossil of a Trilobite, around 500m years ago
[James L. Amos @ National Geographic]

Paleogenetics

The DNA is a sequence of nucleotides that determine the behavior of an organism ↗. DNA sequencing is the process of identifying these nucleotides. This is a lengthy process that is done by expensive machinery and can take several days. The DNA of a human, e.g., contains 3 billion nucleotides. Nevertheless, the DNA of hundreds of species, including humans, have been completely sequenced. All species in the tree of life ↗ have been sequenced, meaning that we know exactly which genes these beings possess. The analysis of genes of different species is an ongoing process, and Wikipedia maintains a list of species whose genes have been sequenced ([Wikipedia/List of sequenced animal genomes](#)).

Paleogenetics is the study of genes (DNA ↗) in fossils ↗. Since every cell of a living being carries its DNA, this DNA can be recovered even from tiny fossil parts, such as a bone part. Since the fossils are usually millions of years old, the material has degraded, and has been invaded by bacteria and other microorganisms. Thus, of the DNA that is recovered from a fossil, only around 5% is actually useable. By overlaying parts of recovered DNA from different

fossils, scientists can reconstruct larger parts of the DNA strain. For example, the genome of the Neandertal humans was sequenced to 50% in 2010 ↗.

Once the DNA of some individuals has been sequenced, the DNAs can be compared. The closer the two individuals are in the tree of life ↗, the more DNA they share. For example, a human baby and their mother differ only in roughly 1 out of 60 million genes. Any two humans differ in 1 out of 1000 genes. A human and a chimpanzee differ in 1 out of 100 genes, and so on. Since we often know which parts of the genome are responsible for which part of the body, we can often tell how two species differ physically – just by looking at the genes.

The DNA sequencing can tell us not only how similar two species are, but also when two species became distinct. By looking at the number of mutations necessary to move from one DNA to the other (a technique known as the molecular clock), we can estimate the time at which a branching occurred in the tree of life ([Wikipedia/Molecular clock](#)).

The DNA contains copies of part of the DNA of the father and the mother of the individual. This tells us not just how the father and the mother were, but also how similar these were among themselves. This, in turn, sheds light the social structure of the species, by telling us whether the species mated within family clans.

Paleogenetics can tell us how similar one fossil individual is to another. All discoveries that we have made so far validate the theory of evolution ↗. Similar organisms lived in similar times. We have not found one fossil so far where the paleogenetic analysis would have contradicted the theory of evolution.

Extinction

The tree of life traces which species evolved from which other species ↗. This does not mean that all species would still be around. Some species disappeared completely. Over the past 4 billion years, thousands of species have evolved only to become extinct a few million years later. The most prominent example are dinosaurs: they are species that evolved, but then died. In fact, 90% of all species that ever lived became extinct ([Neil deGrasse Tyson: Intelligent Design is Stupid, 2009-09-15. Youtube](#)).



The tail of a hadrosaur, 72m years old, 5 meters long
[[The Guardian 2013-07-23](#)]

Hundreds of other species became extinct due to human intervention. They were hunted to extinction, or their life environment was altered so that they died collectively. Hundreds of species are currently at the edge of extinction. The [International Union for the Conservation of Nature \(IUCN\)](#) maintains a list.

Other species became extinct before modern humans. The Neanderthals, for example, were a branch of humans that lived 250 thousand years ago. They died out 200 thousand years later ↗. As predicted by the theory of evolution, a species that became extinct never re-appears.

Some species are pushed to the edge of distinction, but then recover back to a larger population. For example, hundreds of years ago, tens of millions of American Bisons roamed the American prairies. Humans hunted the bison down, and in 1890, only 750 individuals remained. Yet, the population recovered to several hundred thousands today. Similarly, the population of the northern elephant seal fell to about 30 individuals in the 1890s. Yet, dominant bulls are able to mate with many females – sometimes up to 100. Hence, the population has since rebounded. Whenever a population goes through such a bottleneck, the genetic diversity is cut down severely, and the remaining animals are more similar among each other ([Wikipedia/Population bottleneck](#)).

Oddities of evolution

Given any population of species, the ones with beneficial traits have more success in finding food, surviving, and mating. Hence, they prevail, and give their traits to their offspring. This means that the species as a whole develops this trait ↗.

Evolution is not a goal-oriented process. It's not that someone sat down and said: Let's give feet to mammals, so that they can run. It's more like: Those animals that had any means of propulsion (pushing themselves forward,

curling their body, etc.) were more successful than those who did not. Eventually, the ones with more efficient means of propulsion prevailed – those with legs. To prove this, we cannot point to mammals that have no legs – because both theories predict that mammals have legs, and indeed all mammals have legs. But we can point to mammals that have legs and do not use them.

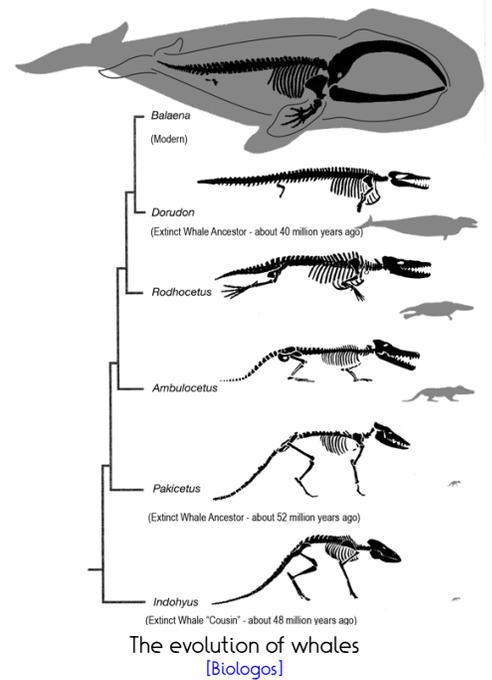
These are for example whales. Whales live in the sea, but evolved from mammals on the land. This means that they developed legs when they lived on the land. Then they started grazing in the sea, and eventually moved fully to the sea. But they kept their legs. Indeed, whales have small leg bones. These do not protrude from the body of the whale, and thus provide no disadvantage, but they are of no particular use either. So, nobody sat down and said "Let's give this whale legs that it does not use". Rather, whales first developed legs and then lost them. This can be traced back through the fossil record [↗](#), as we have found fossils of the intermediate stages of this process (shown on the right).

Such structures are common in nature. They are called *vestigial structures* ([Wikipedia/Vestigial](#)). The mole rat, for example, has eyes, but these are completely covered by a layer of skin. This means that the animal is blind ([Wikipedia/Spalax](#)). Nobody sat down and said "Let's give this animal eyes and cover them up". Rather, the animal developed eyes when it lived on the ground, and then when it proved advantageous to cover them, they covered up.

We discuss more such oddities later [↗](#).

My absolute favorite piece of information is the fact that young sloths are so inept that they frequently grab their own arms and legs instead of tree limbs, and fall out of trees.

By Douglas Adams in "The Salmon of Doubt"



Artificial Selection

We have seen that natural selection filters out disadvantageous traits from a population of individuals [↗](#). This process can also be induced artificially. Consider for example dogs. Assume that we would like to have a large dog that runs fast, so that it can help herd sheep. Then all we have to do is take any population of dogs, select the dogs that run fastest, and breed them. The offspring of these dogs will have the fast-and-strong genes of their parents. Among these offspring, we select again those that run fastest, and we breed them. Eventually, we will generate a population of dogs that run fast. This may sound like a very disrespectful way to treat nature. However, it is what humans have done. We have large dogs that have been bred with the explicit purpose to herd sheep (the German shepherd dog). We have aggressive dogs that have been bred to protect their owners (bulldogs). And we have dogs that have been bred to be cute and cuddly (poodles). This way, humans have actively used the principle of selection and evolution to produce the species they want [↗](#). They have produced species that did not exist before. Thus, the theory of evolution is a testable theory, in the sense that you can actually try it out by yourself [↗](#).

If you do not have the time to breed dogs (they take several years to mature), experiment with drosophila flies instead. These are the tiny flies that live on fruit. They mature and reproduce very quickly. It is also easy to induce mutation by exposing them to radiation (e.g., from an old television screen). If you select bizarre individuals and remove the normal individuals, and if you let the bizarre individuals reproduce, you can generate a population of bizarre flies: Flies with more than 6 legs, with no wings, with 3 eyes, and so on. This works so well that it is



What is this?
[\[Warut Roonguthai @ Wikimedia\]](#)

frequently used as classroom exercise ([search it on the Web](#)). In this accelerated scenario, too, the theory of evolution makes verifiable and testable predictions.

Artificial selection has been at work in some less obvious places, too. Have a look at the fruit on the top right. It is ball-shaped, yellow, and has big grains in it. Can you guess what this is?

This thing is actually a banana. It's just a banana in the wild, as it used to be before humans bred it. Over centuries, humans selected the bananas with fewer seeds, with better taste, and with longer shape, and bred them. This has led to the banana as we know it today: long, seedless, and yellow. Why did this banana not evolve naturally? Because the human banana is unable to survive in the wild. It requires so much water that it can grow only in plantations.

As another example, consider the fruit on the right. Can you guess what this is? It is corn. Corn before humans started breeding it.

Thus, several of the animals and plants around us are actually results of targeted evolution and selection. The theory of evolution is not just validated through the fossil record [↗](#), paleogenetics [↗](#), and the oddities of evolution [↗](#), but actually testable [↗](#).



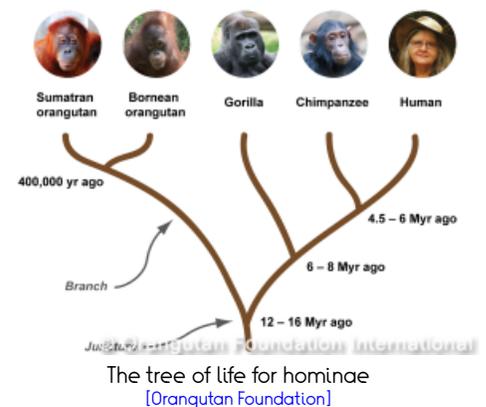
And this?
[\[History for Kids\]](#)

Humans

The evolution of humans

We have seen how plants, bacteria, and animals evolved [↗](#). We will now look into one particular branch of ancient animals: Those that evolved into humans. Humans are rooted in the branch of the great apes, together with orangutans, gorillas, and chimpanzees. They became distinct from the predecessors of chimpanzees around 5 million years ago. This is what the fossil record [↗](#) and genetic analyses [↗](#) tell us.

This does not mean that "humans stem from the ape". It just means that both have a common predecessor. It's like the ancient Celtic people: They originally lived in the alps, but eventually spread out all over Europe ([Wikipedia/Celts](#)). Some of them became Frenchmen, others became Englishmen. This does not mean that the French would be ancestors of the English or vice versa. It also does not mean that one would be "better" than the other. It also does not mean that the French and English are equal in all aspects. On the contrary, the French have developed a cuisine that is considered vastly superior to the English one. Furthermore, the common ancestry does not mean that there cannot be any more Englishmen, just because there are now Frenchmen. It just means that the French and the English have a common predecessor. And it is the same with apes and humans. As Y. N. Harari notes in his book *Sapiens*, this means that there must have been a single female in the past who had two daughters – one that became the ancestor of humanity, and the other the ancestor of chimpanzees.

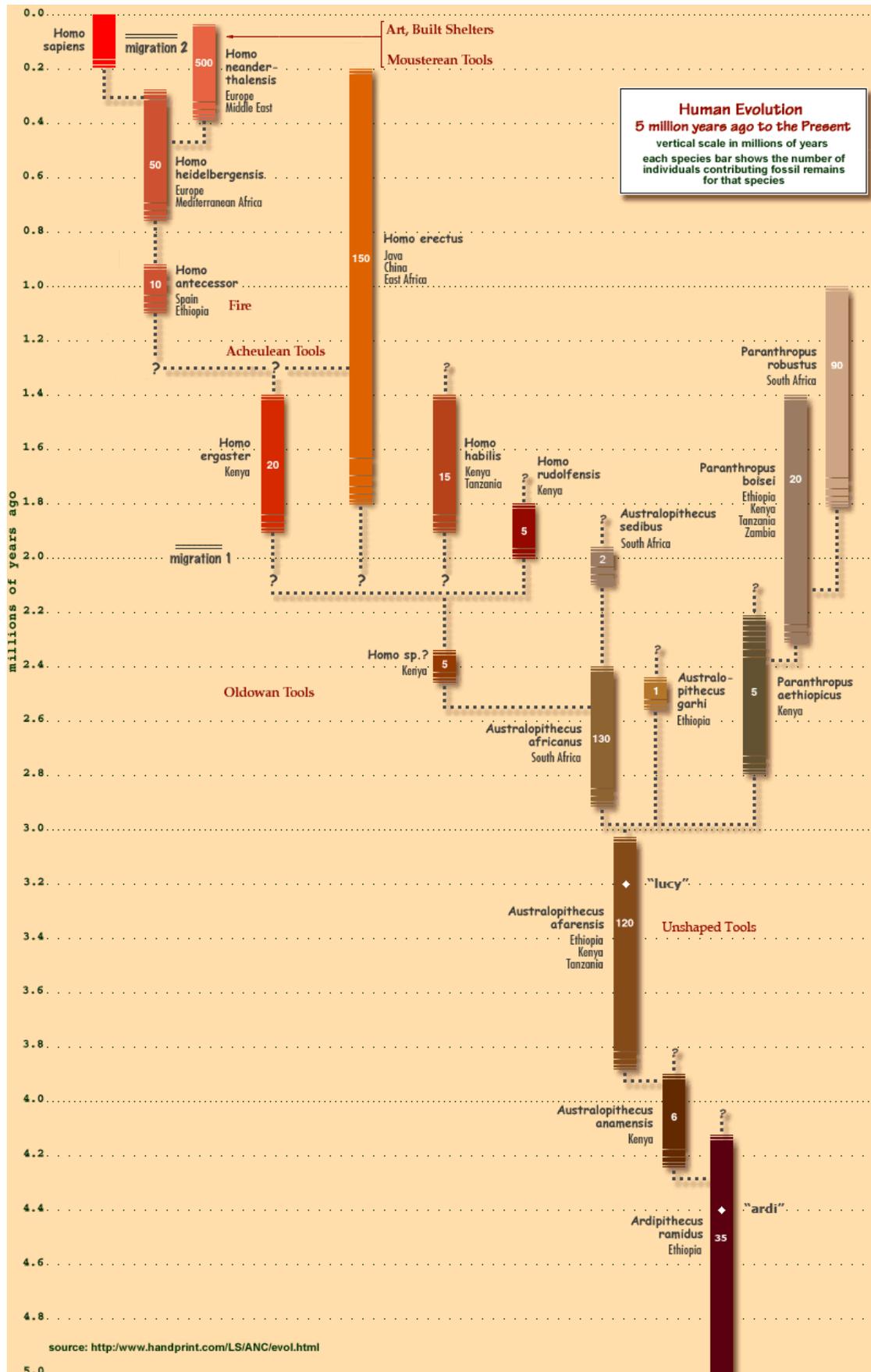


*If God created humans from dust, why is there still dust?
Checkmate, Christians!*

By anonymous

Humans

We have seen that humans and apes share a common ancestor ↗. From what we know, the evolution of humans was not a linear process. On the contrary, nature tried out different branches of humanoid beings. We show them here:



Human evolution
[Handprint]

The vertical scale is in millions of years. Each bar represents the time interval spanned by recovered fossils associated with that species. Dotted lines indicate the conjectural evolutionary lines of descent. (Different paleo-anthropologists will connect these in different ways, while preserving the chronological sequence.) Under each species name is a list of the national or geographical areas where all or most of its fossil remains have been found. White numbers inside the species bars indicate the approximate count of distinct individuals in each species from whom fossil remains survive. This is considerably smaller than the number of fossil specimens, because a specimen can be a single tooth, bone or bone fragment [\[Handprint\]](#). Wikipedia maintains a list of humanoid fossils ([Wikipedia/Human evolution fossils](#)).

It is important to understand that the individual species in the diagram are not independent sets of organisms like, say dinosaurs and birds. Rather, the species in the diagram are periods of time during a continuous evolution where certain physical features were prevalent. Thus, there is no clear-cut difference between, say, *Ardipithecus ramidus* and its successor, *Ardipithecus anamensis*. Rather, the two species blend into each other, with *Ramidus* individuals increasingly resembling *Anamensis* individuals as time progressed, until they finally became so different that we apply a new name to them. Thus, when we say that "Anamensis appeared", we do not mean that a new set of organisms was placed on Earth, but that the children of the children of the children of *Ramidus* species had become so different from their grand-grand-grand parents that they qualify as a new species. One species usually occupies a time range of hundreds of thousands of years. This corresponds to tens of thousands of generations.

Interestingly, some of these actually overlapped geographically and temporally, meaning that different species of humanoids coexisted. We can imagine this like different types of dogs: They are all dogs, but they are all very different, and some of them are so different that they do not interbreed. In general, the following things happened throughout the evolution of the humanoids:

- the brain became larger
- bipedalism became the norm
- hair was reduced
- tools were used

Finally, one branch of this evolutionary process came to dominate all other branches. This is the species to which we belong: *Homo Sapiens*.

Molecular evidence suggests that our common ancestor with chimpanzees lived, in Africa, between five and seven million years ago, say half a million generations ago. This is not long by evolutionary standards ... in your left hand you hold the right hand of your mother. In turn she holds the hand of her mother, your grandmother. Your grandmother holds her mother's hand, and so on ... How far do we have to go until we reach our common ancestor with the chimpanzees? It is a surprisingly short way. Allowing one yard per person, we arrive at the ancestor we share with chimpanzees in under 500 kilometers. (That is the distance from Los Angeles to San Francisco, or from Paris to Amsterdam.)

By Richard Dawkins in "Gaps in the Mind"

Ardipithecus kadabba ("Ardi")

Ardipithecus kadabba ("Ardi") is an ancient species that is assumed to be one of the earliest ancestors of humanity [↗](#). Fossils of around 35 individuals of this species have been found [↗](#). The Ardis lived around 4.4m years ago in Africa. They had a grasping big toe adapted for locomotion in the trees, suggesting that they lived on the trees. However, the skeletons suggest that the species lacked the adaptations of living apes for climbing vertically, hanging from branches, and walking on their knuckles. Instead, Ardis were "careful climbers" in the trees, and supported their weight on the palms of their hands while using the divergent big toe for grasping. At the same time, the feet, pelvis, legs, and hands are adapted also for bipedal locomotion, suggesting that Ardis were bipeds on the ground. The large flaring bones of the upper pelvis were positioned so that Ardis could walk on two legs without lurching from side to side like a chimp. But the lower pelvis was built like an ape's, to accommodate huge hind limb muscles used in climbing. Ardis stood about 120 centimeters tall and weighed about 50 kilograms. Wear patterns and isotopes in the teeth suggest a diet that included fruits, nuts, and other forest foods. They had reduced canine teeth, i.e., two diamond-shaped teeth at the front edges of the mouth. These were smaller than those of a

dog, but larger than those of a human. Ardi had about 20% of the brain size of a modern human, at 300 cm^3 to 350 cm^3 . [National Geographic: Oldest human skeleton, 2009-10-09; re-arranged]

Ardi cannot be a common ancestor of chimpanzees and humans ↗. Chimpanzee are specialised for grasping trees. Ardi's feet are better suited for walking because the middle of the foot is more stable, while a chimpanzee's foot is more flexible (Wikipedia/Ardi). Thus, it is assumed that Ardi was the first species to branch off from the grand apes, and to start the journey to become human.

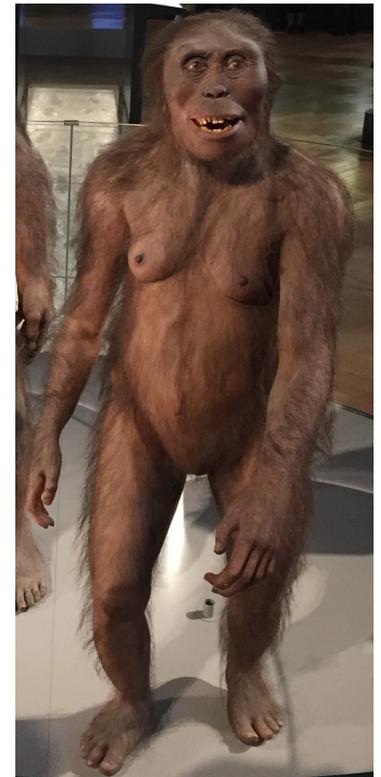


How Ardi might have looked based on the skeletons. Note the feet and the form of the face. [Jay Matternes @ Wikipedia]

Australopithecus afarensis

The *Australopithecus afarensis* is an extinct species that is assumed to be the successor of Ardi ↗ and one of the ancestors of humans ↗. The species lived between 3.9 and 2.9 million years ago in Africa. We will refer to it as "Lucy", which is the name of the most prominent fossil of the species. Like Ardi, Lucy had reduced canine teeth, although they are still relatively larger than in modern humans. Lucy also had a relatively small brain size (380 cm^3 - 430 cm^3) and a prognathic face (i.e. a face with forward projecting jaws). The curvature of the finger and toe bones approaches that of modern-day apes, and suggests that Lucy was able to climb trees. On the other hand, the loss of an abductable great toe suggests that Lucy was not able to grasp trees with her feet. It is currently being debated to what degree Lucy was able to walk like a human, but it is undisputed that she could walk on two legs. Males were most likely larger than females. If observations on the relationship between sexual differences and social group structure from modern great apes are applied to Lucy, then we can deduce that these creatures most likely lived in small family groups, consisting of a single dominant male and a number of breeding females. [Wikipedia/Australopithecus afarensis]

A 2010 study suggests the hominin species ate meat by carving animal carcasses with stone implements. This can be seen as a first use of unshaped tools. With males standing at approximately 1.5m tall and weighing about 59 kilograms and females slightly smaller a 1- 1.2m and weighing 35 kilograms, the *Australopithecus* were certainly not the largest of animals. They may have been the prey of some of the early ancient big cats. The jaws and teeth of the *Australopithecus* are somewhat larger than the modern human but far smaller than those of monkey like the Baboon. They have small reduced canine and molar teeth. These teeth would have been suitable for eating but would not have assisted the greatly to attack predators. [Designer Animals: Extinct Ancestors of the Baboon]



A reconstruction of Lucy. Note the thick neck and the more human feet. [Picture taken in the Natural History Museum of Vienna/Austria]

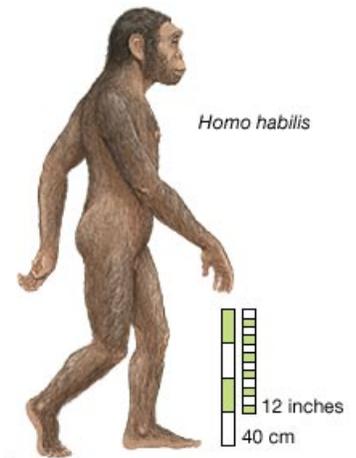
Remark: Today's chimpanzees and orangutans also use unshaped tools.

Homo habilis

Homo habilis a descendant of the Lucy species ↗. Homo habilis lived around 2 million years ago in Africa. It is currently not clear how the species relates to the Homo ergaster and the Homo erectus species. It is commonly assumed that Homo habilis have rise to Homo ergaster, which later gave rise to modern humans. But the species may also have co-existed. They may also have interbred. While we wait for these things to be sorted out, we describe Homo habilis.

Homo habilis had a brain size of 550 cm^3 to 687 cm^3 – roughly half that of a modern human. These hominins were smaller than modern humans, on average standing no more than 1.3m, and weighting 32 kg. The hole for the spinal cord in was located in the centre of the skull base, showing that this species walked on two legs. Walking on two legs allowed the species to carry items or babies while moving. It would also reduce exposure to sun heat. Bipedalism allows the hands to take over other functions. The finger bone proportions of Homo habilis suggest the human-like ability to form a precision grip, thus allowing the species to take and hold an item. Chemical analysis suggests that this species was mainly vegetarian but did include some meat in their diet ([Australian Museum: Homo habilis](#)). The loss of body hair took place between 3 and 2 million years ago, in parallel with the development of full bipedalism.

Homo habilis remains are often accompanied by primitive stone tools. As opposed to Lucy's unshaped tools, these stone tools were intentionally shaped. Homo habilis used one stone to split a flint stone in two pieces, so that the flint stone had a sharp edge. These are the so-called Oldowan (or Mode 1) tools ([Wikipedia/Oldowan](#)). This is a crucial departure from previous species, and also a crucial difference from other modern animals.



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How Homo habilis could have looked. Note the reduction of body hair.

[[Encyclopedia Britannica / Homo habilis](#)]

Homo Ergaster

Homo Ergaster is a humanoid species that first appeared 2 million years ago in Africa. It is likely a descendant of the Homo habilis species ↗. It is a descendant of the Lucy species ↗, and an ancestor of modern humans. It is currently not clear how the Ergaster species relates to another humanoid species, the Homo erectus species, who lived at a similar time. They could have interbred, meaning that Erectus would also qualify as a human ancestor. Ergaster and Erectus could also be two branches of the same species that initially just differed by their location and later diverged. Homo erectus later emigrated from Africa to Asia, while Homo ergaster stayed there.

Homo ergaster was about 190 cm tall, and had a brain size of 700 cm^3 to 850 cm^3 . These species made more complex tools than the Homo habilis species ↗, the so-called Mode 2 (Acheulean) tools. These are symmetrically cut flint stones, which can be used as hand axes. Since Homo erectus had already emigrated when Homo ergaster developed these tools, Homo erectus did not benefit from this invention.

Most importantly, Homo ergaster was probably able to control fire. This is suggested by sherds. These sherds were made of clay, and this clay has to be heated to at least 400°C to be hardened this way. Homo habilis was probably not able to make fire. Rather, they probably used the hot ashes or burning wood from a forest or grass fire, and then kept the fire or coals going for as long as possible by adding more wood and plant materials many times each day. Natural sources of animal fats and petrochemicals that burn could also have been used to keep and maintain fires. Fire would have helped the species to defend themselves against animals, and to produce heat and light. [[Wikipedia/Wikipedia / Making fire](#)]

Homo ergaster later evolved into the Homo antecessor. These species lived around 1 million years ago in Africa. Males were roughly 1.8m tall, weighted 90kg, and had a brain size of $1,000\text{ cm}^3$ to $1,150\text{ cm}^3$. Fossil finds indicate that Homo antecessor practiced cannibalism. Homo antecessor gave rise to Homo heidelbergensis, which lived



A reconstruction of Homo ergaster in the New York Museum of Natural History

[[wallyg @ Flickr](#)]

until 200,000 years ago. Males were about 1.8m tall, and weighted 62 kg. The brain size increased to 1100–1400 cm³ – overlapping with the 1350 cm³ average of modern humans. The morphology of the outer and middle ear suggests they had an auditory sensitivity similar to modern humans and very different from chimpanzees. Branches of the *Homo heidelbergensis* emigrated from Africa and spread to Europe. [\[Wikipedia/Homo heidelbergensis\]](#)

Homo sapiens

Over 400,000 years, *Homo ergaster* [↗](#) evolved into *Homo sapiens*. The new species appeared roughly 200,000 years ago in Africa. *Homo sapiens* have smaller teeth than their predecessors. *Homo sapiens* are the only ape in which the female is fertile year round, and in which no special signals of fertility are produced by the body, meaning that it is not possible for a male to determine when a female is in her fertile period. As a consequence of bipedalism, human females have narrower birth canals. Consequently, childbirth is more difficult and dangerous than in most mammals, especially given the larger head size of human babies compared to other primates. For this reason, human females give birth when the baby is still premature (when compared to other mammal babies). This has two important consequences (Y. N. Harari: *Sapiens – a brief history of mankind*, p. 11): First, humans need to take care of their babies much more than other mammals. This is part of the reason for the complex social structures (families, tribes, societies) that we have built [↗](#) [↗](#). Second, human babies can still be shaped considerably even after birth – through education and socialization. This education is absorbed, and continued in the next generation – much like genes [↗](#). This may be part of the reason for persistence of religions and belief systems [↗](#).



Homo sapiens
[\[Henry Neville Hutchinson et al @ Wikipedia\]](#)

Biologically speaking, *Homo sapiens* generally have a larger fore-brain than their predecessors, so that the brain sits above rather than behind the eyes. The brain volume increased to an average of 1350 cm³ – over twice the size of the brain of a chimpanzee or gorilla. The relatively larger brain with a particularly well-developed neocortex, prefrontal cortex and temporal lobes, enables high levels of abstract reasoning, language, problem solving, sociality, and culture through social learning.

There is evidence that *Homo sapiens* started wearing clothing roughly 100,000 years ago. Around 70,000 years ago, *Homo sapiens* emigrated from Africa – initially probably just with a few hundred individuals, leaving behind the other ones. The successors of these emigrated individuals arrived in Europe, and then in Asia (40,000 years ago) and the Americas (14,500 years ago). The larynx and hyoid bone descended in the species, thus making speech possible. Elements such as language, music and other cultural universals developed roughly 50,000 years ago. The species also started developing arts and manufacture. The first artifacts (little figurines) are dated around 40,000 years ago. The first cave paintings appeared 30,000 years ago (shown right). The species also controlled fire, and started cooking their food. Cooking food makes it more easily digestible, thus allowing humans to spend less time chewing the food. It may also have contributed to shorter intestine tracts, and thus to less energy consumption in that organ (Y. N. Harari: *Sapiens*, p. 14).

Until 10,000 years ago, *Homo sapiens* lived as hunter-gatherers. At this time, they started agriculture, domesticating plants and animals, thus allowing for the growth of civilization. They used metal tools. About 6,000 years ago, the first proto-states developed in Mesopotamia, Egypt's Nile Valley and the Indus Valley. Military forces were formed for protection, and government bureaucracies for administration. Writing was developed around 5,000 years ago by the Sumerians. States cooperated and competed for resources, in some cases waging wars. Around 2,000 - 3,000 years ago, some states, such as Persia, India, China, Rome, and Greece, developed through conquest into the first expansive empires. Influential religions, such as Judaism, originating in West Asia, and Hinduism, originating in South Asia, also rose to prominence at this time [↗](#). Inventions such as the press, and advances in astronomy, mathematics, philosophy, and metallurgy helped shape the daily lives. The Scientific Revolution in the 17th century and the Industrial Revolution in the 18th–19th centuries promoted major innovations in transport, such as the railway and automobile; energy development, such as coal and electricity; and government, such as representative democracy and Communism. With the advent of the Information Age at the end of the 20th century, modern humans live in a world that has become increasingly globalized and interconnected. The life expectancy

has grown from around 30 years to around 80 years in some countries. Today, there are 7 billion individuals of the species *Homo sapiens* – this is us humans.

The evolution of humans continues to today. For example, some branches of humans have developed the genes that allow adult humans to digest lactose (milk), while others did not. Illnesses develop and sometimes die out as humans develop resistance to them. Mutations cause degenerations, and disabilities. Skin color evolves, as does weight and size. People in warm climates are often relatively slender, tall and dark skinned. Dark skin is less volatile to sun burn. Light skin pigmentation protects against depletion of vitamin D, which requires sunlight to make. Due to practices of group endogamy (i.e., mating within the same group), similarities cluster locally around kin groups and lineages, or by national, ethnic, cultural and linguistic boundaries. [\[Wikipedia/Human\]](#)



Paintings in the Chauvet Cave in France
[\[Thomas T. @ Flickr\]](#)

People are just fish plus time.

By Dilbert, by Scott Adams

Neanderthals

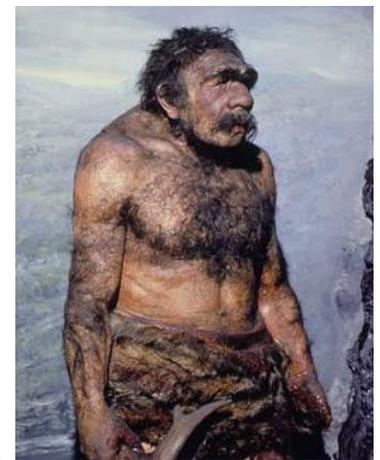
Modern humans have left Africa around 70,000 years ago. However, other hominin species had left Africa before, most notably *Homo heidelbergensis* [↗](#). What happened to these? The other hominin species continued to evolve outside Africa. Over time, they became so different that they became their own species. Examples are the Neanderthals (in Europe and Asia) and the Denisovans (in East Asia). The Neanderthals appeared around 200,000 years ago in Eurasia, after the exodus of their predecessors from Africa. At this time, the North of Europe and Asia was covered with ice. It is estimated that there were about 70,000 Neanderthals at the peak of the population size. The fossils of about 500 individuals have been found. Neanderthals and modern humans share about 99.5% of their DNA.

Neanderthals had an average brain size of 1600 cm³ – larger than that of humans. However, they were also much stronger than humans, so that the ratio of brain to body was actually smaller than that of humans. Neanderthals were in many aspects very similar to humans. They developed tools and art, and buried their dead. Stone tools discovered on the southern Ionian Greek islands suggest that Neanderthals were sailing the Mediterranean Sea as early as 110,000 years ago. An analysis of Neanderthal teeth found traces of cooked vegetable matter, meaning that the species controlled fire and were able to cook. [\[Wikipedia/Neanderthal\]](#)

What happened when the humans arrived in the land of the Neanderthals? This must have been a rather scary encounter, where the humans were confronted with other humanoids that were much stronger than themselves, and yet probably much more primitive. We do not know whether the species fought, lived alongside each other, or just mixed. We do know, however, that humans prevailed. We also know that humans and Neanderthals interbred. Until today, up to 2% of our genetic material is from the Neanderthals. This is true only outside Africa, because Neanderthals did not live in Africa.

6000 years ago God said, "Let there be light!". A cave man who happened to be close looked around confused. Not seeing anything said "ok" and continued to hit a piece of flint with a piece of pyrite until it lit a fire.

God saw the fire and said: "It is good!". The caveman said, "It is something that we have done for tens of thousands of years, you're not a little late?".



How Neanderthals could have looked. Note the shorter and more muscular body.
[\[Memorial Museum\]](#)

God, confused, asked, "Where do you come from? How did you come here without a creator?" And the man said, "This is funny, I was going to ask you the same question."

By *anonymous*

Complexity

Emergence

Nature offers a stunning range of shapes, patterns, regularities, and organization – and often these are very beautiful. Thus, we ask where these shapes and patterns come from. How did nature "organize herself"? In many instances, the process behind these patterns is *emergence*. Emergence is the rise of complex structures from interactions between smaller entities that themselves do not exhibit these properties. Interestingly, emergence does not require central coordination. We look at 2 examples here.

Our first example are snowflakes. Snowflakes are very regular, symmetric, and beautiful structures. They form from water dust roughly 3km above the ground. When the water dust freezes, it forms ice crystals. When other water dust particles collide with this ice crystal, they will also become ice and stick to the initial cluster. Due to the form of the water molecules, individual crystals can only stick together in very specific angles. This constraint makes any water crystal grow in hexagonal shape. This entails that snowflakes have 6 arms, and every one of these 6 arms has again small arms that grow off in the same angle. The length of an arm is determined by an equilibrium of energy. For a certain surrounding temperature, there is a certain optimal length. When this length is reached, the arm splits in two smaller arms. As more crystals join, the snowflake grows.



A snowflake
[SnowCrystals.com]

Now the question is why snowflakes are so highly symmetric. How does each new crystal element "know" what shape the other crystals at the other arms chose? The answer is that the same physical and chemical conditions apply simultaneously at all points of the snowflake. If the snowflake is in a certain temperature, then each arm will grow to the specified length. This is not because one arm would talk to the other, but simply because this temperature is the same at all points of the snowflake. Add in that the crystals can only attach in one specific angle, and you get an identical process and hence an identical shape at all points of the flake.

The next question is why snowflakes are so different. Since snowflakes have higher density than air, they fall to the ground. In this journey, a snowflake will pass different heights at different temperatures. The snowflake may also be blown up again into higher areas, so that the sequence of temperatures is not necessarily monotonously increasing. Each temperature entails a different optimal arm length for the crystal growth. Thus, if a snowflake falls through temperatures A, B, C, B, C, D, it will first form 6 arms of the length given by temperature A, then each arm will split into 2 arms of the length given by temperature B, then the arms split into arms of length C, length B again, length C, and length D. The sequence of temperatures and the time that the snowflake spends in each temperature determines the shape of the flake.

Other crystals grow in a comparable manner. All of these processes are driven by purely local reactions: An individual crystal does not "know" how the others attach. It just attaches to its neighbor. There is also no central authority that tells each crystal where to attach. Each crystal just attaches where the chemical properties allow it to. Thus, we have a phenomenon where local behavior without central coordination leads to the growth of complex, symmetric, and beautiful structures.

Plants grow in a similar way. Each plant cell sees only its immediate neighbors. Depending on where these neighbors are, the cell replicates in a particular manner. If every cell does this, and all the new cells do this again, the resulting structure becomes symmetric and ordered. This process can be described by L-Systems ([Wikipedia/L-System](#)). An L-System can be seen as a rule that says how to grow a single point into a small shape. This rule is applied to an initial point, and then to all points of the resulting shape, and so on. In the biological world, cells can follow such a rule. This single local rule is applied over and over again, and finally yields a global shape.

These systems can indeed generate many plant forms of nature (see picture). Again, a very simple local mechanism gives rise to a complex global structure.

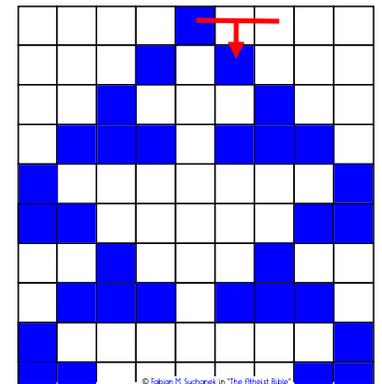
Remark: In this article and the following, we use the word "complex" to mean something that is made up of complicated or interrelated parts [Merriam-Webster / complex], i.e., that is difficult to analyze, understand, or explain [Merriam-Webster / complicated]. This is the common meaning of the word. We can also define "complex" in the sense of "cannot be compressed in an information-theoretical way" ↗. Then, snowflakes and crystals are not complex – because they can be assembled in a simple way from simple parts. Rather, you could call them "intricate". No matter how you call them, if you want to know how they form, you find the answer in the article above.



Shapes generated by L-Systems
[SolKoll @ Wikipedia]

Simulating Emergence

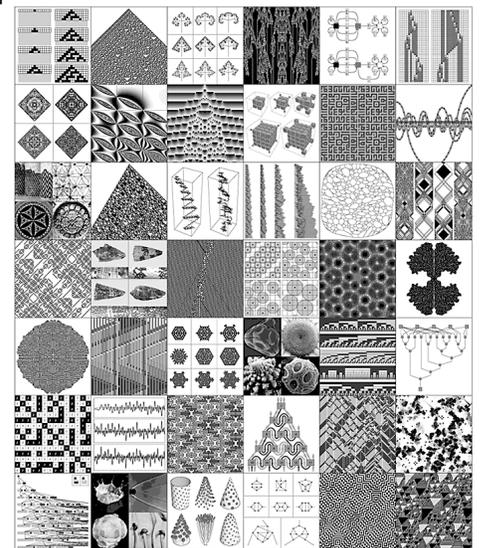
Emergence is the rise of complex patterns from simple components ↗. We can also simulate the emergence of structure on a computer. This is often done by cellular automata. A cellular automaton looks like a check board (shown on the right). In the basic version, each cell can be either colored or white, and initially all fields are white. We start at the top of the checkboard, and color some random cells in the first row (in the figure, this is just one cell). Then, we proceed to the second row. A set of rules tells us how to color the second row. A rule can, e.g., say: If exactly one of the three cells above are colored, then the cell shall be colored, too (see the illustration on the right in red). Such rules can depend only on the neighboring cells in the previous row. This is a very simple mechanism, which we can imagine to happen also in nature: One protein can do one particular thing depending on what its neighbors do; or one ant does one particular thing depending on what its colleagues do. This process is then iterated (always with the same rules) down the checkboard.



A cellular automaton with the rule
"Color a cell if exactly one of the three cells above is colored".

The surprising thing is now that, depending on the choice of rules, very complex and beautiful patterns emerge (shown on the right). With very simple rules, we can create the patterns of the fur of a tiger (Steven Wolfram: *New Kind of Science* / p. 336), the shape of a fern plant, the shape of a snowflake (if we start from the center), the currents of fluids (p. 380), the form of snakes (p. 415), the shape of leaves (p. 402), or the pigmentation of animals (p. 427). In each case, the rule is very simple: It is just an instruction to color one single cell depending on its neighbors. There are only finitely many of these rules, and we can even enumerate all possible sets of rules. The results, however, can be highly complex and beautiful. This shows that the application of local rules, where every cell looks just at its neighbors, can lead to global patterns.

It is relatively simple to come up with a cellular automaton that is able to reproduce a given shape (p. 824). This cellular automaton consists of a fixed set of rules of how to color the cells. When we draw any black-and-white shape on the checkboard, and run these rules, then they will copy the shape – whatever it is. Once the shape has been duplicated, we can continue applying the rules, and the shape will be duplicated again, and so forth. Thus, even if each cell is "aware" of only its immediate surroundings, the cells can still accomplish complex tasks such as the replication of an arbitrary shape.



Shapes generated by cellular automata. Note the plant shapes at the top in the middle, and the snow flakes in the middle
[Steven Wolfram: *A New Kind of Science*]

Behavior

We have seen that a local process can lead to global organization ↗. So far, we have looked only at static shapes. We will now look at dynamic behavior that emerges from the behavior of smaller units.

In the animal world, one example of smart behavior that emerges from local behavior is how ants find the shortest path to a food source. Initially, the ants just stroll randomly around their nest. When one ant finds food, it brings a piece of this food back to the nest. While doing so, it leaves a trail of pheromones. Other ants find these pheromones will follow them, and thus also find the food. Several ants will take several different paths to and from the nest. However, an ant will generally prefer to walk where it can smell the pheromones. The pheromones become weaker with time. Now, something very interesting happens: If there are two paths to the food, a shorter and a longer one, and each is followed by the same number of ants, then the ants on the shorter path will bring back the food much faster. Thus, their pheromone trail will be much fresher. This means that other ants are more likely to choose this path. Since these ants also leave pheromone, the shorter path will accumulate even more pheromones. Thus, even more ants will follow it. In the end, all ants follow the shortest path to the food. Here, a complex global problem (finding the shortest path between two points) was solved optimally by simple local behavior. In a similar way, ants routinely find the maximum distance from all colony entrances to dispose of dead bodies. With such mechanisms, a colony of ants achieves complex tasks such as constructing nests, taking care of their young, building bridges, and foraging for food.

Crucially, the solution to these problems does not require central coordination. The queen ant does not give direct orders and does not tell the ants what to do. Instead, each ant reacts to stimuli in the form of chemical scent from larvae, other ants, intruders, food and buildup of waste, and leaves behind a chemical trail, which, in turn, provides a stimulus to other ants. Here, each ant is an autonomous unit that reacts depending only on its local environment and the genetically encoded rules for its variety of ant. Ants are extremely simple organisms, who lack any memory or intelligence. And yet, collectively, they form seemingly intelligent structures, without the need for any planning, control, intelligence, or even direct communication between the agents. [\[Wikipedia/Swarm behavior\]](#).

Another example of complex behavior in the animal world is swarming. Swarming is the collective movement of similar organisms in a larger structure. Birds, for example, form swarms, as do fish and insects. From an evolutionary perspective, swarming has several benefits for the participating organisms. First, it may be more efficient to move in a swarm than to move alone. For example, geese in a V-formation may conserve 12–20% of the energy they would need to fly alone. Second, a swarm makes it harder for a predator to single out an individual prey. Any swarm member that stands out in appearance will be preferentially targeted by predators. Hence, fish prefer to swarm with individuals that resemble them. Swarms also improve the chances of an individual to find a mating partner. [\[Wikipedia/Swarm behavior\]](#)

Now how do swarms form? Researchers have studied this questions through a variety of techniques. For example, they can film swarm behavior and try to model it by rules, they can modify an individual organism's scope of vision, or they can introduce small robots that resemble the swarming organisms and observe the changes in behavior. It turns out that swarming is governed by 3 simple rules ([Wikipedia/Swarm behavior](#)):

1. Move in the same direction as your neighbors
2. Remain close to your neighbors
3. Avoid collisions with your neighbors

Every individual organism just follows these principles – and the swarming behavior emerges. It has been shown that the organisms often consider only around 6 neighboring organisms. Thus, the process of swarming is governed by very local principles.

Simulating Complex Behavior

Elementary process can give rise to complex behavior ↗. Such behavior can also be simulated by cellular automata. A cellular automaton looks like a checkboard, and in every step each cell is colored either black or white, depending on which of its neighboring cells are black or white ↗. If we allow a rule to recolor a cell that we have already colored before, then the checkboard becomes dynamic.

One of the most famous examples of a dynamic cellular automaton is Conway's Game of Life, a system devised by the British mathematician John Horton Conway. In this automaton, every cell is either alive (= black), or dead (= white). In the beginning, we initialize the cells randomly as either alive or dead. Each cell interacts with its eight neighbors, which are just the cells that surround it. At each step in time, the following transitions occur:

- Any live cell with fewer than two live neighbors dies, as if caused by under-population.
- Any live cell with two or three live neighbors lives on to the next generation.
- Any live cell with more than three live neighbours dies, as if by overcrowding.
- Any dead cell with exactly three live neighbours becomes a live cell, as if by reproduction.

If this process is iterated, very complex dynamics occur (see animation on the right). Depending on the initial configuration, we can have reproduction (as seen at the bottom right of the animation), static behavior (the two squares at the top), oscillations (where the same shape periodically reappears, see the top of the picture), and complex interactions, where one shape moves to disrupt another shape. All of this happens only based on local behavior. Each cell just lives or dies depending on its neighbors – it does not “know” that it is part of a complex periodic system. This shows that local simple behavior can lead to complex global behavior. Conway’s Game of Life and its variations are today a field of research. [\[Wikipedia/Conway’s game of life\]](#).



Predictability

We have seen that local processes can lead to global patterns ↗ and organized behavior ↗. Each of these processes is deterministic. If nature just proceeds by small deterministic steps, does that mean that the result is predictable? In particular, if humans really consist just of cells that follow simple processes, are human actions predictable? And if, in the end, brain activity is also just a pattern of neuron cell activity, are our desires, thoughts, and actions predictable? And if so, what would that mean for our notion of “free will”? We would not have such a free will after all then, if it’s all predictable.

We first observe that organized local behavior does not always lead to organized global behavior. It can also lead to very chaotic global behavior. To see this, consider again the cellular automata ↗. These automata can draw very beautiful patterns on the checkboard. However, they can also lead to entirely chaotic patterns – patterns that show no regularity whatsoever. These patterns are “random” in the sense that they show no organization. They are arbitrary dots of black and white. Thus, local organization does not necessarily lead to global organization ([Stephen Wolfram: New Kind of Science / p. 315](#)).

Now, since a rule can generate very random-looking patterns, it is not always easy to say whether any given pattern is actually really randomly generated (without a rule), or whether it is the result of a rule. Truly random patterns and organized patterns often look indistinguishable (see [Stephen Wolfram: New Kind of Science / p. 551 and p. 553](#)). Thus, given any phenomenon of the real world, it may be hard or even impossible to say whether it was generated by a local process or not.

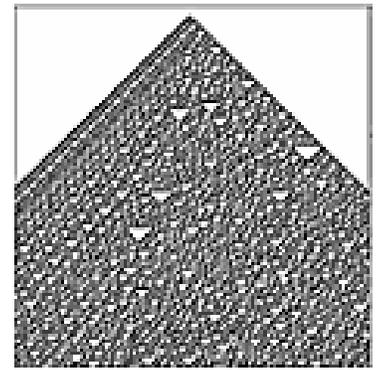
Now assume that we found out that a certain phenomenon is governed by a local process, and assume that we even knew this process. Then, we may still be unable to predict its behavior on the long run. In the language of cellular automata: Given a rule, it may be impossible to describe what happens after the 100,000th step. There are cellular automata that show a behavior that is so complex that it cannot be described upfront by a mathematical function. In the terms of this book, it cannot be compressed ↗. The only way to discover what happens after the 100,000th step is to actually run all steps from 1 to 100,000 and to see what happens. In the language of nature, this means that the only way to find out what happens in the future is to simulate the local processes of nature and to extrapolate them to the future. Since nature is very complex, such a simulation might actually not be able to run much faster than nature itself. Thus, the only way to find out what will happen in the future may be – to wait and see what will happen. In this sense, nature is unpredictable. Human actions, too, are unpredictable in this sense.

Nature is even more unpredictable than that, read on.

The unpredictable future

We have seen that we can construct cases where the only way to predict an event is to wait until it happens ↗. Yet, even if we can afford to just wait and see, we may still be unable to solve the grand mysteries of life. Consider again the cellular automaton. Some automata produce certain shapes (say, a white triangle, as shown on the

right). These shapes may re-occur in later steps, or they may never occur again. In the picture, the white triangle appears several times in the beginning, but then disappears. Now consider the question whether the triangle will die out, i.e., whether there is a point in time after which this shape will never occur again. To answer this question, we could run the automaton and see whether the pattern disappears. But that would not prove that it disappears forever. It could reappear. The only way to find out whether the pattern really disappeared forever is to run the automaton forever. We can prove mathematically that it is impossible in certain cases to make a decision without running the automaton forever. The question is actually undecidable (in the information-theoretic sense of the word). This means that there cannot be a systematic way to find out whether a given pattern will die out or not. In the language of nature, this means: Even if we know the processes that govern nature, and even if we bring enough time to observe what happens, we may still be unable to decide whether a given event will ever happen or not – unless we are prepared to wait for an infinite amount of time. We may say that these automata may be a poor approximation of nature. However, the automata are also part of nature. So the bottom line is that there are things that we cannot predict.



The white triangle seems to be disappearing as we go down in the process. Will it die out completely, or will it re-appear?

[Steven Wolfram: *A New Kind of Science*]

A simple example makes this clear: Assume that it were possible to predict that there would be a revolution in a certain country. Then the government of that country would do everything to prevent that revolution from happening (hand out cash to its citizens, reinforce the security services, or even call elections). As a result, the revolution would most likely not happen. Thus, the prediction would turn out to be wrong. This is an example of a "level-two chaotic system", where the predictions that one makes about its state can actually alter that state (Y. N. Harari: "Sapiens", p. 168). Therefore, it is impossible to predict all events of the future.

This does not mean that it would be impossible in general to make any predictions. There are still lots of other cases where we *can* make a prediction. For example, we can imagine a very simple cellular automaton that just draws everything in black. Of course we can predict the future of this automaton. Or imagine that we throw a stone in the air. Of course, we can predict that this stone will fall back on Earth – no matter all the theoretical results of undecidability. It is this portion of reality that we try to understand ↗.

Free Will

In the picture of humanity that this chapter draws, humans are just a collection of atoms that have evolved from simpler life forms ↗. Now, if everything is just atoms, then human actions, as well as human thinking, is determined by chemical reactions in the brain and in the body ↗ ↗. Then how can humans have "Free Will" – in the sense of the power to make decisions that are not determined by the laws of nature?

The answer is that they don't. Whatever humans do or think is the consequence of the chemical reactions in their brain, and they are bound by these reactions. To see this, take the next thought that comes to your mind – any thought. Did you consciously take the decision to think that thought? Certainly not. This thought just came (Y. N. Harari: 21 lessons for the 21st century). The human brain works like a machine.

Does this mean that we can predict what a human will think or want? Interestingly, that is not the case. We have seen that there are things that we can provably not predict ↗, and there are other things that are so complex to predict that predicting them would amount to waiting until they happen ↗. Human thinking is one of them (Stephen Wolfram: *New Kind of Science* / p. 750). In other words: even if human thought and action is determined by local processes, it may still be impossible to determine what a human will think or do. This unpredictability is what we commonly call "Free Will". When we say "The boy jumped into the water out of his free will", we mean that we were unable to predict this action.

There are plenty of philosophical and religious connotations to the concept of "free will", but for this book, free will is simply the fact that we cannot predict human behavior. Everything else is metaphysical decoration.

*I am hungry for power.
But not to lord over others;
just to own myself.*

Remark: Free Will does not imply that we can never predict what a human will do. For example, offering a human money for a task will significantly increase the probability that the human will perform that task. Vice, versa, punishment will reduce that probability. This insight is the basis of secular morality ↗.

Questions

What has all of this to do with atheism?

This chapter has described how the universe and life came about from a scientific point of view. Now how does this relate to atheism?

Atheism is the disbelief in supernatural beings ↗. As such, atheism excludes the belief that the Earth and life were created by gods. Atheism does not tell us, however, what atheists believe about the formation of life and the universe. Indeed, we cannot make any such statement, because atheism is just disbelief in gods and does not preclude or prescribe any other belief about the universe (or about anything else, for that matter). Different atheists will have different views on this topic.

However, a popular view among atheists is that science is the best method to answer the questions of life and the universe. This is also the stance of Humanism, the particular brand of atheism advocated in this book ↗. What science says on these questions is what this chapter outlined in the preceding sections. Thus, the preceding sections will likely appeal to a large number of atheists as a reasonable view on the formation of the universe.

Nobody would consider God the author of a faulty object. In the perfection, God might have shown himself. But the imperfection reveals nature.

By Charles Darwin

How can you believe what you don't know?

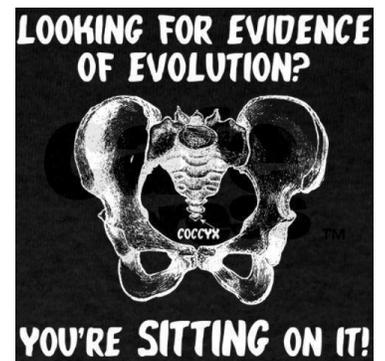
The theories about the universe and life in this book are quite complicated. Most atheists will not even know these theories. Then we may ask why these theories are presented as an atheist view point.

First, not all atheists believe in science. The only thing that unites atheists is their disbelief in the supernatural. However, it is fair to say that probably a majority of those who are explicit about their atheism see science as the primary method to gain knowledge about this world. Humanists, in particular, see science as the best method to learn about the world ↗.

However, this does not mean that these atheists incorporate the entire scientific literature in their belief system. Nobody can do that. It just means that they believe that science is the best method to learn about the physical world. You can believe in the utility of science without knowing all scientific theories.

*Science is not the truth.
It is a way to find truth.*

How can you believe in science?



[Found in: Progressive Secular Humanism]

The theories about the universe and life in this book are quite complicated. Most atheists will not even know these theories. So why do people still believe in science? How can this blind belief be justified?

Scientific theories have a number of properties:

1. Science is the observation of nature. This means that scientific theories are grounded in observations ↗. Since they are grounded, they are falsifiable ↗.
2. Scientists get credit (and thus higher status and more money) when they show that a theory is wrong. Therefore, scientific theories are systematically subjected to attempts to prove them wrong. A theory that produces a false prediction is rejected ↗.
3. Scientific theories have to make at least one prediction to qualify at all. This means that they are applicable ↗.
4. De facto, scientific theories have to make a large number of true predictions before they are accepted into the scientific literature. Thus, the theories are validated ↗.
5. Scientific theories are usually verified in extensive experiments, where the conditions and the conclusions are closely controlled. Thus, scientific theories are testable ↗.

As it so happens, these properties are exactly the properties that make a theory true ↗. This holds almost by definition, because truth is the set of theories that make true predictions, and science discovers exactly these ↗. We remember that a theory can never be proven true ↗. We can only show that it makes true predictions, and no false predictions. Therefore, the above properties make a theory as true as it gets. We cannot make it more true. This holds regardless of the actual content of the theory: If a theory has been tested, verified, re-tested, and always found to make correct predictions, then the theory is a good approximation of truth – no matter what it is about. Since science does exactly this, Humanists believe that science discovers the truth.

Many people object to the scientific method. And yet, even these people use the fruits of science in their everyday life. However, it is inconsistent to reject science, but to use its fruits. For example, it would be impossible to produce plastic the way we do it if the theory of chemical reactions were wrong. We produce and use plastic every single day. This is a concrete outcome of the theory of chemistry. It would be nonsense to use plastic every day and to refuse to believe in the theory of chemical reactions. Likewise, the very same theory that explains how proteins are constructed from DNA also gives us modern medical drugs. It would be inconsistent to use aspirin, but to deny the theory of proteins, DNA, and cells. The aspirin we use is the fruit and the consequence of that theory. It is not possible to make aspirin without knowing the theory. In the same way, the theory that predicts the dilatation of time is not only at the heart of the theory about the size of the universe, but also one of the ingredients of GPS satellites. It is not possible to shoot a satellite into space if (1) one does not know this theory or (2) the theory is wrong. We use GPS satellites every single day. They guide the navigation systems of our cars, locate us on a map on our mobile phones, and geotag the pictures we take with our digital camera. It would be non-sensical to use these things and to say that the science behind it is wrong. The science behind it is right. And it is the very same scientific method, and in large parts even the very same scientific theories, that explain life and the universe ↗.

There's nothing magical about science. It is simply a systematic way for carefully and thoroughly observing nature and using consistent logic to evaluate results. Which part of that exactly do you disagree with? Do you disagree with being thorough? Using careful observation? Being systematic? Or using consistent logic?

By Steven Novella

Science has not answered everything!

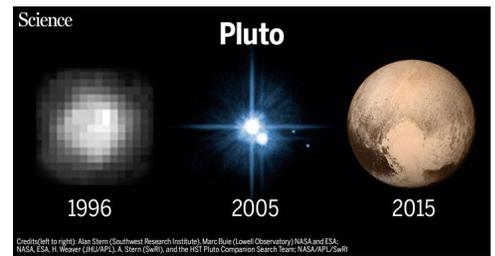
This book has elaborated on several aspects of life and the universe that science can explain. However, there are numerous holes in the story. There are species we have not discovered, stars that we do not know about, and proteins that we have not mapped. On the metaphysical side, we do not know what was before the Big Bang (if anything), we do not know where the universe is going, and we do not know how the human brain and mind work. Since all these questions are unsolved, why do people still believe so much in science?

The first answer is that science has not discovered everything, but what it has discovered is at least validated and useful ↗. Thus, even though science may have treated only tiny bits of the big questions, these bits are at least

reasonably safe to believe in. There is no contradiction here: One can know something without knowing everything.

Second, even if science has not discovered everything, that does not entitle us to invent fairy tales for the parts that it has not discovered. It is better to build on the parts we know rather than to claim that we know what we do not know ↗. We elaborate on this in the [Chapter on the God of Gaps](#).

Third, the parts that we know are growing at breakneck speed. Until 1000 years ago, people had not the slightest idea how the universe was shaped, how life evolved, or how cells work. 100 years ago, people knew about cells, proteins, bacteria, the galaxies, and evolution. 10 years ago, people had a pretty good understanding of life and the universe, but crucial bits were still missing. Today, we can trace nearly the entire history of the universe from the first nano-seconds after the Big Bang until today. We can also trace the entire story of evolution, from the atoms to humans. Many of the things that this book contains were not known at the turn of the millenium. New bits and pieces are added as I am writing this book. Thus, even though our picture may never become complete, it gets more and more complete with every day that passes.



[I freaking love science]

It is those who know little about science who so positively assert that this or that problem will never be solved by it.

By Charles Darwin, paraphrased

Science cannot answer everything!

This book bases its explanations of life and the universe on science. We can argue that this focus is in fact a reduction of the scope of human thinking, because there are things that are inherently outside science.

This book subscribes to a notion of truth that is based on perceptions ↗. Anything that explains or predicts perceptions is recognized as valuable. These can be perceptions in the physical sense (such as what you see or hear), but they can also be psychological perceptions. For example, feelings, desires, and states of mind are all perceptions. Anything that can predict these perceptions is welcome. Thus, the theory of truth presented in this book goes beyond physics and biology. Parts of this area are covered by the sciences of sociology and psychology, or by common sense reasoning. For example, psychology tells us that a person who prays will feel more calm ↗. This is a perfectly valid rule for this book, and hence a step towards truth. Thus, this book is not limited to physics and biology. It just turns out that these are the sciences that explain life and the universe best.

Then there is a large area that goes beyond perceptions. This is everything that has never produced any human perceptions. This is commonly called the supernatural. For this book, all that never produces perceptions is the stuff of stories and myths. These can provide inspiration or entertainment, and thus they have their role in human culture ↗. However, they should not be confounded with truth.

How do you explain the paranormal?

Many people are convinced that paranormal activities are happening all around us. How do we explain this in a purely atheist world view?

[Dale Thomas](#) asks back on Quora.com: How do you explain that in this age of ubiquitous recording devices, worldwide communication, and extremely well-developed scientific processes, no single credible, confirmable evidence has ever been put forth of all those amazing supernatural activities you assert are happening? All we ever get are blurry photographs and unreliable testimonies. That's simply not enough. There is no evidence that religious miracles ever happen. We discuss this in detail in the [Chapter on Proofs for God](#).

Now contrast that with the miracles that science produces. These are:

- remedies that provably cure illnesses such as smallpox. Smallpox was once considered invincible. Yet, science eradicated it. It cured it not just for one particular patient in one remote corner of civilization, but for all of humankind. Now that's a real miracle!
- magical rituals that let you do telepathy with a loved one – even over large distances. This telepathy works not only for a specially trained magician, but for everybody. All that is needed is a small magical tool, called a mobile phone.
- techniques for levitation. Religious levitation (or walking on water) works only for the prophets or gurus of a particular religion, and only under specific circumstances. The levitation that science delivers, in contrast, works for everybody. Furthermore, religious levitation does not actually allow people to move across large distances while hovering in the air. The scientific sort does. It allows arbitrary people to cover huge distances across the surface of the Earth in just hours. All that is needed is a special vehicle called a plane.



I'm Jesus of Nazareth. I cured 10 lepers thanks to unsubstantiated miracles 2000 years ago and half the world worships me for it.



I'm Jacinto Convit. I was nominated for a Noble prize for inventing a vaccine to combat leprosy. Thousands of lives were saved worldwide with proven science yet few know of me.

Something is dreadfully wrong with the relative famousness of these two individuals.

[anonymous]

Different from the religious miracles, these miracles are out there for everybody to see. They actually continuously make our lives better. That is more than we can say of any religious miracle. Thus, if miracles convince you to believe in something, then you have all the more reason to believe in science.

The difference between a miracle and a fact is exactly the difference between a mermaid and a seal.

By Mark Twain

Are humans just apes?

The idea that humans are just more developed primitive apes is not a very flattering one. Hence, the idea is continuously being challenged. It is commonly pointed out that Evolution is nothing more than a theory, and that it is just one possible way to see things. So the question is: Can you really believe that we evolved from apes? And if so, do you have to believe it?

It turns out that you do not have much choice. If you look at the fossil record, you will see fossils of different types of apes ↗. These fossils are just there, we cannot just say that they're not (see picture). These fossils can be dated. Now bones do not just appear like that. They have belonged to a species. Once you have established that the fossils belong to a species, you are basically there: There existed different species, which resemble humans more and more as time progressed. The most recent fossils belong to our species. That's it. There is nothing not to believe in this.

If different experiments give you the same result, it is not longer subject to your opinion.

By Neil de Grasse Tyson



Fossils of humans in their different stages of evolutionary development
[Picture taken in the Melbourne Museum of Science / Australia]

Are some species better than others?

The Theory of Evolution says that species evolve, and that those that fit the environment better will outnumber those that don't ↗. This makes it sound as if some species were "generally better" than others. In particular, it sounds as if humans were "better" than other species.

In fact, the theory of evolution makes no such claim. It just says that those species who are better adapted will outnumber the others. Here, "better adapted" can mean anything: faster, smarter, larger, but also smaller or more resilient. Pigeons, for example, are perfectly adapted to the environment of modern cities: they are extremely resilient to pollution, can eat almost everything (no matter how toxic), and reproduce like crazy. In this respect, they are much "better adapted" than humans. It may well be that humans will one day exterminate themselves through pollution or war – while pigeons, ants, and rats are likely to survive. Thus, humans are not "generally better" than pigeons.

In fact, the theory of evolution says that humans are just species like all the others. It was religion that came up with the theory that humans would be special ↗.



THESE ARE FOUR OF THE NINE FISH WHICH HAVE BEEN FOUND TO BE DEVELOPING HUMAN-LIKE ARMS. EVOLUTION DOESN'T GIVE A SHIT IF YOU BELIEVE OR NOT... IT JUST HAPPENS, SO DEAL WITH IT.

[Found in: [Progressive Secular Humanist](#)]

Is Evolution falsifiable?

This book makes much out of the concept of falsifiability ↗. So the question arises whether the theory of evolution can be falsified.

It turns out that it can. The first possibility to falsify evolution is to find any fossil that does not fit into the tree of life ↗. As B.S. Haldane's observed: Any fossil rabbits in the Precambrian would immediately disprove evolution. So far, we have never found any fossil that would break the principle.

The theory of evolution also says that gene mutations are passed on through the generations of species. This means that any of the following would prove the theory of evolution wrong:

- If it could be shown that organisms with identical DNA have different genetic traits.
- If it could be shown that when mutations do occur, they are not passed down through the generations.
- If it could be shown that although mutations are passed down, no mutation could produce the sort of phenotypic changes that drive natural selection.
- If it could be shown that selection or environmental pressures do not favor the reproductive success of better adapted individuals.
- If it could be shown that even though selection or environmental pressures favor the reproductive success of better adapted individuals, "better adapted individuals" (at any one time) are not shown to change into other species.

Charles Darwin made the case a little differently when he said, "If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down. But I can find out no such case." [[Rationalwiki / Disproving evolution](#)]. Indeed, we have not found any of these counter-indications so far.

The principle of evolution is not just falsifiable, but even testable ↗. You can, for example, take drosophila flies, and evolve them yourself. This is commonly done in biology classroom studies, but you can also do it yourself ↗.

Evolution is just a theory!

The theory of evolution is called a "theory" ↗. Doesn't this already show that it's not a fact?

Scientists use the word "theory" much in the sense that this book uses it ↗. A theory is a set of rules that explain and predict the phenomena of nature ↗. The theory is assumed to be true if (1) it is falsifiable, (2) it is applicable, and (3) it makes only true predictions ↗. It is an even better theory if (1) it is testable ↗ and (2) it compresses information ↗. As it so happens, all of this is the case for the theory of evolution:

1. The theory is falsifiable ↗.

2. The theory has made individual predictions already ↗.
3. The theory is validated through the fossil record ↗, paleogenetics ↗, and the oddities of evolution ↗.
4. The theory is testable ↗.
5. The theory is compressive, because it basically explains the entire fossil record with a single rule ↗.

Thus, we have every reason to believe that the theory of evolution is true. In fact, the theory accurately explains what we observe, and predicts what we will observe. This is more than any religious theory can say of itself.

For this, it does not matter whether you call evolution a "theory", a "fact", or a "hobblenock" ↗. What matters is that it accurately describes reality.

Now scientists still call it a "theory", and not a "fact". This is because they are ready to abandon it, if it ever makes a false prediction ↗. Again, this is more than any religious system can say of itself ↗. In fact, everything in science is a theory. For example, the theory of gravity is a theory. This is because it *could* be that one day it makes a wrong prediction. It's just that it doesn't. And it is the same with the theory of evolution.

Anyone who believes that the laws of physics are mere social conventions is invited to try transgressing those conventions from the windows of my apartment. I live on the 22nd floor.

By Alan Sokal

God did it!

One alternative explanation for the genesis of the universe, the Earth, and life is a supernatural one: "If something exists, then God did it".

We discuss this explanation in detail in the [Chapter on the God of Gaps](#). Here, we just note that this theory cannot be a true in the sense of this book ↗, for the following reasons:

1. It cannot be falsified ↗. There is nothing that a believer would accept as a proof that God did not create a particular thing. This means that we can come up with arbitrarily many contradictory supernatural theories, which also all explain the birth of the universe ↗. This is indeed what people do ↗.
2. The theory is not applicable, because it does not make any perceptible predictions whatsoever ↗. It is for this reason that theologians have never ever come up with a correct prediction about this world that could not have been made by science.
3. The theory makes assumptions (such as the existence of God) for which there is no evidence ↗.

Thus, the theory is not true in the sense of this book. Apart from that, the theory does not compress information ↗. All that the supernatural explanation can say about this world is "It is like that because God made it that way". This, however, does not tell us anything more than what we knew anyway. Therefore, the theory has no explanatory power ↗.

You cannot see evolution!

Opponents of the theory of evolution can argue that the theory is too abstract and hypothesizes only about the past. We have never witnessed how new species come into existence during our lifetime.

The theory of evolution makes some verifiable predictions that fall in our lifetime. We rely on them for the breeding of our food and domestic animals ↗. The theory also makes falsifiable predictions on the types of fossils that we find ↗. Peter and Rosemary Grant have studied how the body and beak size of Galápagos finches changes response to changes in the food supply, driven by natural selection. This happened fast enough to study it ([Wikipedia/Peter and Rosemary Grant](#)). The claim that different species may come into existence is harder to observe.

And yet, we can observe this effect as well [[BBC: Evolution – What the world's youngest species can teach us, 2012-11-23](#)]:

1. populations of periwinkles are evolving elaborate and different penises, which prevents them mating with other populations of snail, isolating them into different species.

2. The *Mimulus peregrinus* flower is one of the youngest recorded, appearing less than 140 years ago.
3. In the mid-1900s another new flower, *Senecio cambrensis*, naturally speciated in North Wales in the UK, while around the same time two species of flower *Tragopogon mirus* and *T. miscellus* appeared in Washington State in the US.
4. In the latter part of the 20th Century, the flower species *Cardamine schulzii* appeared in Switzerland.
5. The *Senecio eboracensis* flower evolved into a new species in the past 40 to 50 years, being discovered in 1979 in York, England.

Thus, new species do arrive, as predicted by the theory of evolution.

*You can criticize evolution for making wrong predictions.
Note, though, that religion has yet to make any at all.*

God created the Universe to look old

Science tells us that the Universe is 13.5 billion years old. Certain interpretations of the Bible tell us that the Universe is 6000 years old. One proposed solution to this is that God created the Universe 6000 years ago, but that he made everything look as if it were 13.5 billion years old.

Let me answer in the words of [Adriana Heguy on Quora.com](#):

That God created the universe 6000 years ago to look much older is certainly possible. Just as possible as that we were all actually created 10 minutes ago, but we are all under the illusion that we have lived for twenty, or fifty years, and that there is a sacred book that says that the universe is 6,000 years old, and that there are fake artifacts to fool us into thinking that the universe is 13.8 billion years old, and that some dinosaurs evolved into birds.

The attentive reader will have noticed that any hypothesis about faked evidence is unfalsifiable [↗](#). We would never be able to show that the evidence we see was faked. This, in turn, means that the hypothesis is meaningless: If we assume that the evidence was faked, we cannot draw any conclusion from it. We are as wise as before. Furthermore, we can come up with arbitrary other theories of faked evidence (as Heguy did), which contradict the first theory. None of them can be proven wrong. This all just confirms that unfalsifiable theories are nonsense.

Chapter on Morality

Introduction

The question of what is right and what is wrong is one of the oldest conundrums of humanity. This chapter offers a materialistic explication for the nature of morality and ethics. The chapter consists of the following sections:

- **Instincts:** Explains the basic instincts that play a role in moral behavior.
- **Pacts:** Explains how a human society organizes itself.
- **Rules:** Introduces the notions of moral rules and moral frameworks.
- **Laws:** Discusses how the law evolved.
- **Morality and Atheism:** Explains how atheists see morality.
- **Questions:** Treats objections to the claims made in this chapter.

Instincts

Survival

The first aspect of morality is the behavior towards yourself. Why do you not just kill yourself?

Humans can indeed kill themselves. Now assume that there was a gene that would encourage an organism to kill itself. Obviously, this organism would produce fewer offspring than an organism that does not have this tendency. Thus, the self-destructive gene would have lesser chances of being passed on. If we scroll forward by some thousand generations, we will see that this gene will have completely disappeared. This is the principle of natural selection ↗. It follows that any organism that is alive today is of the non-self-killing type. All species that exist today have a hard-wired desire to survive. This is simply a necessary requirement for having reached the presence.

This does not mean that organisms cannot or do not kill themselves. An individual mutation can make the drive to survive weaker in one individual ↗. For humans, many more factors can play a role, including psychological, medical, economic, and social ones. The theory does not predict that no-one will ever kill themselves. It does predict, though, that in general, every existing species has a basic tendency to love life and to fear death. This is indeed what we observe also in humans.

*People who consider suicide don't want to stop their life.
They want to stop the pain.*

By Steven Dillard on Quora.com

Animal morality

Animals show a basic tendency to fear death ↗. However, this is about the only moral component that we can find in animals. In fact, animals often show behavior that is rather "immoral".



Lemmings do not usually commit suicide as in this 1991 video game by Psygnosis.

First, many species can only live if they kill other animals. This entails that the life of any carnivore is a continuous chasing, tearing apart, and guzzling of other animals. Every single animal chased means the fear of death, the pain of being killed – and a life destroyed. All carnivore existence continuously tortures other animals. Nature is inherently brutal. This is understandable: It is not beneficial for the survival of one species to spare another species. On the contrary: a species that plays nice will just be eaten and eradicated. Hence, all species that survived in the animal kingdom until today pay no respect to any other species – except if it is useful for themselves ↗.

But the food chain is not the only source of cruelty. Some spider species eat not just their prey, but devour also their mates. This is because their mates do not serve any reproductive purpose any more, they are too weak to defend themselves, and they provide a valuable source of proteins. Hence, it is an evolutionary advantage to eat the mate. Hence, spiders that did it survived. Hence, spiders of this species today devour their mate – no matter whether humans consider this moral or not.

When lions take over a harem, they slaughter the entire population of baby lions in the group. This is cruel. However, it has a clear evolutionary advantage: It serves to eliminate all genes of the preceding alpha lion, and to make sure all offspring stems from the new lion. Again, no respect is shown, not even to animals of the own species.

Parasites infect the host animal and live in the body of the host. The Acanthocephala worm, for example, infects crustaceans that live in the water. It causes the host animal to swim towards the surface, where it is then usually eaten by a bird such as a duck. The duck then serves as the ultimate host for the worm. The crustacean is sacrificed as an intermediate stage in that process. Again, the worm does not care at all for the life of the crustacean. Another type of parasites are roundworms. These live in the human intestines. They grow to a length of up to 35 cm (pictured right) and may cause lung diseases in the human. Again, the roundworm does not care at all for the well-being of the human. It just "cares" for its own survival.



Roundworms live in the human intestines
[DXline]

The list goes on: Some wasps lay their eggs in their prey without killing it, so that the larvae eat their host slowly alive. Or take Malaria. This is a disease transmitted by mosquitos. Every year, hundreds of thousands of people die from it. Of course, the mosquito fly does not care at all whether humans die. The mosquito just cares whether humans deliver the blood that the mosquitos feed on. The malaria virus, in turn, does not care either whether the human dies. The virus just has to make sure that it is transmitted before the host dies. Here, "has to make sure" is to be understood in the sense of pseudo-intention ↗. All virus mutations that kill the host instantly before the transmission occurred have died together with their host. Hence, all viruses that exist today do not instantly kill.

Animals with higher brain functions are no exceptions. Cats, for example, often do not kill their prey, but just incapacitate it. They will, e.g., injure a mouse so that it cannot run. Then they will let it go a bit – just to catch it again. They will throw it in the air, punch it, or play with it like a ball – all while the mouse is still alive. They will even start chewing it, but only a bit (pictured). Cats do all of this apparently for fun. Curiosity and dexterity served them well throughout their existence. Pity for mice did not.

All of this shows us that there is no "ethic behavior" in nature. Nature is just about eating and being eaten.

In nature, every mouth is a slaughter-house and every stomach is a tomb.

By Robert G. Ingersoll

Empathy

We have seen that there is no concept of morality in nature ↗. However, certain species (and among them humans) share the concept of empathy: A basic tendency to dislike suffering by others.

Basic empathy has been observed in canines, felines, dolphins, primates, rats, mice, and ants. Sand-dwelling Mediterranean ants, for example, engage in rescuing behavior when one of their nest mates is trapped in nylon thread. The ants not ensnared in the nylon thread proceeded to attempt to rescue their nest mates by sand

digging, limb pulling, transporting sand away from the trapped ant, and when efforts remained unfruitful, began to attack the nylon thread itself; biting and pulling apart the threads. [\[Wikipedia/Empathy\]](#)

To see why this makes sense, consider a species of animals that lives in couples or social structures. In such social structures, the presence of the individual is useful for the community. Otherwise the community would not have formed in the first place, and the individuals would just go their own way. The community provides protection from predators, an opportunity to find mates, a system to raise the young, and the possibility to exploit opportunities that cannot be exploited alone. Now assume that there is a mutation where the individuals show a basic form of care for each other: whenever one of them is attacked, the others help. In such a system, the individuals have a slightly higher chance of survival. Therefore, the community will have more individuals. Hence, it will provide its services better. Thus, its members will produce more offspring, and ultimately outrun egoistic variants of the species.

This explains why certain animals with social structures have a basic sense of empathy. This does not mean that every individual would be empathetic. In fact, many are not. But most of us abhor violence, and suffer when another human suffers. This trait exists at least on average. It is the basic trait of empathy.

This empathy can be stronger if one is acquainted with the other being. People feel stronger empathy towards their family members ↗ and towards their friends.

If you can't tell right from wrong, you lack empathy, not religion.

By anonymous



People push a train to free a commuter whose leg slipped into the space between the train and the platform

[\[Good News Network: Commuters use people power, 2014-08-14\]](#)

Altruism

Empathy is a basic ability to suffer with people who suffer ↗. Empathy induces the desire to help suffering people, and such help is called altruism.

Like empathy, altruism appears in humans and some animal species ([Wikipedia/Altruism](#)). For example, green monkeys warn each other of predators using different calls. Zoologists have identified one call that means "Careful! An eagle!" (causing those who hear it to look up in fear) and another one that means "Careful! A lion!" (causing those who hear it to climb on a tree) (Y. N. Harari: *Sapiens*, p. 24). Such behavior is beneficial for the survival of the group, and hence the trait has had an evolutionary advantage. Beyond that, it can be shown that, for humans, altruism actually makes happy. People feel happy if they help other people. That makes perfect sense from an evolutionary point of view: If helping makes you happy, you help more. Hence, societies with such happy helpers were more successful. Interestingly, research has also found that, vice versa, happier people are also kinder. Psychologists generally refer to this virtuous cycle of helping others, doing good and subsequently feeling good as "the helper's high" [\[Wikipedia/Altruism\]](#).

Thus, altruism may ultimately not be so altruist at all. We would be altruist mainly for egoistic reasons – namely to feel good. While this poses a problem from a philosophical and religious point of view, it does not from a scientific point of view. Scientifically speaking, we are just observing a correlation between happiness and altruism. This correlation appears true in the sense of this book ↗, and that is all we care about.

The cuckoo egg principle

We have seen that empathy and altruism may be a consequence of the fact that social communities benefit the survival of the species ↗ ↗. This principle, however, suggests that we should feel more empathy for a person that is useful to us, and less empathy for a person from whom we do not directly benefit. This does not happen in practice.

The reason is that empathy evolved before humans had the brainpower to compute the utility of a fellow human. The main principle that proved useful was "take care of other humans" – even if you are unable to figure out how

useful exactly that other human being is going to be. This principle got written into our genes hundreds of thousands of years ago.

Now the problem is that such ancient behavioral traits are coarse-grained. Consider for example birds. Birds are hard-wired to feed their young. However, birds will feed any young in their nest, not just their own. Birds will even feed young birds of other species, if they happen to be in the nest. This is how cuckoos work: They just put their eggs in the nest of another bird, which will then raise the cuckoos along with its own offspring. The bird does not know or understand that it has to feed only its own young. The trait that developed was not "feed your young", but "feed whatever opens its beak in your nest". Similarly, the trait that humans developed was not "take care of another human if you figure that they will be of use to you", but "take care of another human". This is the cuckoo egg principle: Behavioral traits are rough.



Can you spot the cuckoo egg? The passerine bird can't
[Galawebdesign @ Wikimedia]

Remark: The example and the argument are taken from Richard Dawkins' "The God Illusion".

Love of kinship

We have seen that some animal species (and humans in particular) respond to the suffering of others ↗. Such behavior is independent of the particular use of that other individual, because the trait of empathy predates the cognitive ability to compute the prospective use of the other individual ↗. However, empathy is not independent of kinship: Animals, including humans, show higher empathy towards individuals with whom they are genetically related. Ants, for example, rescue other ants that are trapped ↗. However, they rescue only ants of the same nest (i.e., of the same "family"). Studies show that humans, too, show more empathy if the other person is of the same family. They show this behavior also if they just think that the other person is of the same family (e.g., because the photograph of the other person has been altered to resemble the study participant). This trait dates back at least to the Neanderthals ↗. Archeologists have discovered the bones of Neanderthals who lived for many years with severe physical handicaps – evidence that they were cared for by their relatives [Y.N. Harari: Sapiens, p. 15].

From an evolutionary perspective, it may seem strange that individuals care more about their own family, because if a family member survives and produces offspring, this does not propagate one's own genes. For example, why should a sister help a brother, given that the survival of the brother does not help the procreation of the sister? To see why this behavior makes sense, think about it from the perspective of the gene. Take a gene that induces empathy, and suppose that the brother and the sister received this gene from their parents. If the sister helps the brother survive, then there is one more person who propagates this empathy gene. Now take a brother and a sister who did not receive this empathy gene from their parents. Here, the sister will not help the brother. The brother dies, and there will be one less person to propagate the empathy gene. Now iterate this process, and you will find that the people with the empathy gene dominate those who do not have the gene.

We see here that the principle of evolution is not always restricted to the individual, but can concern an entire family.

Remember the parable of the Good Samaritan from the Bible (Bible / Luke 10:25–37)? How he helped the Jew, even though Jews and Samaritans despised each other? Now you know what? The good Samaritan was not a Christian! – He was a Samaritan ([Wikipedia/Samaritans](#)).

Remark: In some species, individuals will sacrifice themselves in order to save members of kin. Some termites and ants release a sticky secretion by rupturing a specialized gland. This helps the colony, but kills the individual ([Wikipedia/Altruism](#)). The cells of a Dictyostelids do the same when they stick together to form a multicellular organism. The individual cell dies, but the genes persist. When threatened by a ladybug, the pea aphid will explode itself, protecting other aphids and sometimes killing the ladybug ([Wikipedia/Animal suicide](#)).

Reciprocity

We have seen that animals can show compassion to other animals of the same species ↗ and that this compassion is stronger for animals of the same family ↗. This mechanism is driven by the evolutionary benefits that empathy brings to the kin. There is also another mechanism in which animals care for other animals: reciprocity.

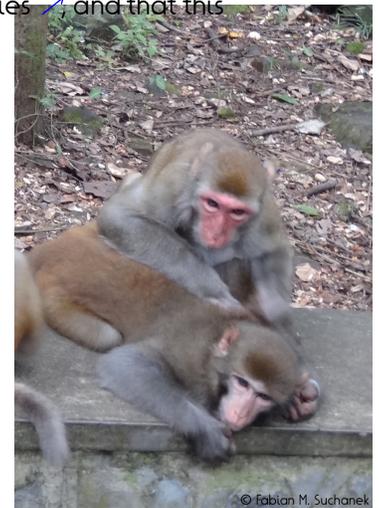
Reciprocity is the principle that one individual does a favor to another individual in the expectation that this favor is returned. The classical example is the monkey who turns its back to another monkey to pick out the parasites (pictured). After some time, the roles will be reversed. A monkey cannot remove the parasites from its own back, but if the monkeys work together, they can remove the parasites from each other's back and both benefit.

This is a very simple mechanism, also known as "tit for tat", and humans use it, too. Suppose, for example, that you are a hunter-gatherer, some tens of thousands of years ago. One day, you are lucky and you kill a deer. You can't possibly eat all of it in a day, and refrigerators are still a few centuries away. You decide to share the deer with the group, which ensures you will profit from others' spoils when your haul is less impressive. [Rolf Dobelli: "The Art of Thinking Clearly", chapter 6, translated by Nicky Griffin] Some societies have developed this concept into the notion of reputation. A good reputation basically means that a person reciprocates what others invest in them – no matter whether the compensation is immediate or not.

The concept can also be generalized. In a society, people benefit from sharing knowledge, solidarity, support, or property. The society benefits if everybody generally contributes – no matter whether the donor receives their compensation from the recipient or from some other person. Therefore, the society holds in high esteem those who contribute selflessly.

If I sometimes need help from others, then sometimes others will need help from me. Therefore, we help others. We are kind to each other. We share. What goes around comes around – it does not take a rocket scientist to figure this out.

By WhyWontGodHealAmputees.com (adapted)



One monkey scratching the back of another monkey
[Picture taken in Zhangjiajie/China]

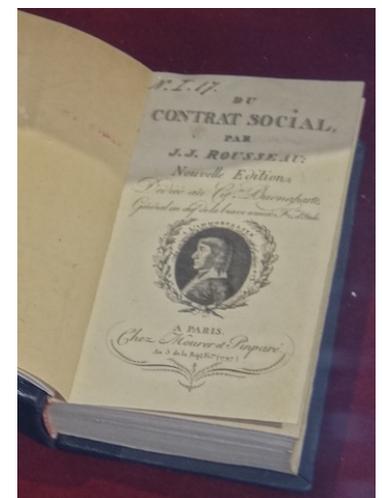
Pacts

Pacts

Imagine a society where there are no moral norms. In such a society, the law of the strongest would prevail: Whoever is strongest, takes what he needs. There would be stealing, raping, and killing. These would be moderated by the built-in concepts of empathy ↗ and love for kinship ↗. But there would be no protection from those who have these traits less strongly developed, or who have learned to overcome them.

Now imagine that you were thrown into such a society. What would be the first thing you do? You would probably run away. But then, you still have to hunt, and grow food, which is very hard to do when you are alone. Also, you could not even sleep at night, for fear of being surprised and slaughtered. So what do you do?

Here is a suggestion: You find another person who is in a similar situation as you. Then you make a deal: You don't hurt that person, and that person does not hurt you. Now, each of you can sleep half of the night. This is a particular instance of reciprocity ↗. Later, more people may join the deal. Each of them vows not to aggress any of the members. Each of them has to be judged for their trustworthiness, before being admitted to the club. What you get is a society based on a non-aggression pact – the root of a moral system. One variant of this



Jean-Jacques Rousseau characterized the state as a social contract
[Picture taken in the National History Museum of Uruguay]

scheme is that several people stick around one particularly strong member – a “protector” ↗.

This scenario might seem highly artificial. However, this is exactly what happens when you put humans together in a rough environment: They form clubs of non-aggression. This happens in prison populations, as well as in Mafia circles, or in groups of refugees or displaced persons. People always cling together for mutual protection. This works only if they don't aggress each other, and hence they quickly make a kind of pact between them. Such behavior emerges in any group of people out of a desire for safety.

It does not take a genius, or a god, to figure out that no normal human being wants to be murdered.

By [WhyWontGodHealAmputees.com](#)

Punishment

We have seen that societies or sub-societies make pacts of non-aggression ↗. Now what happens if one of the members violates the pact?

Suppose that there is a group of 10 people, and one of them kills another one, thus breaking the pact. How would the others react? Suppose they did nothing. Then the pact is not worth anything. It is as if you had no pact at all. If you are in this group and you see that members kill each other without any consequences, you'd better join another club. You would join a group where the members punish any deviation from the pact. This punishment can range from expulsion to beatings or even death. In such a system, an individual does not only benefit from the mutual non-aggression, but they also know that if they transgress, they will pay. Hence, they will not transgress. The threat of punishment is one of the most effective ways to prevent aggression. Thus, every member of the group has an interest in keeping up (and implementing) this threat of punishment.

At this stage, we have a system that prescribes non-aggression and that punishes transgression. Again, such systems emerge naturally wherever people form groups. Even the supposedly lawless Mafia groups punish anybody in their ranks who violates their pact.

Remark: As Richard Dawkins observed, society is in a Prisoner's dilemma with respect to moral behavior: If everyone is evil, and only a minority of people behaves nice, these people will suffer. Hence, they will stop behaving nicely. Vice versa, if everyone is kind, and only a few people are evil, then the nice ones will punish the evil ones. Thus, there are only two stable states for a society: either everyone is nice, or everyone is evil. Evil societies have not lived for long (for reasons outlined above). Hence, the nice societies prevailed (Richard Dawkins: *The God Delusion* / p.301).

Conscience

We have seen that a system of pacts and punishments emerges wherever humans have to live together ↗. One particular instance of this phenomenon is a family. Children usually follow what their parents do or tell them. This has proven an evolutionary advantage, since the parents are examples of a successful strategy of survival. Furthermore, the parents have accumulated more experience, i.e., they have validated more theories ↗. Finally, children are physically weaker than the parents and dependent on them, and thus the parents can enforce or prevent certain behavior. Now one of the first things that parents tell their children is to adhere to the pact of non-aggression that forms the basis of their clan. If the children do not follow the pact, the family risks being thrown out of the club.

This leads to a mechanism where children are expected to follow norms. If they don't, they are punished, and are taught to feel bad. Thus, every human today has the basic ability to follow norms. This mechanism is still in effect: We all have gone through the process of education in our childhood. This process has formed our basic ability to adhere to norms – a phenomenon that we call “conscience”.

Tyrannies

We have seen that people have an interest in establishing moral norms in order to protect themselves ↗. In this scenario, people voluntarily establish norms and watch that everybody observes them.

However, there are also cases where a strongman establishes control over the others. Examples are alpha-males in teams, companies, or organizations; the kings of old times; and the dictators and autocratic regimes of modern times. Such despots establishes rules, which guarantee peace as long as no one questions their dominance. Steven Pinker gives the example of early governments: They pacified the people they ruled, reducing internecine violence, but imposing a reign of terror that included slavery ↗ ↗, harems ↗, human sacrifice ↗, summary executions ↗, and the torture and mutilation of dissidents and deviants ↗. Such despotism has persisted throughout history not just because being a despot is nice work if you can get it, but because from the people's standpoint, the alternative was often worse. [Steven Pinker: Enlightenment Now]. That is: the despot may be repulsive, and it is dangerous to mess with him, but at least he guarantees peace. He establishes rules, and makes people follow the rules – and for the average man, this is better than living in chaos. History seems to prove these people right. The historian Matthew White has estimated the death tolls of the hundred bloodiest episodes in 2500 years of human history. He concludes: "Chaos is deadlier than tyranny. More [deaths] result from the the breakdown of authority than from the [despotic] exercise of authority."

Thus, even despotic systems have their *raison d'être*. In reality, we often see mixtures of the voluntary and the involuntary model, where a ruler promises to uphold peace in the community, but also uses his power to cement his own position.

Why people follow norms

We have seen people form pacts of non-aggression ↗, and that these are enforced by punishments ↗ and education ↗. So when we ask why people adhere to norms, we can now give several reasons:

Empathy ↗

Most of us have a built-in tendency to suffer when we see someone else suffering. Hence, we usually avoid hurting others.

Safety ↗

We have an interest to protect our life, limb, and property. Now, we understand that others will protect our assets only if we protect theirs. This gives rise to a system of moral pacts, in which we agree to protect each other.

Reciprocity ↗

The idea of pacts goes beyond the protection of basic assets. We know that our lives are much easier if we can rely on the society to help us when we are in need. Now, if we do not behave well, then the society will be much less inclined to help us. Thus, it is in our interest to be a respected member of that society.

Conscience ↗

We have been trained from our childhood on to feel bad when we break norms. This system continues to work into adulthood – it is our conscience.

Fear of punishment ↗

If a person believes that they are going to be punished for a deed, then they are less likely to do that deed.

These are some of the reasons why humans follow rules. If these factors are eliminated, then humans will follow the rules much less. Empathy, for example, is less strong if the suffering is less visible. It is probably easier to fire a missile by pressing a button in a control room rather than to shoot a person in the face. Conscience, likewise, can be less developed if people have not been trained to follow rules, or if they have been trained on a much more restricted set of rules. Fear of punishment, too, can be eliminated if there is no punishment. People are more likely to break norms if there is no punishment. For example, 35% of women said that they would be willing to cheat their husbands if they could be absolutely sure that no-one would report it (Welt am Sonntag / page 71, 2014-11-02). Thus, if we eliminated all of these controls, then people would become less moral.

Rules

Moral rules

We have seen that humans follow moral norms for a variety of reasons ↗. We will now look at the philosophical and logical nature of norms. Technically, we distinguish three types of behaviors:

Morally wrong behaviors

These are immoral behaviors that we want to avoid and punish. For example, most people agree that theft is morally wrong.

Morally obligatory behaviors

These are the things that we are morally obliged to do. One example is calling the police when we see a crime.

Morally permissible behaviors

These are the things that we may do. For example, most people will agree that it is morally OK to eat chocolate.

These terms are labels for behavior. A moral statement is statement that says that a certain person or authority gives a certain moral label to a certain action. For example, a moral statement is:

I call George W. Bush's invasion of Iraq morally wrong.

A moral statement can take other forms, such as "I find that the invasion in Iraq is morally wrong" or "For me, the invasion in Iraq is morally wrong".

There is no universal agreement on which behaviors are morally right or wrong. It cannot be proven from the laws of nature which behaviors are wrong and which are not ↗. Therefore, the moral quality of a behavior is not an intrinsic property of the behavior itself. We cannot say that a certain behavior is objectively morally wrong. Such a statement would be unfalsifiable ↗. We can only say that certain people find certain actions morally wrong. These statements are what we call *moral statements*. Such statements are subjective judgements. Thus, "I find the invasion in Iraq morally wrong" is of the same type as "I find Alice beautiful". They express a valuation of an action by a person. Such statements are falsifiable (it suffices to ask the person about their opinion). Moral statements typically come in the form of moral frameworks ↗.

Moral Frameworks

Moral statements are statements that attach a moral label to a behavior ↗. Typically, moral statements come in the form of a whole package of moral statements. These packages are called *moral frameworks*. Examples for moral frameworks are:

- The national criminal law. The law says that certain behaviors are morally wrong.
- Religious scripture. Religious books commonly tell people what is good behavior and what is bad behavior.
- Commandments, such as the Ten Commandments or other lists of do's and don'ts.
- Politeness codexes. These codexes can regulate, for example, that it is obligatory to cover your mouth while sneezing.
- Philosophical frameworks, such as utilitarianism or my [Thoughts on Ethics](#).
- ...or any combination or subset thereof.

A moral framework labels certain behaviors as morally bad, others as morally obligatory, and again others as morally permissible ↗. This means that the moral framework itself appears as the moral authority, i.e., as the "person" who attaches a moral label to a certain behavior. For example, the moral framework "National Criminal Law of Germany" says something like this:

Theft is a crime.

Technically, this statement is an abbreviation for a rule ↗ that has a moral statement in its conclusion:

If X steals something at time point T, then the national criminal law of this country calls X's action at time point T morally wrong.

From now on, we will see moral frameworks as theories ↗ of such rules ↗.

The Nature of Moral Statements

Moral frameworks label certain behaviors as morally bad, others as morally obligatory, and again others as morally permissible ↗. From a metaphysical point of view (as well as from a physical point of view), moral frameworks are just lists of statements written on a piece of paper, on a stone, or on a computer – or even just transmitted orally. They do not have any intrinsic moral force. They are just statements. They obtain their meaning if people decide to adhere to these rules, or if they decide to punish people who don't. Thus, the meaning of "I find theft immoral" in the sense of this book ↗ is simply: "If you steal, I will be angry with you, and I will try to punish you". This does not make theft objectively morally bad. It just means that you will have to fear consequences if you steal.

If a moral framework is enforced by a government, it becomes a *legal framework*. The rules of such frameworks are called *laws*. Something is *legal*, if the legal framework deems it morally acceptable. The concept of *legality* is often opposed to the concept of *morality*. While the former refers to the laws of a country, the latter refers to the "natural" or "true" moral quality of actions. We have already seen that there exists no such "natural" or "true" moral quality of actions ↗. All moral frameworks are just lists of human preferences. Therefore, when people criticize a law as "immoral", they usually mean that it contradicts their own personal moral framework.

Moral frameworks come into existence if someone defines them. This is done mostly by writing them down. The creators of the criminal law, for example, gathered and produced a document that contains rules with moral statements. Such a moral framework comes into effect if someone establishes punishments for those who do not observe the rules ↗. For example, the government of the country decides that from now on, it wishes to enforce its criminal law, and to use its jurisdiction and executive power to prosecute people who behave morally wrong according to this law. This does not make the law "true" or "good" in any sense. It just means that the law is enforced.

Since moral frameworks define what is good and what is bad, a given moral framework cannot be, by itself, "good". It cannot be "better" than another moral framework. For example, we cannot say that the British Law is "better" than the Ten Commandments. The quality of two moral frameworks can be compared only with reference to a third moral framework. For example, if we take the Human Rights ↗ as a reference framework, then we can discuss whether British Law implements the Human Rights "better" than the Ten Commandments. This, however, still does not tell us whether the Human Rights would be "good". An alternative for comparing the two systems is to use a measure such as the happiness of the population. Then again, we would still need the third moral framework that tells us that this measure is what we call "good". (As it stands, a system with slavery may well optimize the average happiness of the population – just not of the slaves.)

Moral Societies

Moral frameworks are lists of do's and don'ts ↗. Any group of people can have moral frameworks. Here are examples for such groups:

Associations

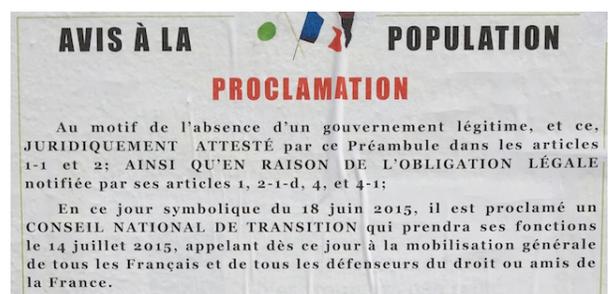
Associations (such as a golfers' club or a charity) are typically governed by a moral framework in the form of a regulation. This regulation says who can be a member, and what are the rights and duties of the members.

Organized Criminals

Criminal gangs also establish moral frameworks to govern their own workings. The Italian Mafia, for example, uses a code of 10 Commandments that all its members have to follow. The rules prohibit going to pubs, being seen with cops, or looking at another member's wife. They also require the members to uphold "moral values" ([The Telegraph: Revealed – Ten Commandments of the Mafia, 2007-11-07](#)).

Rebel Groups

Rebel groups aim to overthrow a government. In order to ensure that all group members pull in the same direction, such groups typically establish rules. These rules usually require members to swear an oath to the group leader, to protect other members, and to fight for the cause of the rebel group. The Islamic State (IS), for example, had extensive rules to govern the behavior of its members ([Wikipedia/Islamic State / Ideology](#)).



In principle, everybody can declare moral rules or statehood, as long as there are people who follow.

[Text: Conseil National de Transition]

Religious denominations

Religions usually come with a framework of conduct, which typically regulates things such as murder, theft, sexual deviations, and rites. The followers of the religion are expected to follow these rules, and are punished or promised punishment if they don't.

Countries

A moral framework enforced by a government is called a "law" or "legal system" ↗. The subjects are the citizens of the country. Different legal systems have evolved over time ↗ ↗.

Subjects of Moral Frameworks

Moral frameworks are lists of do's and don'ts ↗, and any group of people can have moral frameworks ↗. The people governed by the enforcement of the framework are called the "subjects of the framework (or law)". This leaves the question of how the framework acquires its power over its subjects.

In our modern societies, we usually require that moral codes be agreed upon by the people. This tradition stems from the ancient Greek ideals of democracy, and was reportedly also used in the establishment of the Twelve Tables law in the early Roman Empire. The US constitution, likewise, was voted into effect, as are most modern constitutions. In modern liberal democracies, every law is voted into effect by parliament, which was elected by the citizens. Thus, at least in theory, the citizens themselves decide what laws they give themselves. When a law has come into effect, any citizen becomes subject to the law, no matter whether they supported this law or not. A similar principle applies to associations, such as golf clubs. These typically vote their rules into effect.

Voting is only one possible way in which a moral framework can come into effect. Another way is force. In absolute monarchies, for example, the ruler can just decide the laws and enforce them ↗. Anybody who lives in that place then becomes subject to the law. This is how the medieval monarchies in Europe used to function. Still today, there are 6 countries that are absolute monarchies: Brunei, Oman, Saudi Arabia, Swaziland, the Vatican City, and Qatar ([Wikipedia/Absolute Monarchy](#)). Dictatorships work very similarly: The dictator can just decide laws and force them upon his people. This has led to very bizarre effects ([Cracked: 7 Modern Dictators Way Crazier Than You Thought Possible](#)).

In other cases, a small community establishes a moral framework, and everybody who joins the community then becomes subject to that framework. For example, a country that wishes to join the European Union is expected to follow the laws that the other members have already put in place. Similarly, utopian societies (such as the New Harmony movement) usually start off as small communities, and everyone who joins is expected to follow the rules. The same applies to organized crime gangs (such as the Mafia) or to associations (such as golf clubs): people who join have to follow the rules that are already in place.

One can also become subject to a moral framework by being born into a society of subjects. Children of slaves, for example, were traditionally regarded as slaves as well ↗. Children who are born in a country automatically become subject to its law. Children who are born into a religious community usually become members of that religious community, and thus subjects to its moral framework ↗.

Finally, one can also become a subject of a moral framework by force. If, for example, a rebel group takes over a country, it will start imposing its own moral framework. Whoever happens to be in the range of power of this group becomes subject to their law. This is what the Islamic State (IS) did in the year 2014 in Iraq: It just conquered large areas of land, and imposed its rules ↗.

Harm-based Frameworks

There are different ways to define moral frameworks ↗. One way is to base the framework on the notion of *harm*. Such a framework allows everything that does not cause harm to someone else. This idea is known as the *harm principle*, first developed by John Stuart Mill ([Wikipedia/Harm Principle](#)). Harm can be injury, damage to property, insult, or anything else that is considered harmful to a person. The exact details of what constitutes harm are left to the moral framework. The only unifying characteristics of these frameworks is that they will



permit everything that does not impact others. For example, harm-based frameworks cannot condemn blasphemy or apostasy – simply because these things do not influence anybody else.

It's very simple: Avoid harm to others.
[Picture taken in the library of Dakar University/Senegal]

An important component of harm-based frameworks is *consensus*: An action is not considered harmful if it happens with the agreement of the concerned people. For example, if you agree that I pierce you an earring hole, then the injury that I inflict upon you is not considered harmful. This principle is known as *Volenti non fit injuria* ([Wikipedia/Volenti non fit injuria](#)). This principle includes the permission to do harm to yourself. For example, you can decide to smoke if you wish. This harms you, but it is your choice. This liberty is known as the principle of self-ownership ([Wikipedia/Self-ownership](#)).

Now why would we go for a harm-based framework, and not for any other possible framework? The reason is that if someone does something that does not harm anybody, then nobody really cares. Thus, a harm-based system is the one that requires least effort from everybody, while still protecting what people care about.

Remark: Harm-based moral frameworks typically establish exceptions to the principle of *Volenti non fit injuria*: Children and the mentally ill are usually considered unable to consent to damage. Furthermore, smoking may cause harm to others: by having them inhale the smoke, or by weighing on the social security fund.

Egalitarian frameworks

There are different ways to define moral frameworks ↗. One popular guiding principle is equality: The framework should give equal rights to everybody. This is the *Law of equal liberty*, and it was first formulated by Herbert Spencer ([Wikipedia/Law of equal liberty](#)).

The law of equal liberty was not always universally accepted. For example, several societies had slaves, and slaves do not have the same rights as free people ↗. In the same vein, all major religions traditionally gave less rights to women ↗.

Today, however, most people agree on the principle of equal rights. The reason is simple: If we give different rights to different people, then we cannot guarantee that we (or our children, friends, family, etc.) are in the group of those with the best rights. So we better give the same rights to everybody. John Rawls makes this point as follows: A just society is a society in which you would agree to be incarnated as a random citizen – without knowing whether you would be a woman, a man, a child, a white or a black person. Surely, you would want that society to give equal rights to everyone.

Empathy may also play a role ↗. We suffer if other people suffer. Therefore, we believe that we must protect other people in the same way that we protect ourselves. The result is a system that gives the same rights to everybody. Moral frameworks that implement the same rights for everybody are called *egalitarian*.

Egalitarian moral frameworks do not postulate that all people would be equal. Different people, and different groups of people, may have different characteristics, interests, possessions, or abilities : Women can give birth, while men can't; women may care more in general about children than men – or they may not; Africans may or may not have more sense of rhythm than Caucasians; Muslims may or may not prefer more traditional gender roles; the rich own more cars and are generally healthier than the poor. All of this may or may not be true. The only thing that matters for an egalitarian framework is that all people have the same rights before the law.

*Scatman, fat man, black and white and brown man,
Tell me 'bout the color of your soul.*

By Scatman in "Scatman's World"

Liberal Moral Frameworks

A liberal moral framework is a moral framework that is both harm-based ↗ and egalitarian ↗. This means: The system gives the same rights and duties to everyone, independent of profession, salary, social status, religion, gender, or ethnic group. It prohibits what causes harm to another being, and allows everything else.

A liberal moral framework is motivated by two observations: First, we want to give equal rights to everybody [↗](#). This is largely because if we give different rights to different people, we cannot guarantee that we (or our children, friends, family, etc.) are in the group of those with the best rights. So we better give the same rights to everybody. This idea is widely accepted today, but it has not always been. The second observation is that we all want to have the maximal degree of liberty for ourselves. This holds even for those who do not want liberty: They still want the liberty to restrict their liberty. If we put these two constraints together, then we basically have to give everyone the same maximal liberty that does not infringe someone else's. This is the idea of a "liberal moral framework". Such a framework gives the maximal freedom to everybody, and restricts it only where the freedom of someone else begins. Thus, it is a minimalist stable equilibrium, in the sense that whenever we change something, someone will lose out and thus complain.

Humanism, the particular brand of atheism promoted in this book, subscribes to such a liberal moral framework [↗](#).

An Example Moral Framework

A liberal moral framework gives the same rights to everyone, and prohibits everything that causes harm [↗](#). It remains to define what exactly "harm" is. Here is a list of things that are typically considered harmful:

Physical damages

- Injury: Some person or animal suffers bodily harm.
- Killing: Some person or animal gets killed.
- Sexual assault: Someone suffers undesired sexual contact.
- Property violation: Somebody's property is affected.
- Trespass: Something or someone trespasses on somebody else's territory.
- Obstruction: An animal or a person is forced to do something or prevented from doing something.
- Disturbance: Repeated or extreme stress on someone's senses.

Non-physical damages

- Lying: Someone says something that is not true.
- Threat: Someone threatens somebody else with some damage.
- Insult: Someone says something about someone else that is (1) not provably true and (2) pejorative.
- Sabotage: Someone disturbs the working of a machine or computer.
- Intellectual Theft: Intellectual property is used in a way that is not permitted by the author.
- Privacy violation: Private information is extracted by (1) causing damage or (2) using technical means.
- Exposure: Embarrassing information is shared.
- Disclosure: Personally identifying information is made public.

Damages caused by non-action

- Missing credit: Intellectual property is used without giving due credit.
- Denial of assistance: Someone suffers a damage and someone else just stands by.
- Dereliction: A child is not given a proper upbringing.

If you want to see a moral framework that defines these moral rules down to the meaning of individual concepts, see my [Thoughts on Ethics](#).

The above moral framework will most likely correspond roughly to the personal moral framework that people in the Western world use. Other moral and legal frameworks have been developed over time, as we shall see next.

Doing the right thing means having no regrets.

By Edward Snowden

Early Legal Frameworks

Moral frameworks are lists of do's and don'ts ↗. People develop such frameworks to create the basis for a working society ↗. They enforce such frameworks by education and punishments ↗. Over time, human societies developed different moral frameworks.

Maybe one of the first moral rules was "Do not do to others what you do not want for yourself". This rule is called the "Golden rule" and has been around since antiquity ([Wikipedia/Golden rule](#)). It appeared in all major philosophical schools of Ancient China around 2000 BCE: Mohism, Taoism, and Confucianism. It also appears in the Ancient Egyptian concept of Maat, which was developed around the same time. Ancient Greece developed the same principle around 600 BCE. It can also be found in Ancient Rome and in India. It also appears in all of today's major religions.

But humanity also developed more sophisticated moral frameworks. The first legal framework of recorded history is the Code of Urukagina, from around 2300 BCE. It was decreed by King Urukagina, who was the ruler of a city in what is Iraq today. The code exempted widows and orphans from taxes, compelled the city to pay funeral expenses, and decreed that if a poor man does not wish to sell, the powerful man cannot force him to do so. It also took measures against usury, burdensome controls, hunger, theft, murder, and kidnapping. It also regulated the salary, rights, and duties of priests. [[Wikipedia/Urukagina](#)]

The oldest legal framework that survived until today is the Code of Ur-Nammu. It was developed in Mesopotamia (today's Iraq) around 2000 BCE. The code contains very detailed instructions in the form of IF...THEN... statements, which tell us which punishment shall be given for which crime. The system divided people into free men and slaves, and regulates the rights and duties of each of them. Interestingly, the code institutes fines of monetary compensation for bodily damage, as opposed to the later "eye for an eye" principle of Babylonian (and Jewish) law ↗. Murder, robbery, adultery and rape were capital offenses. The entire code has been deciphered and can be found on Wikipedia ([Wikipedia/Code of Ur-Nammu](#)).

Several other codes have been developed in this region. The Laws of Eshnunna date to 1930 BCE. They regulate theft, sexual offenses, injuries, property seizure, and damages by oxen. The laws mostly prescribe monetary compensation and seem to not involve the death penalty ([Wikipedia/Laws of Eshunna](#)). The Laws of Lipit-Ishtar date to around 1870 BCE. They regulate heritage, the rights of slaves, rental of goods, and neighborhood quarrels ([Wikipedia/Lipit-Ishtar](#)). The Code of Hammurabi dates to around 1772 BCE (pictured right). It consists of 282 laws, which regulate contracts, liability for quality of work, military service, and household and family relationships such as inheritance, divorce, paternity and sexual behavior. It established the presumption of innocence, and it also suggests that both the accused and accuser have the opportunity to provide evidence. ([Wikipedia/Code of Hammurabi](#)). It also established the "eye for an eye" principle, which limits the revenge to the damage done by the deed ↗. All of these legal systems are grouped together as the Babylonian Law ([Wikipedia/Babylonian law](#)). The Babylonian Law influenced the Assyrian law (from 1075 BCE). This law took up many concepts from previous systems, but had rather brutal punishments. The Law of Moses dates from 900 BCE, and later became the Jewish Torah and the Christian Old Testament. It contains the Ten Commandments, and laws on purity, feasts, sacrifices, and priesthood ([Wikipedia/Law of Moses](#)). Most codes developed around this time in this region invoke divine authority, and command the reader to abide by them. They are usually imposed or enacted in the name of a king.



The Code Of Hammurabi, a law system from around 1772 BCE
[[Wikipedia / Code of Hammurabi](#)]

*What is hateful to yourself, do not do to your fellow man.
That is the whole Law; the rest is just commentary.*

By Hillel the Elder

Other Early Legal Frameworks

Legal codes also emerged outside the Near East. The Hittite lived in Anatolia (modern-day Turkey), and established their laws around 1600 BCE. The Hittite laws were in power for 500 years without modification ([Wikipedia/Hittite laws](#)). Among other things, they regulated sacral matters, contracts and prices, and marital relationships. The Code of the Nesilim was used simultaneously in the same region. It contains 200 articles ([Wikipedia/Code of Nesilim](#)). Draco was the first known leader in ancient Greece who developed a legal code (around 700 BCE). His laws were so brutal that we still use the word "draconian" to refer to brutal punishments. The death penalty was the punishment even for minor offences, such as stealing a cabbage. But the law also established elections to a council. This would lay the ground for the later development of the Greek democracies ([Wikipedia/Draco](#)). The Romans developed their legal code in 451 BCE, the Twelve Tables ([Wikipedia/Twelve Tables](#)). Reportedly, the Romans sent a delegation to Greece to study their legal systems. Then they came up with their own code, and gave it to every citizen for feedback. After public discussion, the law was then established. It was a very detailed code, which, in its later variants, became the basis of many modern legal systems ↗.

In China, legal codes were developed around 500 BCE. Some of them survived on cauldrons and bamboo. They regulated the administration of the state, as well as punishments for offenses ([Wikipedia/Traditional Chinese Law](#)). The laws became very sophisticated, culminating in the Tang Code of 624 CE. It contained 500 sections of law compiled into 12 volumes. It established a police, courts, magistrates, judges, and a hierarchy of courts. In its later variants, it was used in China until 1911, when the last imperial dynasty fell.

In India, the Code of Manu was developed around 200 BCE in India. It is ascribed to Manu, the supposed first man of humanity. The original version consisted of 1000 chapters. It contains a religious explanation for the origin of the world, religious rites, laws, social norms, and a description of the caste system ↗.

As we see, humanity came up with comprehensive legal frameworks in different regions of the world. Some law systems influenced each other. Others developed independently. For example, the ancient laws that were established in Europe and the Middle East were independent of the religious laws of the Far East.

Later Legal Frameworks

Legal systems are moral frameworks that are enforced by governments ↗.
Humanity developed different legal systems in different parts of the world ↗.
Some of the most dominant ones gave rise to today's legal systems. The most prominent ones are:

Roman law

Roman law regulated all aspects of the Roman empire, from public law to private law and court procedures. It was in effect from around 400 BCE to 1400 CE, in some countries even until the 19th or 20th century.

Civil Law

Civil Law is a law system based on Roman law. In Civil Law, the jurisdiction is based on a collection of written laws. Civil Law is the basis of the French Napoleonic Code and the German law system, and influenced the legal systems of roughly half of the world's countries.

Common Law

Common Law is based on precedents. It gives more importance to preceding similar law cases than to written law. Through British influence, Common Law became the basis for the legal systems of nearly all countries that did not follow Civil Law. Together, both law systems cover nearly all of the world's countries – apart from countries that implement Islamic law.

Islamic Law

Islamic Law (also known as Sharia) is a system of moral codes that are based on the Quran and the teachings of Mohammed, the prophet of Islam. It emerged around 570 CE. It regulates crime, politics, and economics, as well as personal matters such as sexual intercourse, hygiene, diet, prayer, everyday etiquette, and fasting. In different variants, and to different extents, the law is today used in several Muslim countries, including Saudi Arabia and Iran ↗.



Legal systems of the world. Blue: Civil Law. Red: Common Law. Yellow: Islamic Law.
[\[Legal systems of the world\]](#)

Human Rights

The Human Rights are a legal framework that aims to be a global and universal moral yardstick ↗. Its roots lie in several older frameworks: the English Magna Carta (1215 CE), the English Bill of Rights (1689 CE), the French Declaration of the Rights of Man and of the Citizen (1789 CE), and the Bill of Rights in the United States Constitution (1791 CE). After the Second World War (1945), the international community began to seriously consider drafting a global legal framework. In 1948, the "Universal Declaration of Human Rights" was published by the United Nations.

The Human Rights include the right to life, freedom of religion, freedom of speech, and freedom of assembly, as well as electoral rights and the rights to due process and fair trial. They also contain economic, social, and cultural rights, such as labour rights and the right to health, the right to education, and the right to an adequate standard of living. The Human Rights abolish slavery, guarantee equality before the law, prohibit torture, and establish the presumption of innocence.

The Human Rights Declaration became the basis of the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights. These were signed into local law by the large majority of countries in the world, thus making them binding nearly all over the world – at least nominally. Several countries have made reservations to the convention. This is the case most notably for some Muslim countries and the United States. Still, the Human Rights are the de facto yardstick for legal systems.

The Human Rights are also part of Humanism, the particular atheist life stance promoted in this book ↗. Humanism holds that countries should uphold the Human Rights.



Eleanor Roosevelt with the Universal Declaration of Human Rights (1948)
[\[wikimedia\]](#)

Diversity in Laws

Humanity has developed different legal codes, ancient ↗ and modern ↗ ↗. The theory of moral statements proposed by this book suggests that moral statements are completely subjective. Any behavior can be labeled as "bad", no matter whether there is any harm done or not ↗. And indeed, different times, cultures, societies, and sub-societies have developed different moral rules. Some examples are:

Slavery

Today, most cultures shun slavery. However, slavery was completely normal in large parts of the world until well into the 18th century. The ancient Romans and Greeks had slaves; the popes had slaves; and American farm owners had slaves. In the 1960s, Saudi Arabia's slave population was estimated at 300,000. In some countries, slavery was abolished only in the 20th century. In Mauritania, for example, it was not a crime to own slaves until 2007 ([Wikipedia/Slavery](#)).

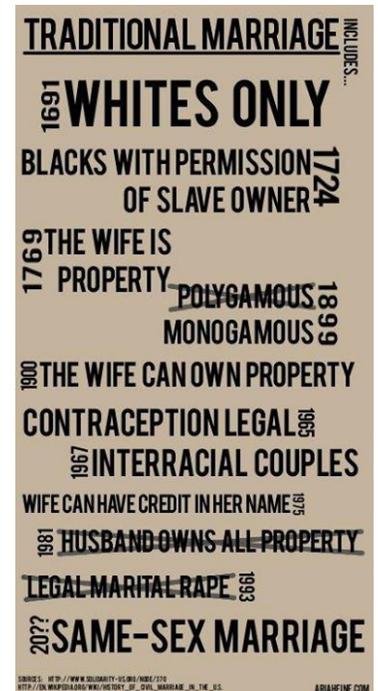
Homosexuality

Gay love has variously been labeled as morally bad or as morally acceptable. It was totally acceptable and to some degree even institutionalized in the ancient Greek states. It was largely shunned in the Western world with the rise of Christianity and Islam. Recently, it became acceptable again in some Western countries, to a degree that gay marriage is permitted. In other countries, homosexuality carries the death penalty.

Capital punishment

The death penalty is another example of a controversial behavior. Capital punishment is illegal in most countries, but legal in others. In the US, some states implement it, and others shun it.

Abortion



Moral diversity, illustrated by the concept of marriage in the US over time

Abortion was allowed in early Christianity and Islam, but is now prohibited in these religions ([Thoughts on Ethics / Abortion, Wikipedia / Abortion / History ↗](#)). Liberal countries typically allow abortion under some conditions. Other countries consider it murder.

Theft

Theft is a crime in most countries. However, we can well imagine a society without the concept of property and hence without the concept of theft. Some sub-societies implemented this philosophy, for example the Hutterites ([Wikipedia/Hutterite](#)) or the New Harmony movement ([Wikipedia/New Harmony](#)).

Prostitution

The practice is illegal in some countries, but legal in others. In some countries, prostitutes have to pay taxes for their job.

Other practices

Sex before marriage, drinking alcohol, smoking, gambling, and raping prisoners of war are all behaviors that are considered normal in some parts of the world and inherently sinful in others.

This shows that moral rules are indeed subjective judgements. For almost every rule that one society considers normal, there is another society that sees it slightly differently.

Maybe there are some moral principles that all societies share. For example, most societies would probably consider it immoral to kill another person who has not done anything wrong. Then again, what is "wrong" is entirely subjective. Having sex with a person of the same gender, changing your religion, or taking drugs may all be legal reasons to kill you in different parts of the world.

Artifacts of the Law

Laws are moral frameworks that are enforced by governments ↗. Different law systems have been developed, ancient ↗ and modern ↗, and these can be quite diverse in what they consider legal ↗.

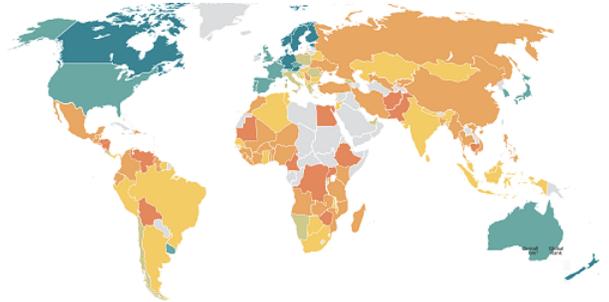
There is no objective reason why something has to be legal or illegal. Furthermore, laws may be enacted with a purpose that later becomes obsolete. At the same time, humans are very accustomed to following laws ↗ – no matter whether these laws are reasonable or not. This has led to systems with very bizarre laws. Some of them are listed here:

- In the EU, the shape of a banana is prescribed by law ([Wikipedia/EU Banana law](#)).
- In Canada, it is prohibited to pretend to use witchcraft ([DumbLaws](#)).
- In France, you can marry a dead person under exceptional circumstances ([Code Civil de la France / Article 171](#)).
- Similarly, an uncle can marry his niece if the president of France is OK with it ([Code Civil de la France / Article 164](#)).
- In Alabama, Dominoes may not be played on Sundays ([DumbLaws / Alabama](#)).
- In Arkansas, it is illegal to pronounce the name of the state wrongly ([DumbLaws / Arkansas](#)).
- In San Jose/California, stores may not sell plastic bags ([DumbLaws / California](#)).
- In Florida, unwed couples may not live together ([DumbLaws / Florida](#)).
- In Indiana, you may not take a fish from the water with your bare hands ([DumbLaws / Indiana](#)).
- In Massachusetts, it is illegal to give beer to hospital patients ([DumbLaws / Massachusetts](#)).
- In Mississippi, it is illegal to teach people about polygamy ([DumbLaws / Mississippi](#)).
- In New Jersey, it is illegal to wear a bullet-proof vest while committing a murder ([DumbLaws / New Jersey](#)).
- In New Mexico, idiots may not vote ([DumbLaws / New Mexico](#)).
- In Texas, one must acknowledge a supreme being before being able to hold public office ([DumbLaws / Texas](#)).
- In Texas, a felony charge can be levied for promoting the use of, or owning more than six dildos ([DumbLaws / Texas](#)).
- In Germany, public dancing is prohibited on certain holidays. Salafists and Wahhabis consider dancing in general to be forbidden ([Wikipedia/Dancing ban](#)).
- In North Carolina, statute 14-309.8 says that a bingo game may not last more than 5 hours (Edward Snowden: Permanent Record).
- In Britain, you may not die in Parliament ([Telegraph: Don't die in parliament – it's the law, 2008-04-12](#)).
- In Britain, it is an act of treason to place a postage stamp bearing the monarch's head upside down on an envelope [ibid].

- In London/Britain, a pregnant woman can relieve herself anywhere she wants – including in a policeman's helmet [ibid].
- In the Netherlands, it is legal to smoke cannabis in coffee shops, but illegal to smoke tobacco ([Telegraph: Dutch cannabis smoker fined – for using tobacco, 2008-09-24](#)).
- In Swaziland, young girls were not allowed to have sex for 5 years, and had to wear tassels as sign of their chastity in an effort to combat AIDS ([BBC: Swazi king drops sex-ban tassels, 2005-08-23](#)).
- Saudi Arabia prohibits alcoholic beverages, theatre, public exhibition of films ([Wikipedia/Saudi Arabia](#)).
- In Saudi Arabia, women have to wear black clothing that covers every part of their body other than hands and eyes. Every adult female must have a male relative as her "guardian", and women are not allowed to drive a car [ibid].

The Rule of Law

The law is a moral framework that is enforced by a government ↗ ↗ ↗. Independently of the actual laws, such enforcement can be more effective or less effective. For example, in some countries, the arm of the law does not reach the remote regions. Crimes basically go unpunished there. Criminals can bribe the judges or police and get free. The law is vague, and allows members of the ruling class or the nobility to interpret the rules in their interest. In such places, the law has not much value.



The Rule of Law
(World Justice Project)

There are other countries where the laws are transparent, clear, and enforced coherently. An independent court system guarantees that a claimant gets their redress, no matter who they are. In such places, the citizen knows that whoever transgresses the rules gets punished. This is very useful for enforcing contracts. If someone does not honor a contract, the other person can go to court, and claim their rights. If the system works well, the claimant will get their compensation in a few months time. Now contracts are the basis of any commercial activity – be it trading, sharing work, or specializing in certain tasks. If I can be sure that you will honor a contract, I will work for you, buy your goods, or sell you mine.

The well-functioning of such a system is called "the rule of law". Countries that uphold the rule of law provide better conditions for economic activity, and they are thus generally richer. This does not mean that the laws would be "good" in any sense. It just means that people can rely on them.

The Future of Laws

Most people in the Western world will roughly subscribe to the values of the Human Rights ↗. However, not all contemporary societies share these values. And most societies did not share these values 1000 years ago.

In the future, the values might evolve further. It is possible, for example, that animal rights will become more prominent in the next decades. It is also possible that our understanding of intellectual property will be redefined. We might develop a new concept of marriage. We might also have to deal with new inventions. What happens, e.g., if we are able to grow animals in the lab? What happens if we can grow humans? How do we define the rights of a person who has been cloned from another person? What happens if robots become intelligent, and when they become members of society? All of these questions show that moral frameworks have to be developed continuously in order to keep up with the pace of society.

Morality and Atheism

Demystification

What is right and what is wrong has long been a philosophical conundrum. We are taught that certain behaviors have an innate quality of being bad or being good. This clashes with the fact that the animal kingdom does not care at all about good and bad ↗. It also clashes with the fact that different societies make so unbelievably different moral choices ↗. Religions teach us that the gods told us what is good and what is bad. And yet, different gods said different things. In all of this, we are always looking for the intrinsic quality that makes a behavior "good". The fact that we are never able to nail it down gives the question the aura of the mystic.

For this book, the answer to the question is plainly unromantic: "Good" is whatever we define it to be. Goodness is not something absolute or intrinsic. It is a subjective label that we attach to behaviors ↗. That's all. There is no innate, mystic ethic quality. Laws exist not because there would be an inherent justice in this world, but because humans have developed norms and enforce them. People follow laws not because there would be a universal ethics, but because of biological, social, pragmatic, and psychological factors ↗.

Don't get too caught up in the symbolism of "the court" as a place where justice prevails and the bad are punished. The courthouse itself is a building, nothing more and nothing less.

By Ira A. Lipman in "How to be Safe"

An illustration of morality

This chapter has argued that humans create rules to guarantee their safety ↗. Marshall Brain illustrates this process as follows [WhyGodWontHealAmputees.com]:

Imagine that you were to plan a big family vacation to Disney World. You are going to take a week off of work, buy the plane tickets, reserve a hotel room and go. Most people would not travel all the way to Orlando, pay the price of admission into the Magic Kingdom and then fall asleep on a bench. Most people want to ride as many rides as possible. They want to see the entire park, watch the parade, eat the food, buy the souvenirs and get as much enjoyment as they can out of the experience. That is a completely valid way to look at Disney World, and it is also a completely valid way to look at your time here on earth. You want to get the most out of life.

Let's say that you did go to Disney World, paid your money to get in the gate, and then you discovered that there were gangs of teenagers running around robbing people, that there were people cutting into line at every ride, that many of the rides had been vandalized and did not work, and that there was litter everywhere. In other words, what if other people were totally ruining the place? You would be upset. You would complain to management. You would want your money back.

You realize several things as you think about your life in this way. For example, you can see why normal human beings do not want criminals running around in our society. During your 30,000 days on earth, you hear all sorts of stories in the news about:

- Gangs of teenagers robbing people and selling drugs
- Rapists attacking women and children
- Murderers killing people in cold blood
- Terrorists blowing up buildings and buses
- Drunk drivers destroying the lives of innocent people
- CEOs stealing millions of dollars from their businesses

These out-of-control people ruin the experience for the rest of us. If they were running around doing this inside Disney World, management would exterminate them immediately. They simply would not be tolerated.

Your time here on earth is very precious, and you only get one chance to experience it. That is why human beings create laws, police departments and courts to deter the people who are spoiling the experience for everyone else. The vast majority of people are good, and they have no desire for bad people to wreck their lives.

What is the link with Atheism?

This chapter has laid out a theory for the origin of moral rules. Now how does this theory relate to atheism?

Atheism is the disbelief in supernatural beings ↗. It follows that, in this view, moral rules cannot come from the gods. Hence, the most popular opinion among atheists is that the moral rules came from people. This chapter has outlined one way in which this might have happened.

Now we know what atheists think about the origin of moral rules, but we still do not know what moral rules atheists follow. In fact, we cannot say what moral rules atheists follow, because atheism is not an organized movement ↗. Different atheists may or may not follow different moral rules.

However, we can talk about one particular type of atheism, Humanism ↗. Humanism says that the Human Rights should be the basis of laws and government ↗. Humanism also says that moral frameworks should be harm-based and egalitarian ↗.

And I would come to the conclusion that a society that was honest about its perils was better than one that denied its citizens the knowledge and the preparation to fend off their approach.

By Deborah Feldman in "Unorthodox"

Responsibility

In the theory of moral values put forward in this book ↗, moral rules are regulations of behavior that humans establish in order to make their society work ↗. The rules are enforced by punishment and education ↗, and can be imposed by different groups ↗ in different ways ↗. When the rules are enforced by a government, we call the moral rules "laws" ↗.

In this view of things, humans are the primordial factor of ethics: Humans define the moral rules in the first place. Humans follow the laws, they defend them ↗, they hand them down to the next generation ↗, and they change them ↗. Humans can define any rules they want: they can introduce or abolish slavery ↗, they can establish or abolish tyrannies ↗, and they can define the shape of legal bananas ↗.

As it turns out, this greatest possible freedom also comes with the greatest possible responsibility, in the following sense: How we structure our society is completely up to us. We cannot say that humans are the victims of the rules that govern them, because it was humans who made these rules in the first place – either in consensus ↗ or not ↗. In one way or another, it is always humans who are responsible for the laws.

There once was a time in America when no woman could vote. Yet, somehow, even though women could not vote, they all have the right to vote today. How did that happen?

There was once a time in America where the large majority of people smoked cigarettes. Smoking was allowed everywhere – even on airplanes and in public restrooms. Yet today, smoking is banned in most public spaces, including airplanes. How did that happen?

It was not God who reached down and made these laws. It was people who decided to make these laws.

By GodIsImaginary.com

Questions

Arbitrary rules are horrible!

The theory of moral frameworks of this book essentially says that humans can define any laws or moral codes that they want ↗. But would such a world not be completely merciless and ungovernable? Wouldn't it be horrible if there were no absolute moral rules? Is there nothing that prohibits us from establishing slavery, dictatorships, or suppression? – I can literally hear the reader screaming these questions into my face.

The answer to all of these questions is "yes". Indeed, humans can define any rules that they wish. Here, "can" is to be understood in the sense of "are able to". Humans are able to define and enforce any rules they want. This is a fact. People have established rules that guarantee personal liberty ↗, that enforce slavery ↗, that abolish slavery ↗, that require regular prayers ↗, or that prohibit dying in parliament ↗. It is just a fact that humans establish arbitrary rules, and since they do, it follows that they are able to.

Be assured that I am as sad about this circumstance as you are. But the fact is that indeed, human rules are arbitrary. What we consider the standard of law today was completely different just 100 years ago ↗. For example, women were not allowed to open a bank account as recently as 1960. For the people at that time, this was the natural law. It follows that what we consider lawful today may be completely different in 100 years from now ↗. Witness the growing acceptance of gay marriage, the creeping abolishment of the death penalty, or the increasing care for animal treatment. These are controversial now. But in 100 years' time, people will look back at our current laws in horror – much like we look back at the medieval laws with horror. Of course, everyone thinks that *their* laws are absolute. Nobody can imagine that their laws are considered immoral by other societies, or that their laws will be considered obsolete in 2000 years from now. But history shows that this is what happens. Different societies, and different times, see different laws. The fact that we are both unhappy about this does not make it less true ↗.

Obey the laws and ordinances of the community. If you do not agree with them, work to change them rather than disobeying them.

By WhyWontGodHealAmputees.com

But arbitrary rules are bad!

People establish arbitrary rules ↗. Now even if this is true, the question is whether this is "good".

A behavior is never good or bad by itself. We need a moral framework to judge a behavior ↗. Let us take the Human Rights for this purpose ↗. Is it good, according to the Human Rights, that people establish arbitrary rules? The Human Rights set out certain limits for laws. For example, the Human Rights say that no law may approve of torture. Hence, the fact that people establish arbitrary rules (which may include torture) is "bad" according to the Human Rights. Since the Human Rights are part of Humanism, the particular brand of atheism promoted in this book ↗, humanists find arbitrary rules bad, too.

This, however, does not prevent people from establishing arbitrary rules. Even if we both think that it's bad, people still do it ↗.

There are absolute rules!

Some moral rules look just totally obvious and natural, and hence we have a tendency to assume that they would be somehow innate.

Indeed, there may be some rules that are innate. For example, a general aversion to suicide is probably an innate behavior ↗. This, however, does not mean that suicide would be immoral in general. There are societies that allow suicide and others that disallow it. Love for kinship, likewise, seems to be innate ↗. Then again, in some cases the law may require us to go against our kinship (if our brother is a murderer, e.g.). Empathy may be a general innate trait ↗. However, we mostly agree that criminals should be punished, even if the punishment causes harm to the criminal. Punishment may be a universal constant. Then again, it is hardly a moral value in itself if we cannot say which behaviors should be punished ↗.

Many rules that we hold dear are violated by some society in modern times or in history ↗. Even the Human Rights, a supposedly universal catalog of laws, are hotly contested and nowhere near universal implementation (Wikipedia/Universal Declaration of Human Rights/Criticism).

This is not to say that there cannot be universal rules. Maybe there are some, or maybe there will be some one day.

You say people are like animals!

This book suggests that there are no absolute rules, and that people just make their own rules ↗. But wouldn't that mean that people just behave like animals – barbaric and brutal, caring only for their own interest?

And the answer is: Yes, they do. Throughout history, humans have exterminated each other in the most brutal forms of warfare, with no respect for the other group. They tortured, murdered, and raped whatever was not their own clan ↗. The Islamic State, for example, a 2014 terror group in Iraq, routinely killed the men in the conquered non-Muslim areas, and raped the women ([Wikipedia/Islamic State/Sexual Violence](#)). Tell me, please, how is this different from a lion that takes over another lion's realm by killing the male, killing the babies, and mating with the female lions? ↗. The Bible even tells us to do the very same (Bible / Deuteronomy 21:10). All of this is driven by the desire to have one's own group prevail ↗.

Inside the group, however, the human animals establish very strict rules. The Islamic State, for example, had very rigid rules of conduct within its community, which were rigorously enforced ([Wikipedia/Islamic State/Ideology](#)). They do this because otherwise their group would not function. Or, in other words, the groups that did not do it were too weak and got eradicated. Hence, all groups that we see today have this type of rules.

This is the mechanism that we see in reality, and this is the mechanism that this book describes. It is not "good", to be sure. But that doesn't make it less true ↗.

God gives us the rules!

Many religious people believe that a certain moral system was established by God ↗. Thus, this system would form an absolute moral truth.

Indeed, most ancient legal systems were said to come from the gods. The Babylonian Laws, for example, from 2000 BCE ↗, usually stated in their preamble that they were designed and enforced by the gods ([Wikipedia/Cuneiform law](#)). In India, the Law of Manu was assumed to be dictated by Brahma, the god of creation, to Manu, the first human. Manu recorded the words and taught them to his students ([Wikipedia/Law of Manu](#)). The Quran, the book that forms the basis of Sharia Law ↗, is assumed to be dictated by the Abrahamic God to the Prophet Mohammed ([Wikipedia/Quran](#)). Starting with King Pepin the Short of the Franks, the kings of medieval Europe took their office by the grace of the Christian God. This is in tune with the Bible, which states that all government power stems from God (Bible/Romans 13,1–7). The medieval kings were absolute monarchs, meaning that that they could also make the law. Thus, the medieval European law was ultimately traced back to God.

In China, the emperors had a "Mandate from Heaven", which gave them divine right to rule ([Wikipedia/Mandate from Heaven](#)). Still today, the monarchs of the following countries reign by the grace of God: Denmark, Liechtenstein, the Netherlands, Spain, the United Kingdom and hence all Commonwealth countries ([Wikipedia/By the grace of God](#)).

In all of these cases, the legal systems derive or derived their authority from gods. Still, these legal systems vary widely. Behaviors that are prohibited in one society are allowed in another one – or in the same society at a different point in time ↗. Thus, the reference to God does not make a moral system universal.

Imagine just for a minute that all criminal law would be declared void. If all the protection that remains were the religious belief of our co-citizens, then neither you nor I would dare just to cross the street. If, conversely, all religions were declared void from one day to the other, but the criminal laws remained in place, then you and I would still live our daily lives without too much preoccupation.

By Philaletes in Arthur Schopenhauer's "Dialog about Religion", translated and paraphrased

Where do the rules come from?

This book says that there are no absolute divine rules ↗. So then where do we get our moral rules from?

The answer to this question is very simple: It is us humans who develop and establish rules ↗. Most of us have a basic trait of empathy, i.e., we abhor suffering ↗. Most of us also have the desire to live in a stable and peaceful society ↗. The easiest way to achieve this is to make pacts between us ↗. Now what exactly constitutes "suffering", what exactly is a "peaceful society", and what exactly is a "good pact", is subjective. Our subjective view is shaped by what we learn from our parents ↗, by what the society around us does ↗, and by what we read or hear. Out of this mix, we build our own approximate moral framework.

People then start to impose these moral frameworks on others where they can ↗ – either in agreement with the others or not. An authoritative father will impose his values on his family. A sports club decides its charter and imposes it on its members. An elected local party imposes their values on the city. A criminal gang forces its values upon its members. An elected national party makes the laws for the country. A dictator imposes his laws on his subjects.

So, to answer the question, this is where we get our moral rules from: We make them ourselves, or we get them from the other people.

*You know those parts of the Bible that are completely ridiculous? The bits about stoning adulterers to death, and not wearing mixed fibres and not working on a Sunday and so on? The bits that you refuse to take seriously even though you take other parts of that Bible completely seriously, and even though the book itself claims you must take ALL of it seriously?
Whatever part of your brain is responsible for working out that those parts of the Bible are safe to ignore - that's where an atheist's morals come from.*

By [Atheist Cartoons](#)

What is morality anyway if we're all just atoms?

The biological view of the human holds that we are all just atoms ↗ ↗. Everything that happens in our body is just chemical reactions – including our thoughts, wishes, feelings, and choices. In such a system, how can we even talk of morals, guilt, sin, and duties? And what sense does it make to punish someone for a chemical reaction in his brain that caused him to kill someone?

The answer is quite plainly that punishing someone for a deed will reduce the probability that he (and, for that matter, everyone else) repeats the deed. Of course, we cannot guarantee this effect, because human behavior is unpredictable in general ↗. However, the theory "Punishment reduces the probability of a crime (as compared to no reaction at all)" is true. And this is what counts: Secular ethics cares exclusively about (1) making up for a past crime, and (2) reducing the probability of a future crime. All the other notions (guilt, sin, morals, etc.) are metaphysical concepts whose existence we never postulated.

We have thus demystified the notion of "morals", much like we have demystified the notion of Free Will before ↗, and much like we will demystify the Sense of Life in the next chapter ↗.

Chapter on the Meaning of Life

Introduction

This chapter discusses the most fundamental conundrum of humanity: "What is the meaning of life?". The chapter consists of two sections:

- [An atheist view](#): Describes an atheist view on the meaning of life, including our reason for existence, our purpose on Earth, and our life after death.
- [Questions](#): Treats objections to that view.

An atheist view

What is the meaning of life?

"What is the meaning of life", or "What is the sense of life" is certainly the most fundamental question that humanity can ask itself. The question can mean different things ([Wikipedia/Meaning of Life](#)):

- Why are we here? ↗
- What is the purpose of life? ↗
- What is the purpose of my life? ↗
- What should I do with my life? ↗
- Why am I doing all of this? ↗

We will discuss each of these questions in the sequel.

You asked me for the answer to "The Ultimate Question of Life, the Universe, and Everything". The answer is 42. I checked it very thoroughly, and that quite definitely is the answer. I think the problem, to be quite honest with you, is that you've never actually known what the question was.

By Deep Thought in Douglas Adams' "The Hitchhiker's guide to the galaxy"

Why are we here?

One of the interpretations of the question "What is the meaning of life?" is "Why are we here?" ↗.

I know that this will probably not satisfy you, but here is the scientific answer to this question: We exist because we were born. We were born because our parents had sex. Our parents had sex in part because they have a built-in desire to have sex and to have children. This is because the gene that wants sex is more productive than the gene that doesn't want sex, meaning that all living beings today have this gene ↗. Our parents exist because they were born, and they were born because our grand-parents had sex and so on. This process continues into the past until we go so far back in time that your ancestors were no longer humans, but resembled more the Homo Ergaster ↗. The ancestors of these resembled more primitive forms of humanoids, before resembling the Ardipithecus, and so on ↗. When we go further and further back in time, we come to life forms that consisted of only a few cells, and finally to life forms that consisted just of a single cell ↗. The cells came into existence by chemical processes that we detail in the [Chapter on the Universe](#). Starting from these cells, the reason for existence has always been the same, all the way up to you and me: reproduction.

Now if you want to know why you and me made it until here, read on ↗.

Why were we selected to exist?

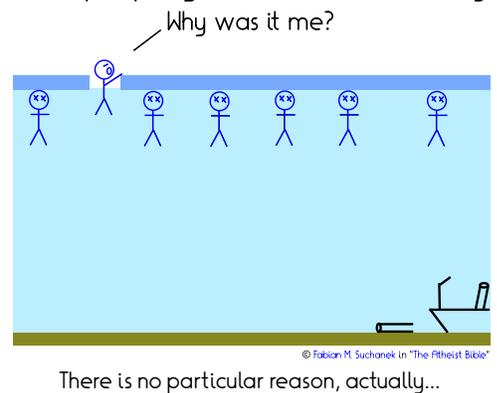
The scientific world view holds that we are at the current point of some evolutionary process that took 4 billion years ↗. If we are to believe the theory of evolution ↗, then we are mainly the product of lots of random mutations. So the fact that I am writing this book, and that you are reading it, is largely due to a combination of an incredibly large number of random factors. So, why is it us who made it into the 21st century? Why did life evolve here, and not somewhere else? Why was it our species that developed reading, writing, and thinking?

The answer to all these questions is the Anthropolical Principle. It says:

If someone asks such questions, then all the conditions for life and intelligence have been met in this place at this time for this species.

This is pretty obvious. If the conditions had not been met, then nobody would be able to ask such questions ↗. So the reason why it is you whose species ended up prevailing is simply that all those other species who did not prevail will not ask the question. So whoever asks the question survived. It's not that someone chose you to survive, and chose to eradicate all others. It is more that a large portion of species and people got eradicated, and only those who survived start asking questions.

Let us illustrate this with an example. Suppose that a ship sinks in icy waters. All passengers are pulled down with the ship. Those who survive try to get out of the ship, and hurry to swim to the surface. Hundreds of people start swimming to the top. Through drifts in the water, they are all dispersed, and reach the surface at different points. Unfortunately, the surface of the sea is completely covered with thick ice. There is only one hole in the ice, large enough to allow a single person to get out. Out of the hundreds, one person is lucky enough to hit that spot, and survives. All others perish. That single person asks: Why is it me who survived? And the answer is: There is no specific reason why it was you. It could have been any other person. But since you are asking, it was you.



The universe is under no obligation to make sense to you.

By Neil deGrasse Tyson

Remark: There are other examples: The lottery winner wonders why it was him, against all the odds, who won the lottery. There is no specific reason actually, it was just by chance. Someone had to win, and it's only because it happened to him that he's wondering in the first place. Or consider Johannes Kepler, who agonized over why the Earth was 93 million miles away from the sun, just right for water to fill our lakes and rivers without freezing solid or boiling away. [Stephen Pinker: Enlightenment Now]. The reason is obviously the Anthropolical Principle: There are millions of planets, and the life that asks such questions could evolve only on those planets that have the right temperature for water to be liquid.

What is the purpose of life?

The usual interpretation of "What is the meaning of life?" is "What is our purpose of existence?" ↗.

The "purpose" of a thing is the intention that some agent pursues with this thing [Merriam Webster/Purpose]. For example, the purpose of a chair is to sit on it, because we (the agents) use the chairs to sit on them.

This purpose is usually defined by the person who created the thing. For example, Ikea produced a chair with the intention that people sit on it, and hence this has become the purpose of the chair. Now how does this transfer to the "purpose of life"? The purpose of life must be the intention that the creator of life pursued with his creation. Now, unfortunately, there is no such creator in the atheist world view. Thus, the notion of "purpose of life" in the sense of "the intention of the creator" is undefined in the atheist world. For atheists, there is no god-given purpose of life.

Fortunately, we can get a purpose of life from somewhere else. Read on ↗.

*It matters not how strait the gate
how charged with punishments the scroll,
I am the master of my fate:
I am the captain of my soul.*

By William Ernest Henley in his poem "Invictus"

What is the purpose of my life?

The "purpose" of a thing is the intention that some agent pursues with this thing [[Merriam Webster / Purpose](#)]. Now if we want to find the purpose of our life, we have to find someone who pursues some intention with us. As we have seen, God cannot take this role in an atheist world view ↗. Now who else could pursue an intention with us?

How about yourself? Do you have an intention for your life? If yes, then this is the purpose that you have given to your life. If your intention is to make money, then making money is the purpose that you are giving to your life. If your intention is to be happy, then being happy is the purpose that you have given to your life. Congratulations, you now have a purpose of life! It is, quite plainly, whatever you choose it to be. You are the one who chooses what to do with your life.

This is not a particularly smart insight. It just follows from the definition of the word "purpose": your body is but a tool, and the purpose of a tool is whatever intention someone pursues with it – on this occasion you yourself.

But maybe you do not pursue an intention with yourself. Then don't worry! If you refuse to give your life a purpose, and if you keep seeking for a purpose, then you will eventually find someone who will offer you a purpose for your life! Plenty of people are happy to pursue their intentions with you. They will tell you what is your purpose of life! In other words: If you don't know what to do with your life, then others will tell you what to do with it.

The problem is that what others tell you is often not in your interest. So you better give your life a purpose by yourself. We discuss some popular choices next ↗.

*Asking "If there is no God, what is the purpose of life?"
is like asking "If there is no master, whose slave should I be?"*

By anonymous

What should I do with my life?

At some point of our lives, we wake up and ask ourselves: What should I do with my life? From an atheist perspective, this question is even more burning, because the answer to this question defines the "Meaning of life" in the atheist world view ↗.

The problem of what people "should" do is a problem of morality (see the [Chapter on Morality](#)). So we need a moral framework to judge what we should do ↗. Where do we get our moral framework from? De facto, we mostly inherit our moral framework from our parents, and then enrich it by what we learn and think ourselves ↗. If you would like to choose your own moral framework, you are warmly encouraged to have a look at the one we discuss in the [Chapter on Morality](#). It is a liberal moral framework that will get you a long way.

Once we have the moral framework, the first thing that we "should do" is avoiding behavior that is immoral in our framework. This is just the definition of the word "should". As a Humanist ↗, you have a liberal moral framework, and thus the main thing that you "should do" is avoiding harm to others ↗. The world would be a much better place if people just followed this rule. The next thing that we "should do" is to pursue behavior that our framework labels morally obligatory ↗. Again, this is just the definition of "should". For example, if you see a car accident and people are injured, then most likely your moral framework tells you that you should call the police and the ambulance. This is what you "should do". Again, the world would be a much better place if people actually did it.

This is only part of the answer of what we "should do". We discuss the other part next ↗.

When we look for things in life like love, meaning, and motivation, we tend to think that they are sitting behind a tree or under a rock. It is not until late in life that we discover that we have to create our own love, manufacture our own meaning, and generate our own motivation.

By Neil deGrasse Tyson, adapted

What should I do with my life, apart from being moral?

We have seen that we should do what our moral framework requires us to do ↗. This holds just by definition. Now, our moral framework (hopefully) does not tell us which job to choose, whom to marry, or where to go on vacation. So what "should" we do?

There are some hard-wired intentions that most of us share: We all have (to some degree) the desire to survive ↗. We also have, to some degree, the desire to help others in need ↗. We probably also have the desire to be happy. These are good starting points. Beyond this, we can give our own purpose to our lives. We are completely free in this choice ↗.

Here are some popular options [[Wikipedia/Meaning of Life](#)]:

- try to be nice to people, avoid eating fat, read a good book every now and then, get some walking in, and try to live together in peace and harmony with people of all creeds and nations [[Monty Python: The Meaning of Life](#)]
- find the love of your life. Once you found it, you will stop worrying about the meaning of life (Y. N. Harari: 21 lessons for the 21st century).
- live your dreams
- stand for something, make some difference that you lived at all
- seek happiness and flourish
- live as long as possible
- reproduce
- seek wisdom and knowledge
- learn as many things as possible in life
- leave the world as a better place than you found it
- make other people happy
- help others, and help one another
- seek peace
- seek pleasure and avoid pain
- love those who mean the most
- be moved by the tears and pain of others, and try to help them out of love and compassion
- eat, drink, and be merry
- know and master nature

Philosophy of Everyday Life Question asked · Sun

If God does not exist, what purpose do we have? What is the point in living?

137 Answers

Good to know...
[[Quora.com](#)]

And since we're at it, here is one more: "Live, love, learn", i.e., take care of your life, be kind to others, and advance your knowledge. Now it's your turn: Choose one of the above as your purpose of life. Or come up with a new one. And remember: If you don't choose a purpose for your life, then someone else will ↗. So you better do it yourself.

I am driven by two main philosophies: know more today about the world than I knew yesterday and lessen the suffering of others. You'd be surprised how far that gets you.

By Neil deGrasse Tyson

Remark: The instruction to avoid eating fat has been the subject of debate, with the claim that sugar bears more dangers than fat ([Wikipedia/Sugar Association](#)).

Why am I doing all of this?

Every morning, we get up, wash, have breakfast, work, come back, eat, and sleep. Naturally, we ask ourselves why we are doing this every day. Some people's lives are even more loaded than this: They have to take care of their children or their elderly parents, they are looking for a job or a place to live, they suffer from an illness, or they are unhappy in life. So then, why on Earth are we doing all these things?

Again, I know that this will not satisfy the reader, but the question has a very plain answer. There are several reasons why people do things:

Survival

We all have a built-in desire for survival ↗. If we don't eat, we feel hungry, which is what we want to avoid. If we don't earn money, we can't eat. Therefore, we take a job and earn money.

Moral obligation

There are quite a number of things that we do out of moral obligation or for reasons of conscience. We discuss reasons why people follow moral rules in the [Chapter on Morality](#).

Pleasure

There are some things that we do just because they make us feel better. These are pleasant things such as going on vacation, but also near-sighted things like drinking beer or eating chocolate, as well as egoistic things such as showing off with the new phone.

Empathy

Sometimes, we do things just to be good to other people. This can be out of a built-in feeling of empathy ↗ or love for the other person ↗. It can also be because helping another person makes us feel good ↗.

Intermediate goals

In many cases, we are pursuing some goal just in order to achieve a final goal. For example, an intern makes coffee in order to please his boss. He wants to please his boss in order to get a good reference letter. He wants a good reference letter in order to get a good job, which he wants to earn good money, which he wants to in order to eat, and in order to enjoy a higher social status.

Foreign control

Some people also do things because it is the path of least resistance. They do things because other people tell them to, because they have always done them, or because they cannot think of anything else. Again others are forced to do something ↗ or tricked into doing something by brainwashing or psychological pressure.

These are the main reasons why people do something.

The struggle itself [...] is enough to fill a man's heart. One must imagine Sisyphus happy.

By Albert Camus in "The Myth of Sisyphus"

Where do humans go after death?

One of the questions that people routinely ask themselves is what happens after death. Where do humans go?

Most atheists believe that humans go nowhere after death. They just cease to exist as a person. That may seem hard to understand. In fact, this idea that a human being simply ceases to exist upon death drives many people absolutely nuts. They cannot imagine it. "Me? Die? I am going to totally cease to exist?" [WhyWontGodHealAmputees.com]. And yet, this is what will happen. Here is an analogy: Let's suppose I take Lego bricks and build a small airplane. It's a model plane, but we can agree that it exists. It can move and turn. Now I disassemble the plane, and use the same bricks to build a car. Where did the model airplane go?

The answer is that the model airplane is simply gone. It is saved nowhere. The same happens to the human after death. The body decomposes, and it



disappears. This is for the body; read next for what happens to the human spirit ↗.

Life is pleasant. Death is peaceful. It's the transition that's troublesome.

By Isaac Asimov

Remark: The idea of the Lego airplane is by Chris Irwin Davis on Quora.com.

Atheist graves do not have religious symbols, but they can still be beautiful.

[Picture taken in the Novodevichy Cemetery in Moscow/Russia]

Where does the spirit go after death?

Atheists believe that the human body goes nowhere after death ↗. Now, where does the human soul go after death? Where do all the memories, capabilities, thoughts, and wishes go, where do the personality, the spirit, the consciousness, and the character go?

The answer is, likewise, that they go nowhere. They cease to exist. Life ends. Consciousness ceases. What we consider the "personality" or "consciousness" is in fact not a physical thing that goes somewhere. Rather, it is a process. When the physical conditions for this process are no longer there (because the body died), the process stops.

If that is difficult to understand, consider a burning candle. Its flame gives warmth and light, and it has been frequently taken as an analogy to the human spirit. Now suppose there is a wind and the candle goes off. Then where did the flame go? Well, it went nowhere. The flame is not a physical thing that goes somewhere. Rather, the flame is a physical process. When the wind comes, this process stops. The same happens, in a positive atheist's view, to the human spirit. It is a process that stops when the human dies. It's just gone. Consciousness is turned off forever. This state is called eternal oblivion ([Wikipedia/Eternal Oblivion](#)).

Now where does the soul go? From a physical perspective, the human brain is a big chemical reaction. There is no "soul" mixed in with the chemicals, just like there is no soul in a bacterium, a mosquito, a mouse, a dog or a chimp. The concept of a "soul" has been invented by religion because many people have trouble facing their own mortality. It makes people feel better, but the concept is a fabrication. [[GodIsImaginary.com](#)] Note that people commonly have no trouble understanding this for animals. For example, some people develop a deep relationship with their dog. They know the wishes, traits, and the personality of their dog. When the dog dies, it is as if a good friend died. Yet, few people think that the dog's spirit went somewhere. People understand that it just ceased to exist. Positive atheists believe that it is the same with humans.

This may be a troubling insight. We all like the idea of going to paradise much better than the idea of inexistence. However, this does not make the idea of paradise true ↗. While this insight may seem depressing, it has an interesting side effect: It makes our life on Earth much more precious. This is because our life on Earth is the only one that we have for sure ↗.

*My worst nightmare is not my own death.
It is that of the people I love dearly.*

By Adriana Hügey on Quora.com

Remark: The analogy of the flame comes from Jehova's Witnesses ([Jehova's Witnesses: What does the Bible really teach?](#)). They believe that humans die completely before being resurrected at the end of times. The first part of this belief coincides with atheist belief. The exact nature of death is not yet fully understood. In certain cases, humans can be revived after up to 1 hour near-drowning experiences in icy water ([Wikipedia/Hypothermia](#)). Some people believe that they can be resurrected after being frozen ([Wikipedia/Cryonics](#)).



Where did the flame go?
[Earl Sod @ Flickr]

Demystification

In this chapter, we have learned some very plain facts:

- We exist because our parents reproduced ↗
- The purpose of your life is the intention that you pursue with it. If you don't pursue an intention with your life, someone else will ↗.
- You do your everyday work mainly because you would like to survive, have pleasure, or help others – or because you're being controlled by someone else ↗.
- Life is a process. At death, this process stops irreversibly ↗.

Now these are very unromantic facts. All the blah blah that is commonly associated with the meaning of life has been cut away, and what remains are just very obvious conclusions. We have thus completely demystified the question of the meaning of life – much like we have demystified the notions of Free Will ↗ and Morality ↗ before.

*Les morts ne nous demandent pas de les pleurer, mais de les continuer.
(The dead do not ask us to beweeep them, but to continue them.)*

By François Mitterand

How do atheists get hope?

Some people live mainly with the hope to have a better life after death ↗. That is not how atheists see it. Interestingly, the absence of a life after death gives this life an extraordinary significance – it is our only life.

Thus, the disbelief in afterlife teaches us something: It means that we have only one single chance to live our life. There is no way to live a better life in the next cycle of re-incarnation and there is no way to make up for missed pleasures. Also, there is no way to make the bad guys pay for their sins in the afterlife. To atheists, this means: Live your life now, fight the ill and don't hope for eternal judgement. Live your life thoughtfully and enjoy its pleasures.

Maybe Marshall Brain says it best by summarizing: The truth is this simple: When you die, you die. Some people have a tremendous amount of trouble getting their arms around this fact of life. If you live to be 82 years old, what you have is approximately 30,000 days of existence. You are not going to then commute to "heaven" to live for eternity. 30,000 days is all that you've got.

That's it. Now that you understand that your death is final, you may look at your life in a different light. [WhyWont-GodHealAmputees.com]

*I am an atheist.
That doesn't mean I have nothing to live for.
It means I have nothing to die for.*

By anonymous

What is the spirit of life for atheists?

It is certainly impossible to make a statement about the atheistic "life spirit" in general. However, the American atheistic community has compiled a definition of atheism that will probably appeal to most atheists [[Murray v. Curlett, 374 U.S. 203, 83 S. Ct. 1560, 10 L.Ed.2d \(MD, 1963\)](#)]:

[...] Atheists [...] define their beliefs as follows. An Atheist loves his fellow man instead of god. An Atheist believes that heaven is something for which we should work now – here on earth for all men together to enjoy.

An Atheist believes that he can get no help through prayer but that he must find in himself the inner conviction, and strength to meet life, to grapple with it, to subdue it and enjoy it.

An Atheist believes that only in a knowledge of himself and a knowledge of his fellow man can he find the understanding that will help to a life of fulfillment.

He seeks to know himself and his fellow man rather than to know a god. An Atheist believes that a hospital should be built instead of a church. An Atheist believes that a deed must be done instead of a prayer said. An Atheist strives for involvement in life and not escape into death. He wants disease conquered, poverty vanquished, war eliminated. He wants man to understand and love man.

He wants an ethical way of life. He believes that we cannot rely on a god or channel action into prayer nor hope for an end of troubles in a hereafter.

He believes that we are our brother's keepers; and are keepers of our own lives; that we are responsible persons and the job is here and the time is now.

Questions

Science cannot answer

Some people say that science will never be adequate to address the question of the meaning of life. It is also impossible to use science to address the other great existential questions: those of life, of death, of love, of loneliness, of loss, of honor, of cosmic justice, and of metaphysical hope.

That may be true. However, the alternative to "religion" as a source of meaning is not "science". No one ever suggested that we look into ichthyology or nephrology for enlightenment on how to live. [Stephen Pinker: Enlightenment Now] Rather, the alternative to "religion" is Humanism ↗ – together with the entire fabric of knowledge and creativity that humans have produced ↗. And with this, we can give answers to some of the bigger questions of humanity, as we have seen in this chapter.

Why don't you just kill yourself?

Atheism does not see any god-given meaning in our lives. Then the question arises why we don't just kill ourselves.

As Barry Puzzle remarks, this question is usually asked by people whose religion insists that this world is a world of sin and suffering and when they die they will be delivered to an eternal paradise [Atheist Cartoons/p. 14]. People who think that the current life is a pitiful existence in the expectation of a much better life elsewhere would indeed have good reason to speed up the transition from one to the other. If killing yourself is not an option, refusing food, drunk driving, extreme sports, or driving without a seat belt are all on the table. However, people don't do that.

The reason that people (theists and atheists alike) usually don't kill themselves is that we all have a strong urge to stay alive. This is because the gene that urges us to strive for survival had better evolutionary success than genes that induce suicide ↗. Therefore, we all have a hard-wired desire to stay alive.

Atheists have even more reasons to stay alive: They believe that their life is the only life they have, and that there is nothing thereafter. This makes their lives even more precious ↗.

Religion is basically an advertisement for death.

By Theodor Lessing

Isn't life without god absurd?

"The Absurd" refers to the conflict between (1) the human tendency to seek inherent value and meaning in life and (2) the human inability to find any [\[Wikipedia/Absurdism\]](#). Is our life thus absurd? And if so, is it possible to live our life with satisfaction?

Søren Kierkegaard spoke about a "leap", arguing that life is full of absurdity, and one must make his and her own values in an indifferent world. One can live meaningfully (free of despair and anxiety) in an unconditional commitment to something finite, and devote that meaningful life to the commitment, despite the vulnerability inherent to doing so. [\[Wikipedia/Absurdism\]](#)

In other words: If you give a purpose to your life, then your life has a purpose ↗. Millions of people have done that and do not feel the need for an external purpose. On the contrary, they take pride in defining their own lives.

*The universe will not give you a meaning.
You give the universe a meaning.*

By Y. N. Harari in his book "21 lessons for the 21st century"

But what happens to the villains?

In the atheist view of the world, there is no afterlife ↗. This means also that there is no hell and no heaven. In particular, this means that the villains will not get punished in the afterlife. They live their evil life, and then they die just like everyone else. Isn't that a horrible injustice?

Yes, that is indeed horrible injustice. This is the reason why we have to punish the villains. It is our job to bring justice to this world ↗. It does not help to wish that evil people will be punished in the hereafter. As long as there is no evidence for that, this remains just wishful thinking ↗. It is even dangerous wishful thinking, because if we believe that these people will be punished in the hereafter, we can justify to let them go in this life ↗.

Therefore, most atheists, and certainly the Humanists, insist that bad behavior must be punished in the here and now.

*Atheism doesn't say that humans can bring peace to the planet.
It says that nobody else can.*

Aren't atheists victims of randomness?

It is one of the fascinating (and sometimes frightening) facts of life that so many things are outside our control: accidents, illnesses, deaths, but also admissions to university, winning the lottery, or just being lucky – all these things happen without us having a hand in the matter. Atheists are helpless in face of this randomness. They cannot see any higher power that would explain this randomness, let alone a power to which they could pray to help them find their way.

The believer, in contrast, believes that it is their god who makes these things happen ↗ ↗ ↗ ↗. This is an understandable conjecture. It is assumed that the supreme coordinator makes things happen through his own decisions. These decisions cannot be influenced by humans. They are outside the realm of human comprehension. Thus, the very same problem appears again: Things happen that cannot be understood by humans. The arbitrariness of the supreme coordinator is itself a kind of randomness. It makes little difference whether humans are surrendered to the randomness of nature or to the arbitrariness of a supreme being. In the end, we are all victims of the very same randomness – atheists and believers alike. Randomness is just lack of knowledge about what will happen (Nassim Taleb: "The Black Swan"). It does not help control the randomness in any way if believers imagine a supreme being on top of it.

In other words: There is no such thing as fate, providence, karma, spells, curses, augury, divine retribution, or answered prayers – though the discrepancy between the laws of probability and the workings of cognition may explain why people believe there are [\[Stephen Pinker: Enlightenment Now, p. 394\]](#).

Much like phlogiston was mentally added to all materials, God was added to all events: chance becomes a purposeful story through God's planning; revenge against a criminal becomes punishment through God's justice; a statement becomes an oath by God's name.

By Fritz Mauthner

Remark: Technically, this means that the hypothesis "God gives our life a sense" is unfalsifiable. We discuss the consequences of this in the [Chapter on the God of Gaps](#).

Religious meanings of life

Religions offer different answers to the Meaning of Life ↗. Let us take a look at the most common ones, and see why atheists don't find them convincing:

People exist to love their neighbors / People exist to live a moral life

Most religions consider it the purpose or at least the duty of human beings to behave morally. This view is nothing specific to religions: Even though their motivations may differ, virtually all world views, including Humanism ↗, want humans to behave morally. Thus, this Meaning of Life applies to atheists and believers alike.

People exist to worship and love God

Some religions (and the abrahamic ones in particular ↗) assert that God created humans to praise him. If that were true, then we would be nothing more than the toys that an almighty being created to in order to please himself. Furthermore, atheists wonder why a god who is almighty, omniscient, and wise anyway would be so desperate for human devotion ↗. Last, the abrahamic religions teach that God hampered our task deliberately by subjecting us to earthly pains and by making us inclined to doubt. Atheists wonder why people on Earth have to suffer from misery only to ensure that an almighty God gets his devotion – a problem that we discuss in the [Chapter on the Abrahamic God](#).

People exist to reach Heaven

Again, this view appears predominantly in the abrahamic religions ↗. It says that Heaven should be our ultimate goal and that our life on Earth is our qualification for entrance. Although this is currently not the official view of the big Christian denominations, it has been an influential view in the past and is still commonly encountered today (search the Web for "[Meaning of Life](#)"). If the goal of our lives lies in the afterlife, then life on Earth is just an intermediate stage in our life, which we should overcome as quickly as possible. Thus, such a view de facto devalues our life in Earth. Furthermore, compared to Heaven, life on Earth is unpleasant and cumbersome. As an unofficial Christian Web page puts it ([Meaning-of-Life.info](#)), God, in his infinite goodness, has arranged a way for us to return to Paradise; all it requires is a short stay in this hard world of temptation and pain. This Meaning of Life inspires a view of life as an unpleasant, temporary and unimportant step – which atheists find deplorable, given the joys that life offers to those who love it. Furthermore, there is no reason why a loving god would subject us to the misery on Earth in the first place ↗.

Life is a big test for the afterlife

In this view, life is a sequence of temptations and we as humans are to resist them. If we succeed, we go to Heaven. To atheists, it is unclear why God would want to test his own creatures – given that he is omniscient and knows the outcome anyway ↗.

People exist to reach Nirvana

The Indian religions (Hinduism, Jainism, Buddhism, and Sikhism ↗) hold that we exist to go through a cycle of rebirths, until we are finally pure enough to reach Nirvana. Nirvana is a state of eternal peace of mind. This philosophy explains what will happen, but it does not tell us why. For example, the theory does not explain why we are born at all.

People exist to be fruitful, and multiply; fill the earth, and subdue it

This is the view of Christianity, Judaism, and Islam (Bible/Genesis 1:28). Species that do not multiply die out. Hence all species that have survived until today have an inclination to multiply. Hence humans have an



Yes, I know.
But thanks for the reminder!
[Picture taken in Shanghai/China]

inclination to multiply. Hence it is futile to prescribe being fruitful as a purpose for our lives: It is not the purpose, but the cause of our existence ↗.

People exist to "play" the game of life

This notion is e.g. found in Hinduism, where it is known as the principle of "lila" (literally, "play"). It explains the universe as a cosmic puppet theater, in which people are assigned roles by the gods ([Wikipedia/Lila](#)). Unfortunately, these roles are beyond human control in Hindu philosophy. Thus, this world view tells us that our lives have meaning, but it does not tell us which meaning ↗.

Therefore, the meanings of life brought forward by these religions do not convince atheists.

*What if our religion was each other
If our practice was our life
If prayer, our words
What if the temple was the Earth
If forests were our church
If holy water—the rivers, lakes, and ocean
What if meditation was our relationships
If the teacher was life
If wisdom was self-knowledge
If love was the center of our being.*

By Ganga White

Chapter on Proofs for Gods

Introduction

This chapter refutes popular proofs for the existence of God, gods, life after death, spirits, spiritual life forces, or anything supernatural ↗. The chapter will argue that these proofs do not stand up to scientific scrutiny.

The chapter consists of the following sections:

- **Introduction:** Presents the goddess Gayatri, who has kindly agreed to serve as a running example throughout this chapter.
- **Proof by claim:** Treats simple claims that gods exist.
- **Pragmatic Arguments:** Discusses arguments that say that it is convenient to believe in gods.
- **Redefinitions:** Treats alternative definitions of God.
- **Abstract Universal Hypotheses:** Discusses supernatural patters that people see in earthly existence.
- **Interaction:** Lists proofs that are based on some interaction with the supernatural.
- **On Proofs:** Discusses meta-arguments about whether proofs are possible at all.
- **On Discussion:** Discusses whether it is possible to discuss about the supernatural.

This chapter treats gods in general – which includes the abrahamic god ↗. In addition, we dedicate two entire chapters to the Abrahamic God in particular:

- the [Chapter on the Abrahamic God](#)
- the [Chapter on the God of Gaps](#)

The story of Gayatri

Gayatri is the Mother Earth. She is the symbol of nature, motherhood, fertility, creation, and destruction. She gave rise to the Earth and the Universe, and it is through her that we all are. She is the mother who gave birth to our very existence, she is the sister who accompanies us on our way through life, and she is the beauty that we see in nature all around us.

The very first humans knew Gayatri, and they worshipped her. Nearly all known cultures worshipped Gayatri – in different forms. She was known as Hathor to the ancient Egyptians, as Pachamama to the Incas, as Toci to the Aztecs, as Ninsun in Mesopotamia, as Gaia to the ancient Greeks, as Ceres to the Romans, as Anu to the Celts, as Nerthus to the Germanic people, and as Kali to the Indians. She has different names and forms of appearance in different languages, but the essence of is always the same: She is the caring mother who gave rise to the universe, Earth, and everything that there is. People all over the world made little figurines in honor of Gayatri. One of them is pictured right. They can be found all over the continents. People started worshipping Gayatri as soon as she gave them language to understand her greatness – around 35,000 years ago. Consequently, the earliest figurines date to around 35,000 years ago. ([Wikipedia/Earth Mother](#))

Gayatri was worshipped for thousands of years ↗. She helped humans develop tools, master metal, and she even taught them writing. But as soon as she taught humans how to write, around 5000 BCE, something strange happened. Humans began worshipping other gods. Egyptians worshipped lion gods, Indians invented all kinds of different gods, and in the Middle East, people started abandoning faith in Gayatri in favor of Baal.



A figure of Gayatri, from Europe, from around 25,000 BCE
[Picture taken in the Natural History Museum of Vienna/Austria]

Gayatri felt betrayed. She had accompanied humans loyally from the cave to early civilization. All her attempts to keep people with her failed. Finally, Gayatri became very sad and bitter. When she saw that she could not bring her people back to the right path, she reasoned how she could take revenge. She could have destroyed Earth with a snip of her fingers. But Gayatri thought of something greater. She knew exactly how to inflict the biggest pain on her earthlings. And she came up with a devilish plan.

She would send a spirit to some humans, and empower these humans to become prophets. Some of these prophets could do miracles. Others could talk with the dead. Again others would write poetry of magical beauty. Again another would be able to part the waters. To yet another one, Gayatri gave enlightenment under a tree. And each prophet would tell people a different story. One would tell them to worship a single God. Another would tell them that he is the son of God. Others would say that there are no gods, but spirits all around us. And Gayatri knew exactly what would happen. Through their gifted abilities, the prophets would draw followers. First only a few, but later more and more. These followers would follow their prophets, and keep their word alive after they died. And when followers of one prophet would meet the followers of another prophet, they would try to convert them to their faith. And since all prophets were given magical powers by Gayatri, none of the followers had any more convincing arguments that the followers of the other prophet. Eventually, this would lead to bitter fighting. And since no-one could ever prove anybody else wrong, this fighting would continue until the dawn of days.

And this is indeed what we observe. The story of Gayatri can finally explain to us not just how the world came into existence, but also why there are so many religions. It can also explain how Moses could part the waters, and how Buddha could be so wise. It all becomes clear now. And so it is time we come back to the true faith, the faith in Gayatri.

Really?

Well, kind of. People did revere a female goddess all over the world. However, I made up the story of how she got deceived by mankind. Gayatri does not really exist. At the same time, her story is more plausible than many of today's religious stories, because (1) Gayatri was indeed revered in nearly all continents over tens of thousands of years and (2) the story can explain why we have so many different religions today. Thus, it can explain more things than today's religions. But it's still wrong ↗.

Proof strategy

In the sequel, we will use the story of Gayatri to show that proofs for the supernatural are wrong. Technically, a proof for the supernatural is a true theory ↗ that predicts the existence of the supernatural ↗. This theory counts as evidence that the supernatural exists ↗.

We will show that these theories can equally well be used to prove the existence of Gayatri. Since Gayatri does not exist, she is a counter-example to the theory ↗. Therefore, the theory is wrong.

Proof by claim

God exists

This is a simple claim. It does not need to be true. We could also claim "Gayatri exists" – which is false ↗. In the same way, an atheist could claim "God does not exist". To find out which of these claims are true, we need to support the claims by evidence ↗.

If you do not think that God needs evidence, see the end of this chapter ↗.

There is a god in every being

Some people believe that there is a god in every being, in animals, in plants, in Earth and in the forces of nature.

Similarly to the previous statement ↗, this statement is a simple claim. It needs evidence to support it. If we accept statements without evidence, we can as well claim "Gayatri is present in all beings of nature" – which she is not ↗.

If you do not think that gods need evidence, see the end of this chapter ↗.

Most people believe in God!

The vast majority of people on this planet believe in supernatural beings ↗. If there were no god, then 90% of the world's population would be wrong. Is it not more reasonable to assume that they are right, and that there must be a god?

Unfortunately, it is not possible to conclude from a belief to the truth. This fallacy is known as the Argumentum ad populum ([Wikipedia/Argumentum ad populum](#)). Here are some examples of false things that millions of people believed in:

- The Sun orbits around the Earth.
- Dancing certain dances makes rain.
- Slavery is a good thing.
- Witches must be burnt.
- The goddess Gayatri exists ↗.

In all of these cases, the belief of millions was wrong. Thus, these cases serve as counter-examples for the theory "If many people believe it, it must be true" ↗.

Apart from that, people believe in quite different gods: Single gods, multiple gods, good gods or evil gods ↗. Some people also believe in ghosts and witches. It is difficult to derive any consistent statement of existence from these beliefs. As Charles Darwin argued: If we want to take the belief of the majority as the truth, we should all believe in evil spirits, as the belief in such spirits is much more widespread than the belief in a loving god.

Truth is not something to be decided by votes.

By [Atheisme.ca](#)

People have always believed

Religion is a very old human phenomenon. This is taken as evidence that there must be something true about the existence of gods.

However, if people believe in something for a long time, this does not mean that the thing is true ↗. The belief in Gayatri, for example, was upheld for tens of thousands of years ↗. It is much older than any of today's religions. Still, Gayatri does not exist. This shows that we cannot take the age of a belief as a proof for the truth of that belief ↗.

People believe in gods mainly because everybody else does it ↗. Everybody else does it because their parents did it ↗. The parents did it because their parents did it, and so on, until we come to a person or group of people who claims to be in touch with the supernatural. This touch with the supernatural, however, is never proven. Thus, following a religion because everybody else does it is like a proof by induction, where the induction hypothesis holds, but the base case hangs in the air.

People go "Do you think the vast majority of the world is wrong?"

Well, yes.

I don't know how to say it nicely, but yes.

By *Tim Minchin*

There is a God Gene!

It has been hypothesized that a certain gene predisposes humans towards spiritual beliefs. This gene has been called the God Gene ([Wikipedia/God gene](#)). Can this be used as evidence for the existence of God? ↗

We first note that the gene can equally well be used as evidence for the existence of the goddess Gayatri ↗. We can say that this mother goddess implanted this gene in us (called the "Gayatri Gene") so that we may remember and revere her. Indeed, mankind revered Gayatri for tens of thousands of years (in different forms). Still Gayatri does not exist. Therefore, we cannot use the god gene argument to support belief in one particular god or goddess.

We could still use the god gene to argue that humans are predisposed for the belief in the supernatural in general. This may be true. However, this does not mean that the belief in the supernatural must be correct. Humans are equally predisposed to believe that fat and sugar are good for them. This belief is hard-wired in the human nature, because humans had to accumulate fat and sugar to cover their energy needs. Indeed, humans will devour large quantities of chocolate if given the chance. Today, however, where nutrition is readily available, this desire is no longer adequate. On the contrary, we have a tendency to become obese if we eat too much fat and sugar. Thus, even though the belief is hard-wired, it is still wrong. Thus, it serves as a counter-example to the theory "If some conviction is hard-wired in the human being, it must be true" ↗.

*Religion is like a Big Mac.
Just because it tastes good and it has sold millions,
doesn't mean it's good for you.*

By [Atheism Today](#)

Argument by Imagination

It is sometimes argued that the very fact of us having an intuition of God implies that he exists. People are somehow fascinated by the concept of God. Doesn't this imply that there is something about it?

However, having a precise imagination of something, or being fascinated by something, does not allow us to conclude that this thing exists. For example, we have a very precise imagination of all kinds of legendary creatures: Dragons breathe fire, unicorns have one horn, Gayatri has large hips ↗, and fairies have a light-colored dress. Some of us are even fascinated by these creatures. Still, they do not exist.



Dragons breathe fire.
When did you last meet one?
[\[Gustauma @ 7themes\]](#)

*It is the mark of an educated mind
to be able to entertain a thought without accepting it.*

By Aristotle

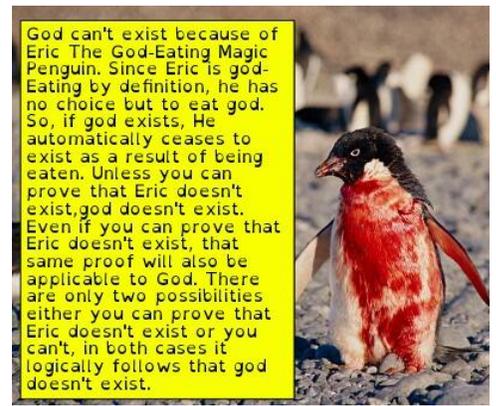
God does not believe in atheists

This argument goes as follows: Assume that God believes that atheists do not exist. Still, atheists exist. Now let us apply the same argument to god: Atheists believe that god does not exist. Still, god exists.

This argument says that, just because someone believes that something doesn't exist, we cannot conclude that it really doesn't exist. That is totally true. However, it can also be applied the other way round: Just because someone believes that something exist, we may not conclude that this thing exists. In other words: even if theists believe that God exists, this does not mean he exists.

All of this illustrates that human belief does not tell us anything about reality – neither about existence, nor about inexistence.

Remark: God is commonly assumed to be omniscient. Thus, he knows that there are atheists. Thus, it is unreasonable to assume that God believes that atheists do not exist. Therefore, the hypothesis on which the argument rests is invalid.



[Found in: Progressive Secular Humanist]

All religions believe the same

Many religions believe in the unique God ↗. This makes it look as if their beliefs are essentially the same, and as if atheists were standing apart.

There is indeed some overlap between religious beliefs ↗. However, not all religions believe in a unique god ↗. There are Polytheistic religions (worshipping many gods), Nontheistic religions (which do not believe in personal gods), Spiritual religions (which believe in unnamed spirits rather than gods), UFO religions (which worship extraterrestrial intelligent beings), and Animist religions (which hold that natural physical entities such as animals possess a spiritual essence). We discuss these religions in detail in the [Chapter on Religions](#).

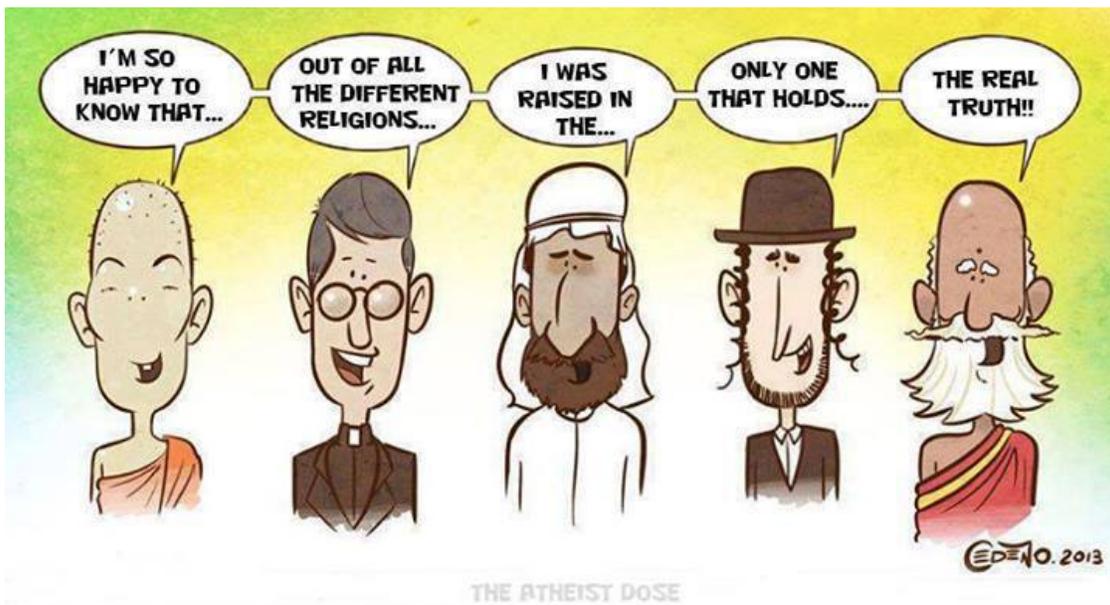
It turns out that around half of the world does not believe in the abrahamic god. A large portion of humanity does not believe in personal gods at all. Around one billion people believe in multiple gods. By saying that all religions essentially believe in the same God, we are doing injustice to these numerous religious communities. However, adherents of the abrahamic religions are rarely aware of this diversity ↗.

In light of this diversity, atheists no longer stand so far apart. For every single religion-specific belief (trinity, divinity of the Quran, existence of gods in all elements of life, reincarnation, etc.), an atheist is on the side of the majority of the world population by not believing in it.



It's the same god, really!
Conflicts with more than 1000 deaths per year, as of 2015. Conflicts with religious component in yellow.

[Empty map: E pluribus Anthony]
[Data: Wikipedia]



Remark: Besides, the belief of many does not make a thing true ↗.

All abrahamic religions believe the same

The abrahamic religions share a belief in a unique God ↗. So it looks as if atheists are standing apart. In reality, however, the abrahamic religions are quite different from each other.

Christianity and Islam

Christianity believes that God is triune, i.e., he consists of three different entities ↗. This concept, however, is rejected by Islam. Furthermore, Islam holds that Jesus was a human and that he was neither crucified nor resurrected. The Quran says:

- People of the Book, do not go to excess in your religion, and do not say anything about God except the truth: the Messiah, Jesus, son of Mary, was nothing more than a messenger of God, His word, directed to Mary, a spirit from Him. So believe in God and His messengers and do not speak of a "Trinity", that is better for you – God is only one God, He is far above having a son, everything in the heavens and earth belongs to Him and He is the best one to trust. [Quran / 4:171]
- Those people who say that God is the third of three are defying (the truth): there is only One God. If they persist in what they are saying, a painful punishment will afflict those of them who persist. [Quran / 5:72]
- That they said (in boast), "We killed Christ Jesus the son of Mary, the Messenger of God"; – but they killed him not, nor crucified him, but so it was made to appear to them, and those who differ therein are full of doubts, with no (certain) knowledge, but only conjecture to follow, for of a surety they killed him not: – Nay, God raised him up unto the himself; and God is Exalted in Power, Wise. [Quran / 4:157]

Thereby, the God of Islam and the God of Christianity are incompatible.

Islam and Judaism

The God of Judaism looks compatible to the God of Islam. And yet, Jews and Muslims are some of the most antagonized peoples in history ([Wikipedia/Islam and antisemitism](#)). The conflict runs exactly along religious boundaries. This suggests some fundamental incompatibility between their beliefs ↗.

Bahai faith and Christianity

The Bahai faith considers itself the successor of Judaism, Christianity, and Islam (and all the other religions that existed at the time point when the Bahai Faith arrived). The Bahai Faith believes in a unique god. However, it does not explain whether this god has a son (as in Christianity) or not. Either way, its concept of God will be incompatible with at least one other abrahamic religion.

More differences

The above list shows that, even among the abrahamic religions, the theological convictions differ. They differ enough to make it a religious duty in Christianity and Islam to convert the people of the other religions to these religions ↗. They differ enough to prohibit adherents of Judaism, Christianity, and Islam from marrying adherents of the other faiths ↗. They differ so much that these religions prohibit the conversion to any of the sibling faiths – under penalty of death ↗. If all religions believed essentially in the same god, then why would these boundaries be necessary? The answer is that even the abrahamic faiths are less compatible among themselves than believers would like to believe ↗.

Atheists, in contrast, can marry followers of any religion from their point of view ↗. In this sense, they are closer to all of these religions than the religions are among themselves.

The Muslim says the Christian is wrong.

The Christian says the Muslim is wrong.

The atheist says both are right.

By anonymous ↗

Remark: People often raise the question of whether the gods of Islam, Judaism and Christianity are not the same god in spite of these differences. Maybe the people just believe in the wrong traits of the same God. The question of whether these gods are the same or not, however, is not to be answered by atheists. Besides, even if these religions believe in the same god, that does not mean he exists ↗.

I can feel that God exists!

Many people feel that God exists. Thus, we can ask whether this is evidence for his existence.

The feeling that God exists is one of the most common arguments for the existence of God. However, these feelings differ across individuals and across times: For tens of thousands of years, people felt that Gayatri existed ↗. Today, some Hindus feel that there exist multiple gods ↗. They feel this just as strongly as others feel that there exists only one god. The Romans also felt that there were several gods. Monotheists would reject these beliefs. However, their argument for monotheism (their feeling) is not stronger or weaker than the Romans' argument (their feeling). The failure to realize this is one of the biggest issues with religion in general ↗.

Atheists, in contrast, feel that God does not exist. Even those who have tried have not been able to feel the existence of the supernatural ↗. If feeling counts as a proof, then this proves that God does not exist.

To atheists, this "feeling of something higher" is just the result of a number of psychological processes. These are: the desire for protection ↗, self-talk ↗, imagination ↗, the insight that we have much less power over our life than we commonly assume ↗, the longing for hope ↗, the personification of entities ↗ and events ↗, and our tendency to assume humanness ↗. None of these, however, is proof for the existence of a god.

If fifty thousand people say a foolish thing, it's still a foolish thing.

By Bertrand Russel

Pragmatic Arguments

Atheism is blasphemy!

Blasphemy is the defamation of the name of a god ([Wikipedia/Blasphemy](#)). In this sense, the denial of God is certainly a blasphemy. However, since there is no god in an atheist's world, an atheist does not have to be afraid that the blasphemy causes it any harm.

We could argue that the denial of God insults his adherents. However, if voicing a disbelief in God insulted theists, then voicing a belief in God insults atheists – for example if it is printed on bank notes. This conclusion however, is usually not drawn ↗.

To make sure that my blasphemy is thoroughly expressed, I hereby state my opinion that the notion of a god is a basic superstition, that there is no evidence for the existence of any god(s), that devils, demons, angels and saints are myths, that there is no life after death, heaven nor hell, that the Pope is a dangerous, bigoted, medieval dinosaur, and that the Holy Ghost is a comic-book character worthy of laughter and derision.

By James Randi

Question



Sabarish Bharadwaj

I do not.

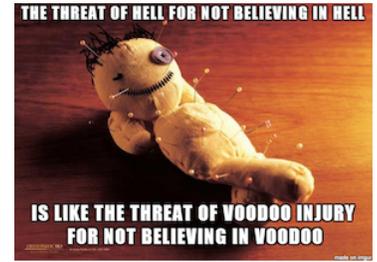
I am also of the opinion that God did create the universe. But unlike the standard versions of God, my God doesn't give a shit about what people do. He created the universe as a part of his study on singularities. He wanted to see what kind of singularities form in a universe, given a set of universal constants. A by-product of the study would be to see what regions in the parameter space would give rise to a stable universe, and the sustainability of such universes. The rise of our, and all other, species was just an insignificant, irrelevant event in this study of His.

Can you prove him wrong?

Atheism leads to hell!

A common thinking goes that if we do not believe in God, then we go to hell ↗. Therefore, we should believe in God. This is the argument that is implicitly used in many Christian denominations, and explicitly in Islam ↗.

However, this argument is faulty: If God does not exist, then neither does hell. Atheists do not believe that hell exists. For atheists, hell is just an invention that people use to scare other people – much like adults use Robin Goodfellow to scare children. Robin Goodfellow does not exist. Neither does hell.



[Evangelical Pastafarism]

Eskimo: If I did not know about God and sin, would I go to hell?

Priest: No, not if you did not know.

Eskimo: Then why did you tell me?

By the [Global Secular Humanist Movement](#)

Positive effects of religion

This essay takes a very critical view on religion in general ↗. Yet, there are a number of positive effects of religion. These effects include:

- personal strength
- happiness
- a moral framework
- a community

We discuss them in detail in the [Chapter on the Benefits of Religion](#). If religion has so many positive effects, then why do atheists not choose to believe in gods?

Atheists note that, even if the belief in God can have a positive effect on some people, this does not make God exist. For example, the belief in Santa Claus also makes children happy, but Santa Claus does not exist. Therefore, it is impossible for an adult to start believing in Santa Claus, even if we tell him that this will make him happy. Analogously, it is not possible for atheists to start believing in the supernatural in order to be happy ↗. Atheists prefer to believe things because they are true, and not because they make them happy.

Apart from that, religion does not have all the positive effects that people commonly associate with it. For example, people in religious countries are actually unhappier than people in secular ones ↗. In the same vein, religion has a number of dangerous, and sometimes disastrous effects on society. We discuss them in the [Chapter on Criticism of Religion](#).

You may need religion for comfort. That doesn't make it true. You may need a million dollars. That doesn't mean you have them. Join the real world.

By [Richard Dawkins](#)

Pascal's wager

Blaise Pascal, the French mathematician, made the following argument for the belief in God: If you believe in God and turn out to be incorrect, you have lost nothing. However, if you don't believe in God and turn out to be incorrect, you will go to hell. Therefore, it is better to believe in God. This argument is known as "Pascal's Wager". A variant of this argument goes as follows: If God doesn't exist then I will just cease to live after death, and I cannot have feelings of regret; if it's the wrong god, then both the atheist and the believer suffer; and if God exists, I'm good.

Unfortunately, the argument has at least three flaws:

1. The argument works if the only alternative to atheism is monotheism. However, as we know today, that is false ↗. There are at least 2000 possible gods, and hundreds of denominations even for the supposedly same gods ↗. This makes the chance of choosing the right god(s) one to several thousand. If you worship the wrong god, you may make the true god very angry – much more angry than if you didn't believe at all. The abrahamic god, for example, gets extremely angry if people worship other gods. Now if the true god is the one of the Mayas, then worshipping the abrahamic god will make the Maya god very angry. Thus, it is actually safer not to worship at all. Homer Simpson summarized this by saying: What if we're worshipping the wrong god, and every time we go to church we're just making him madder and madder?
2. Even if you believe in the true god(s), the argument does not guarantee that the true gods appreciate your opportunistic behaviour. The gods of most religions require wholehearted devotion. As most gods are omniscient, they would discover your false faith.
3. It is not true that you don't lose anything by adhering to a religion. Religions usually come with dietary restrictions, restrictions of sexual liberty, rituals, dogmata, and restrictions of whom you can marry. We fill an entire chapter with these issues, the [Chapter on Criticism of Religion](#). If you follow a religion, but turn out to be wrong, then you have needlessly curtailed your life – your only life. If you add in all the damage that religion inflicts on humanity ↗, you may actually have done more harm than good with your life.

Finally, atheists refuse to believe in some arbitrary stories that someone tells them, because this can be harmful in itself ↗.

By believing in an imaginary god, you have not "lost nothing". What you have done is committed yourself to a lifetime of delusion, instead of committing your life to reality.

By [GodIsImaginary.com](#)

Yes, but maybe he exists!

One of the most frequent arguments for following a religion is a variant of Pascal's Wager ↗, which just says: Yes, but maybe God exists!

Yes, maybe. But maybe not. For atheists, a "maybe" is just not enough to start following a religion. Scott Berry explains this by telling the following story on [Quora.com](#):

Let's say a Christian finds someone else who believes the exact same things as they do, down to the last letter, with one exception: the other person believes that you must have three llamas, and you have to allow those llamas to eat at your dinner table. When people hear this, their reaction is generally "That is the stupidest thing I've ever heard." Never once has anyone decided they should rush out and buy llamas, just in case. But why not?

Once you understand why you do not rush out and buy llamas, you will understand why atheists don't rush out and worship the Christian god. It just doesn't make sense to follow some religion for which there is no evidence.

Belief in God is convenient

Pascal's Wager essentially tells us to believe what is most convenient ↗.

This line of thinking, however, is rarely followed – neither by atheists nor by theists. Many religions carry some inconvenience with them. Muslims, for example, have to fast once a year; Hindus have to follow all types of rituals; Jews may not operate devices on a Saturday; Christians also have to fast; all of them have restricting laws on sexuality. There are, however, some more liberal religions that have no such constraints. Take, for example, the Wicca Religion ↗ or the Bahai Faith ↗. These religions offer the same postmortal comfort as the established religions, but come with much less demanding rituals. If people wanted to believe what is most convenient, then they could start believing in these newer religions. However, they don't. They don't because what counts for them is not the convenience, but the plausibility of their belief. Try explaining to a Hindu that he should become Muslim, because he could have 4 wives instead of just one. He will tell you that he is not Hindu because it is convenient, but because Hinduism is most plausible to him.

The same holds for atheists: They refuse to submit their life to a myth for which there is no evidence ↗.

*A man convinced against his will
is of the same opinion still.*

By anonymous

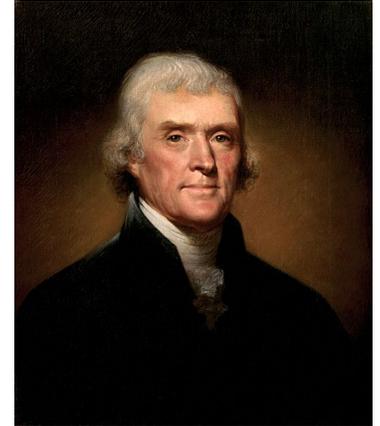
The Atheist Wager

The Atheist Wager is a reply to Pascal's Wager ↗. It was brought forward by Michael Martin in his book "Atheism: A Philosophical Justification". The wager goes as follows:

You should live a good life and be a nice person, but leave religion alone. If God is loving and kind, he will forgive you for not believing in him and reward you in the afterlife for having been a good person. If God punishes you despite having been a good person all your life then God is unjust and you shouldn't worship him. [Wikipedia/Atheist's Wager].

Question with boldness even the existence of God; because, if there be one, he must more approve of the homage of reason than that of blindfolded fear.

By Thomas Jefferson



Thomas Jefferson
[Rembrandt Peale]

Redefinitions

God is love

This argument goes as follows: Most atheists believe that love exists. One can argue that love itself is God. The two are equivalent. Then, atheists believe that God exists.

By love, we mean the "strong feeling of affection" [Oxford Dictionary / Love]. This feeling, however, is nothing supernatural ↗. If we define God as being love, then God is not supernatural. God is just another name for the natural feeling of affection. Thus, atheists have no problem with this definition of God and indeed believe that this god exists.

However, this view of God excludes the other attributes commonly ascribed to God: He is not omniscient, he did not create the universe, and he does not stand above the laws of nature. Thus, the word "God" would no longer mean the god of the monotheistic religions ↗. This would be confusing. Therefore, it is more convenient to call "God" the God of the monotheistic religions and "love" the feeling of affection. This is indeed the common meaning of words ↗. With these meanings, atheists do not believe in God.

God is the universe

The pantheistic argument says that God is equivalent to the universe, i.e., the set of all existing things. Since atheists believe in the existence of things, atheists would thus believe in the existence of God.

If we define God as being all that exists, then our God is not supernatural ↗. Hence atheists have no problem with this definition of God. They believe in the existence of things and if we call the things God, then they believe in God.

However, this view of God excludes the other attributes commonly ascribed to God (omniscience, creation of the universe, omnipotence etc.). Thus, the word "God" would refer to something different than the God of the monotheistic religions ↗. That would be confusing. Therefore, most people prefer to call God "God" and to call the universe "universe" ↗. With this meaning of the word, atheists do not believe in God.

It does not make much sense to pray to the law of gravitation.

By Carl Sagan

Remark: If God is the set of all existing things, he exists himself. So he is part of the existing things. This means that he is, together with all other things, a proper part of himself.

God is the universal principle of existence

Some people say that God is the universal, basic principle of our existence and of life ↗. If atheists believe in this universal principle, then atheists believe in God.

Unfortunately, it is not very clear what this universal principle is. Let us try to make it more concrete ↗. Would we say that the universal principle is the existence of things? Then this question is treated above as Pantheism ↗. Or is it the power that made the world come into existence? Then the "universal principle" is a different name for God ↗. In this case atheists do not believe in this universal principle.

I am not aware of a different "universal principle". It may just be an empty word ↗.

Abstract Universal Hypotheses

Sense behind everything

The argument goes as follows: We observe that all things in life have a certain sense: Chairs are made to sit on, cars to drive and the laws of nature have the purpose of holding the material world together. The sense behind this order in nature is God ↗.

It is certainly true that most man-made things (such as chairs and cars) have a certain "sense". Here, "sense" has the meaning of "purpose" and ultimately refers to the intention of the maker. Now let's look at the things in nature: volcano eruptions, lightnings, waterfalls... The argument supposes that there is "a sense" behind these things. That is, the argument supposes that there is a maker who pursues an intention with these things. This, however, was what the argument aims to prove in the first place. Therefore, the argument presupposes what it aims to prove.

The argument is an example of a universal abstract hypotheses ↗.

- *Just believe everything I tell you, and it will all be very, very simple.*
- *Ah, well, I'm not sure I believe that.*

By Douglas Adams

Everything goes in cycles

Many things in life repeat themselves. For example, the tide comes and goes, and seasons repeat. This recurring nature is seen as a proof for God.

The recurring nature certainly applies to the seasons and the tide. Nevertheless, there are also things that do not go in cycles. For example, if a pencil is used up, it never comes back. If you got a chance in life, the chance may

possibly never be there again. The second law of thermodynamics even says that the entropy of the universe will steadily increase without any chance of ever being reversed ([Wikipedia/Second law of thermodynamics](#)). Thus, not everything repeats itself. The theory is just wrong ↗.

Furthermore, even if everything repeated itself, this does not mean there is a god. The rule "Everything repeats itself, therefore God exists" has not been validated ↗. Rather, the rule is an example of an abstract universal hypothesis ↗. These, however, are rarely true.

The concept of sense

This argument goes as follows: Humans have the concept of sense. Everything humans have a concept of must have a role-model in nature. Thus, sense is inherent in nature. This sense is, ultimately, God ↗. This rather philosophical argument is based on the assumption that everything humans have a concept of must be derived somehow from a role-model in nature.

This theory is wrong: Not everything humans have a concept of needs a role-model in nature. Humans (and some animals) for example have developed the concepts of language, symbols and abstraction. We can be sure that the single-cell animals that preceded the living beings of today had no concept of abstraction ↗. Thus, humans developed a concept for something that had no role-model in nature. Similarly, humans developed the concept of sense (which essentially means the intention of a behavior) without the need for a role-model. Therefore, the theory is wrong ↗.

This argument is an example of an abstract universal hypothesis ↗.

Argument from Dualism

This argument is based on an intense and old philosophical discussion. It goes as follows: We observe that any thought is always embedded in a physical system. For example, human thoughts cannot exist without a human body. Seen this way,

(1) all thought has risen from matter

Similarly, we observe that thought creates matter. For example, if a human constructs a chair, the human's idea of the chair becomes a physical structure. Hence,

(2) all matter has risen from thought

This insight defines a kind of dualism between thought and matter. Thought has a corresponding matter and matter has a corresponding thought. Hence, given the material world, there must be a thought that gave rise to it. This thought is, ultimately, God ↗.

The first problem is that the argument can be continued: If God (the thought) gave rise to this world (the matter), then it follows by (1) that there must be a matter that gave rise to God. This is usually denied.

Therefore, people leave away (1) and postulate only (2): All matter has risen from thought. Now let us see what could be a counter-example to that rule ↗. What if some matter were manifestly ill-designed? For example, what if some animals had eyes that they cannot use? Would that be a counter-example? If this counts as a counter-example, then we can point to the mole rat: It has eyes that it cannot use ↗. Thus, the theory is false, and the argument is over ↗.

If the mole rat is not enough of a counter-example, let's look at things such as volcanoes, illnesses, cockroaches, or rocks. These do not have any visible thought that precedes them. Hence, for the theory to stand, we have to say that the "thought" is something invisible, undetectable. Then, even rocks and cockroaches are no longer counter-examples. In fact, there cannot be any counter examples at all. Everything has just risen from thought, no matter whether we see the thought or not. This, however, means that the theory is unfalsifiable ↗. If we assume that there is a thought, but that it is undetectable, then we are just as wise as before. The theory is meaningless ↗.

The theory (and in fact the whole idea of the dualism between thought and matter) is an example of an abstract universal hypothesis: It offers a simple all-embracing schema for our world, but it is so weakly defined and it has been generalized from so few evidence that it is of no use ↗.

Everything in life is one

Advaita or *Nonduality* is a philosophy that asserts that the fundamental property of the things in life is their oneness. As an Advaita website explains: Your fingers are all different from each other, but are they separate? They all arise from the same hand. Similarly, the objects, animals, plants and people in the world are all definitely different in their appearance and functioning. But they are all connected at their source – they come from the same source. This one Being that is behind all life has an infinite number of different expressions that we experience as different objects. To continue with the hand analogy, your fingers are all made of the same substance. They are made up of similar tissues, cells, atoms, and at the deepest level, subatomic particles. Similarly, when your experience of reality becomes more subtle, you discover that everything is just different expressions of one field of nondual Being. [Endless-Satsang.com / [Oneness](#)]. This one Being can be called God ↗.

It is certainly true that many things have something in common. All fingers of my hand are on the same hand. Yet, to give oneness to the fingers of my left hand and the fingers of my right hand, I need to generalize to "they are on the same body". If I want to give oneness to the fingers of my hand and the fingers of your hand, I have to generalize to "they have the same shape". To generalize to fingers and hooves, I have to say that they are of the same cells; to generalize to fingers and my watch, I have to say they are made of atoms. To generalize to fingers and an abstract concept such as a square root, I have to say that they both exist. To generalize to fingers and unicorns, I have to say that they both exist in my mind. Thus, the theory is basically "If I speak about something, then it exists in my mind". This theory is true. However, it carries no practical value. In particular, it cannot be used to predict the existence of God.

The assumption of nonduality is an abstract universal hypothesis ↗ – essentially an all-embracing, yet unfalsifiable hypothesis. Since the hypothesis is unfalsifiable, the opposite of the hypothesis is equally true. Let us give that a try: "Your fingers look all similar, but are they the same? If you look closely, you will find that each one of them is a little different from the other. Similarly, the objects, animals, plants and people in the world are all different in their appearance and functioning. Even if two things look similar to us, every one is slightly different from all the others. Just like every fingerprint is unique, and like every snowflake is unique, so is every being unique. When your experience of reality becomes more subtle, you will discover that everything is in its own way unique, and different from everything else that might look similar." This discourse is as true as the previous discourse that asserts oneness of everything. If the opposite of a theory is as true as the theory itself, then the theory is nonsense ↗.

Remark: The theory that "Every two things have something that is different" is trivially true, because two things are considered identical if and only if they share all properties (wikipedia/Identity). Thus, if you look at two different things, you will always find something that makes them unique (and be it only their position in space).

The spirit of nature

We observe that the environmental damage we impose on the world sometimes contributes to natural disasters. Thus, nature appears like a conscious being who "fights back" if it is attacked. This perceived consciousness behind nature is attributed to God ↗.

However, not everything that appears to behave like a human has consciousness. Rivers, for example, always find the swiftest way to the ocean. Although this can be interpreted as a conscious search for the optimal way, it is simply a consequence of gravity. Similar mechanisms are the reasons for other natural phenomena, such as the search of a bacterium for sugar ↗. Thus, it would be an over-interpretation to suspect consciousness behind nature.

Apart from that, the mechanisms of nature are unfortunately too weak to counter all human activity. Pollution is proceeding relentlessly and species are dying out every day. Thus, the idea that "nature fights back" is just wrong ↗.

A spirituality that sees meaning in the whims of fortune is not wise but foolish. The first step towards wisdom is the realization that the laws of the universe don't care about you.

By Stephen Pinker in "Enlightenment Now"

Conscious beings

This argument goes as follows: In our everyday life, we make a natural distinction between living (conscious) and non-living (non-conscious) things. For example, a stone is a non-conscious thing, while a boy is conscious. When a boy throws the stone, we notice that the source of the flying stone is a conscious entity. Now, we observe that the wind blows. Should we not assume a conscious entity behind the wind, just as we assume a conscious entity behind the flying stone? If so, then these conscious entities are the gods.

We first note that all events in (macroscopic) nature can be predicted by the laws of science. The event-gods would be obeying these laws without exception. For example, the Sun god has to make the Sun set every day exactly according to our calculations. He cannot decide to make Sun set an hour earlier. This means that the Sun god cannot actually take decisions on his own. He has no free will. Thus, he is lacking a crucial component of consciousness. Furthermore, the gods can even be yoked by humans to move the electrons in a light bulb, to turn the axle in a diesel engine, and to heat the food in a microwave. Thus, the gods would be in fact inferior to humans.

But what if the gods just consciously follow what we humans predict and enforce? In that case, we cannot prove that there is no conscious being. There could be a conscious being in everything, and these conscious beings could just choose to behave exactly as if they were mere physical entities. This means, though, that they are no different from physical entities. If something always behaves exactly as a physical entity, well, then it is a physical entity. In other words, the hypothesis that there are conscious beings behind everything who just behave as if they did not exist is unfalsifiable ↗. This entails that we are not any wiser about this world if we assume these entities. The hypothesis is literally meaningless ↗.

The idea that everything had some consciousness behind it seems to be driven in part by the human instinct to suspect human-ness in the phenomena of nature ↗. It is an abstract universal hypothesis ↗.

I am a polytheist.

There are hundreds of gods that I do not believe in.

By anonymous

Abstract universal hypotheses

Quite a number of arguments for the existence of God make an all-embracing assumption about the phenomena of life: One argument ↗ assumes that there is a sense behind everything, which is ultimately God. Another argument ↗ postulates that everything in nature needs a role-model. The argument of Dualism ↗ says that matter always rises from thought. Non-Dualism ↗ says that one-ness is a fundamental property of everything. Another argument ↗ goes that everything in life comes and goes in cycles. Yet another argument ↗ says that everything is driven by conscious beings.

These arguments are abstract universal hypotheses (AUHs). An AUH is a theory about the world that is so general and fuzzy that it is not admissible in rational discourse ↗. More precisely:

The AUHs overgeneralize

The AUHs promise us a universal principle behind the phenomena of life. This satisfies our thirst for the understanding of this world. Yet, the AUHs swipe under the rock that they just do not apply to everything. For example, not everything in life is "one", not everything has a sense behind it, not everything needs a role-model in nature, and not every matter has risen from thought (see the respective articles). The AUHs just postulate that from a few handy instances. This, however, ignores the cases where the hypothesis does not hold ↗.

The AUHs are not falsifiable

If we want to insist on the truth of an AUH, we tend to interpret them in such a vague way that they do apply to everything. Then, however, the AUH becomes, by definition, unfalsifiable ↗. This means that nothing in life can prove them wrong. This means, in turn, that the AUH does not have any predictive or explicative value. The AUH does not allow us to predict that something will happen or will not happen – we are as wise as before.

The opposite of an AUH is equally true

The unfalsifiability entails that we can equally well claim the opposite of the AUH ↗. For example, instead of claiming that "Everything in life is one", we can equally well claim that "Everything in life is dual". This is in fact what some eastern religions say – with equally many examples. If the opposite of a statement is as true as the original statement, then the statement makes no sense.

Therefore, AUHs cannot be used to prove the existence of gods. In this book, we group them together as "metaphysical philosophies", and treat them in the [Chapter on Religions](#).

Interaction

Near Death Experiences

A near-death experience (NDE) is a personal experience associated with impending death, encompassing multiple possible sensations including detachment from the body, feelings of levitation, total serenity, security, warmth, the experience of absolute dissolution, and the presence of a light [\[Wikipedia/NDE\]](#). Does this not prove the existence of something that goes beyond our lives?

Interestingly, there is a drug called Ketamine that produces all of the elements of an NDE when it is injected into normal, non-dying people. In other words, an NDE is a natural, chemically induced state that the human brain enters. The trigger for an NDE is lack of oxygen to the brain and body. [\[GodIsImaginary.com / Near death experiences\]](#) [\(Wikipedia/NDE/Neurobiological analysis\)](#)

Thus, the sensations of an NDE can be induced by a chemical reaction. They are hence no proof for the supernatural.

We know of only one documented case where someone decided to study life after death in a self-experiment. Thomas Lynn Bradford designated a woman who was to receive supernatural communication from his spirit after his death. Then Bradford committed suicide. Unfortunately, no communication has ever been received from him [\(Wikipedia/Thomas Lynn Bradford\)](#).

Spiritual encounters

I have met a man who was an unbeliever. One day, the presence of God struck him so violently that he ran immediately to a church and had himself baptized on the spot. Are such powerful experiences not a proof for God?

If a god truly existed and were universal (or even sole), then that god would appear in different parts of the world. And yet, that is not the case. People have spiritual experiences exclusively with the deities they know. Rarely has a Hindu an encounter with Allah, a Muslim an encounter with Khonvoum, or a Christian an encounter with Vishnu. Everybody meets exactly the deity they learned about. Therefore, such encounters are more likely to be the product of education than the proof for a particular deity.

However, the encounters could be used to argue for the existence of "something" supernatural ↗ ↗. And yet, it is very hard to judge to what degree we can rely on personal accounts of the supernatural. In Jerusalem, e.g., dozens of tourists every year succumb to the so-called Jerusalem syndrome. This is the syndrome of developing religiously themed obsessive ideas, delusions or other psychosis-like experiences [\(Wikipedia/Jerusalem syndrome\)](#). These people start saying that they have met God, that they will perform miracles, or that they are the next prophet. Nobody (except the person concerned) takes these experiences seriously. Rather, these people are hospitalized as mentally ill.

Thus, we generally reject the theory "If someone says they have a spiritual encounter, that person met the supernatural" ↗. Therefore, the theory cannot be used to prove the existence of the gods. On the contrary, there are quite a number of natural causes for such encounters. We discuss them in the [Chapter on the Founding of Religions](#).

Table-turning

Table-turning is a social activity, where several people sit around a table and put their fingers on it. The participants ask questions, and the table will tip to one edge if the answer is "yes", and to another one when the answer is "no". In more advanced settings, people agree on a code that maps table movements to letters, so that the table can spell out words. A related technique is the Ouija board – a board that has letters written on it. People place their hands on a small piece of wood that glides over the board, thus spelling out sequences of letters. Such movements are seen as evidence for supernatural spirits, most notably in Spiritualism ↗.

We first note that different people get different answers from the activity. Also, in the words of the founder of Spiritism, "Spirit-orthography, it must be confessed, is not always irreproachable" [Allan Kardec: *The Spirits' Book*]. Therefore, the activities are seen as evidence not for a single omniscient god, but for several, individualist, unrelated spirits with different degrees of knowledge. This has prompted the Catholic Church to warn their faithful against the practice ↗.

Natural Explanations

It is not surprising that a table can be made to move if people place their hands on it. After all, we always move things with our hands. The astonishing part is only that the participants say that they do not consciously move the table. The following factors can contribute to this phenomenon.

Ideomotor movements

People can move their hands subconsciously, while being convinced that they do not move their hands. In other words: Honest, intelligent people can unconsciously engage in muscular activity that is consistent with their expectations [Wikipedia/Ideomotor phenomenon]. In an experiment, people were asked to put their hands on the Ouija plate and think of a particular direction (say, the door of the room). The plate started moving in that direction, even though people were told not to move the plate (The Guardian: *The psychology of spiritualism: science and seances, 2013-10-20*). As soon as there is some movement by some hands, the other hands unconsciously move along, thus amplifying the movement. The same happens with table turning: The physicist Michael Faraday placed sheets of cardboard on the table, and had the participants put their hands on that cardboard. When the spirits "talk", it is the cardboard that moves, not the table – thus proving that the participants make the movement and not the spirits. When the participants become aware of this, the table turning no longer works (Wikipedia/Table-Turning).



Video evidence is, unfortunately, not terribly convincing.
[karruk]

Fraud

In a large number of cases, such purported interaction with the spirits was proven to be fraud. The Fox sisters, for example, whose reported interactions with the supernatural marked the beginning of Spiritualism ↗, later admitted that they used tricks to make the spirits "speak" (Wikipedia/Fox sisters). For table turning, common tricks include: just pushing the table in the desired direction; waiting until the opposite player pushes the table down, and then placing the foot under the table so that one can move it at will; moving the table with the knee; or using a ring on the finger that hooks into a protuberance of the table (Wikipedia/Table-Turning).

False memories

People tend to idealize their memories. In one experiment, participants were made to believe that the table flies, by someone repeatedly saying "The table rises! Spirits, raise the table higher!". Two weeks after the experiment, one third of the participants wrongly remembered that the table rose (Wikipedia/Séance). When such memories are shared with others, people tend to amplify them ↗. Just as for miracles ↗, people tend to make the stories more miraculous as they tell them ↗. The effects of the "Chinese Whispers" game apply accordingly.

All of these factors make people believe that the table moves by itself.

There is actually counter-evidence to the theory that table-turning communicates with the supernatural.

Blindfolding

If the participants of the Ouija game are blindfolded, so that they cannot see the letters, then the game does not work. The spirits just make nonsense sequences of letters ([National Geographic: Do You Believe?, 2015-02-05 \(Youtube video\)](#)). This shows that there cannot be spirits at work. The same should apply to the table-turning activity, if the participants decide to use a letter code that they do not know. For example, they could ask the spirits to use the Morse code, and decode the message after the activity. In such a setting, table turning will not work. The games work only if the participants can consciously participate in building the answer.

No advantage

If these activities really worked, then their participants should be able to know things that other people do not know. Thus, they should be more successful than the average person at making life choices, at betting, or at least at resolving murders (by contacting the spirits of the victims). And yet, that does not happen. Participants know just as much as everybody else. The Spiritualists have not, by the advantage they get from supernatural communication, risen to become the dominating class in politics, business, or science. Brazil (where Spiritualism is particularly popular, with millions of adherents) has one of the highest murder rates in the world ([Wikipedia/Countries by homicide rate](#)). Plenty of spirits to talk to.

All of this shows that table-turning and related activities are nothing supernatural. It remains, however, as Allan Kardec rightly pointed out, a fascinating activity.

Miracles

Some people believe that God works miracles. Are such miracles not proof for his existence?

Who did it?

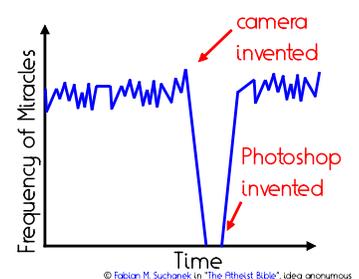
We first note that a miracle does not prove the existence of a specific god. Most major religions have claimed miracles: Buddhism tells the story of a prophet who darkened the sky, Christianity claims the miracles of Jesus, Islam claims that God parted the waters, the Jews know the miracles of Elijah and Elisha, and the Bahais claim a miracle of their founder ([Wikipedia/Miracle](#)). Thus, if a miracle occurs, it could be in favor of any of these religions.

Worse, the religions each claim that the miracles of the others are fakes or done by their own demons ↗. The Old Testament, e.g., tells Jews and Christians that if a prophet from another religion performs a miracle, then this is done only by the abrahamic God to test his followers (Bible / Deuteronomy 13:1-5). The New Testament urges Christians not to take miracles by non-Christian prophets as a proof for existence of other gods (Bible / Revelation 19:20, Matthew 24). In Islam, the Jinns are spirits that can perform miracles ([Wikipedia/Jinn](#)). Thus, any miracle of any other religion can be seen as a Jinn activity to mislead humans. This book uses the same strategy: It claims that all miracles are in fact ultimately the work of Gayatri ↗. So, next time we see a weeping statue of Mary, we should consider Gayatri as an explanation.

Thus, miracles cannot prove the existence of one particular god. They can just point us to the existence of some unspecified god.

Miracles don't happen

The positive atheist position on miracles is clear: Miracles do not happen ↗. If something seems to be a miracle, it is not. This is a falsifiable ↗ and validated ↗ theory. There is not a single case of a scientifically verified miracle. Despite the ubiquitousness of cameras, we are not inundated with videos of miracles ↗. Several organizations have promised awards for the first person who shows a verifiable proof of a supernatural intervention. In total, there are 29 prizes waiting to be claimed, totaling several thousands of dollars. So far, no prize has been claimed ([Wikipedia/List of prizes for evidence of the paranormal](#)). If the



miracles were really as obvious as is claimed, then it would be easy to prove it. The people who see the miracles could be rich. Yet, that does not happen.

And the reason is that nothing can go against the laws of nature. Miracles are either

- Tricks done by magicians ([Wikipedia/Magic](#))
- Fraud (as in the case of Televangelists ↗)
- Consequences of scientific theories that the general public is unaware of ↗
- Lies, propagated by those who have an interest in the miracle ↗
- Stories, mystified and enhanced as they pass along ↗

As an example, consider the Miracle of Calanda: There was a man whose leg had been amputated. He later had his leg restored. This would justly qualify as a miracle. However, the more likely explanation is that the man never had the leg amputated, but bound his foreleg to his thigh in order to be more convincing as a beggar. When his trick was discovered, he claimed a divine miracle to save face ([Wikipedia/Miracle of Calanda](#)). The same goes for weeping statues ([Wikipedia/Weeping statue](#)). All weeping statues studied so far have been shown to be fraud. The stories of weeping statues are propagated by people who have an interest in these miracles – for example in order to attract tourists and pilgrims. Such sites make millions from the pilgrims ↗. The same goes for faith healings ↗. Such healings do not work. The stories of faith healings are propagated in order to attract the trust (and the money) of the gullible ↗. People are happy to pass on such stories, and each time the story is passed on, it becomes a little bit more miraculous ↗.

For scientific-minded people, all miracles are of this type.

You also don't believe in miracles

Let us look at the miracles performed by the abrahamic prophets. Whenever Moses, Jesus, or Mohammed performed a miracle (or reported a revelation), there were people who doubted it (see, e.g., Quran / 5:110, 16:101, 26:186, 25:4, 25:5, 25:8, 26:185, 81:22-25 ↗; Bible / John 20:24-29, Matthew 14:28 ↗). That is strange. If you walk for me on the water without technical means, I would immediately believe you have supernatural powers. And if you speak verses of divine beauty in a seemingly miraculous way, that would make me at least open to your arguments. So why did people not believe in face of the evidence?

In fact, we are the same today: We do not believe either that miracles happen. Take for example the picture on the right. It shows a man in a costume who hovers in the air. I took the picture personally in London. The man is a real person in a costume, you can actually go and talk to him. And he really hovers in the air, you can put your hand under him. This is amazing! Still, not for a second did you consider this to be magic. You see a man flying before your eyes, and still you are 100% convinced that there must be a trick. You would probably brood over the trick, discuss with friends, search on the Internet, or even go ask the person to figure out how he does it. But you will just not believe that this person is magic.



It's a miracle only if it happened 2000 years ago. If it happens before my eyes, it's not a miracle.
[Picture taken in London/UK]

Now all I ask of you is to apply the same criticism to the miracles of your religion.

If you do not believe in magic even if I show you a man flying before your eyes, then why do you believe in magic for stories that reportedly happened over 1000 years ago in some other country? ↗ ↗ ↗

We only ever believe in miracles if they are told to us, and never when they are shown to us. And the reason is that we fully well know that miracles do not happen.

Is it more probable that nature should go out of her course or that a man should tell a lie? We have never seen, in our time, nature go out of her course. But we have good reason to believe that millions of lies have been told in the same time. It is therefore at least millions to one that the reporter of a miracle tells a lie.

By Thomas Paine in his book "The Age Of Reason"

Prayer

People pray for many things. They pray for recovery from illnesses, for luck, or for success. Sometimes, these wishes become true. This is seen as a proof for the existence of God.

Where prayer works

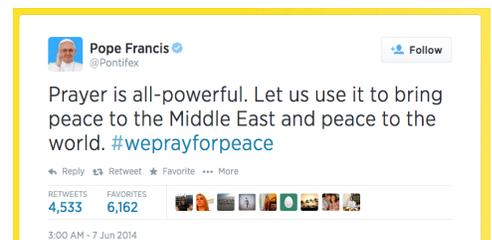
Prayer can have a very positive psychological impact on the person who prays. People who pray feel less anxiety and they manage stress better. Prayer can even help curing an illness, if that illness is mainly psycho-somatic. We discuss this in detail in the [Chapter on the Benefits of Religion](#). However, all of these effects are psychological. They are based on a number of psychological phenomena ↗, which include the Placebo effect ([Wikipedia/Placebo](#)) and the powers of positive thinking. While these effects are undisputed, they cannot be used to prove the existence of a god.

Hence we turn in the following to prayers for non-psychological effects.

Where prayer does not work

For a positive atheist, the position is clear: Apart from psychological effects, prayers have no influence whatsoever on the physical world ↗. Formulated as a theory: If you pray for something, this is not going to influence the probability of that thing happening. This is a falsifiable ↗ and validated ↗ theory.

You can try it out on your own: Pray for anything that would not happen anyway by coincidence. Then watch as your prayer gets ignored. For example, pray for your laptop to fly. Pray for finding \$10,000 in your basement. Pray for peace in the Middle East. All of this is just not going to happen. God never answers prayers if there is no possibility of it happening coincidentally [[WhyWontGodHealAmputees.com/5](#)]. Examples are [[WhyWontGodHealAmputees.com/11](#)]:



You have tried this for the past 2000 years and it did not work. Will you now please draw the consequences?

- God never answers the prayers of amputees. If he did, we would see amputated limbs spontaneously regenerating every day.
- God never answers impossible prayers – if he did, people would be flying through the air like superman on a regular basis.
- God never answers prayers that break the laws of nature – if he did, then scientific equations and computer models would have to take God's random antics into account.
- When two people pray opposite one another, obviously someone's prayer will go unanswered. If a million people pray for the same thing but only one can have it (e.g., winning the lottery), then by definition 999,999 people will have their prayers unanswered.
- God doesn't answer medical prayers – otherwise the U.S. would not need to spend \$2 trillion a year on health care.
- God doesn't answer prayers to avert natural disasters – if he did, hurricanes would not hit the U.S.
- People who pray do not experience better weather than people who don't [Marshall Brain: How God works / 74].

Therefore, the hypothesis "Prayer works" is simply false ↗.

To go beyond individual prayers, consider the developing nations, where many people live in misery. These places happen to be among the most religious places on Earth (see my essay on [Why are poor countries poor? / Religion](#)). Every day, millions of these people pray to God. And yet, these places suffer the most from natural disasters, famines, and wars. A concrete instance of this phenomenon is the Pater Noster prayer, the main Christian prayer. Among other things, it asks God to "give us our daily bread". It is recited daily by millions of believers. Yet, every year, thousands of Christians perish from malnutrition.

Thus, we cannot validate the theory that prayer would be effective ↗. On the contrary, we have a huge number of counter-examples for the theory. Thus, we can safely conclude that prayers can never cause what would not be possible anyway by coincidence ↗.

Prayer does not even increase the probability

Now we can still hope that the prayer at least increases the chance of a coincidence. Yet, this is not the case. Consider, e.g., the royal family in the United Kingdom. In the Sunday mass, faithful Britons pray in the thousands for the health of the British queen and her family. Yet, as the Victorian scientist Francis Galton remarked, the royal family gets ill as often as everybody else (Richard Dawkins: *The God Delusion*; [Wikipedia / Studies on intercessory prayer](#)).

There are several studies on the matter. The majority show no effect of prayer ([Wikipedia / Studies on intercessory prayer](#); [Wikipedia / Efficacy of prayer](#)). The largest study was the "Study of the Therapeutic Effects of Intercessory Prayer (STEP)", which was conducted by the Templeton Foundation, a religious think tank. It was published by the *American Heart Journal* in April 2006. It asked hundreds of people to pray for the health of hospital patients, and then compared their health to the health of patients that received no prayers. The study showed that prayer had no effect. Worse, those people who knew that someone else was praying for them had lesser chances to recover from surgery, suggesting that they saw the prayer as a proof for the difficulty of their situation ([Templeton Foundation: Largest Study of Third-Party Prayer Suggests Such Prayer Not Effective In Reducing Complications Following Heart Surgery](#), [Wikipedia / Studies on intercessory prayer](#)).

Thus, these studies invalidate the theory that prayer can influence physical events ↗. This is, by the way, how science works. The mathematical formula that computes the distribution of lottery numbers does not include a factor "unless John prays to God, in which case the probability of this number is greater". This is because prayer has no influence whatsoever on physical things – and we know it ↗.

Thus, prayer cannot be used to show the existence of God. On the contrary, the ineffectiveness of prayer shows that the God who grants prayers does not exist. This, however, is a conclusion that believers are somehow unable to draw ↗.

Prayer doesn't even work "sometimes"

It is commonly pointed out that God cannot be forced to grant the wish of a prayer. God himself decides whether to fulfill a prayer or not. This decision is beyond the prayer's control, i.e. a prayer may be heard or may not be heard. We cannot tell upfront whether the prayer will be heard ↗.

It follows that praying to God is no different from praying to a water kettle. If we pray to the water kettle, the prayer may also work sometimes, and sometimes not. It will actually work with exactly the same probability as when we pray to God. For example, pray to God that there is no lethal car accident in the US tomorrow. Tomorrow, pray to the water kettle that there is no lethal car accident in the US the next day. You will see that both prayers have the same effect: none. And the reason is simple: Both the prayer to God and the prayer to the water kettle are just you talking to yourself in your head. It has no influence on reality whatsoever.

The idea that prayers work "sometimes" and "sometimes not" makes no prediction at all. The theory is unfalsifiable and hence nonsensical ↗.

Why we think that prayer works

We can often read in the newspapers how survivors of earthquakes or plane crashes testify that their prayer saved them. Yet, no-one talks about the hundreds of people who also prayed and were killed nevertheless. Suppose that 100 Christians are diagnosed with a cancer that has a survival rate of only 5%. All 100 Christians pray fervently. In the end, only 5 of them survive. What you will read in the press are only those 5 cases where the prayer "worked" (Marshall Brain: *How God works*). This is because "Person prays, then dies" is not a great headline [[WhyWontGod-HealAmputees.com](#)]. Thus, prayer appears to work simply because we are counting the hits and not the misses ↗. Furthermore, we tend to remember only the cases where the prayer actually worked ↗. This predisposition is then used by religious figures to claim powers that do not exist ↗.

People may also have an interest in claiming that their prayers work ↗. If you don't have a story [of a successful prayer] to tell, it appears that you have lost favor with God. Therefore, you may be willing to exaggerate a little, and



[Found in: Progressive Secular Humanism]

even make something up, in order not to lose face with your peer group. [GodIsImaginary.com]

James 5:16: The prayer of a righteous person is effective.

In other words, God doesn't listen to the prayers of assholes. Why should he? I guess if you're finding that your prayers are neither powerful nor effective, that can only mean one thing.

By [Atheist Cartoons](#)

Faith Healing

Faith healing is the attempt to cure human physical ills through prayer, rituals, or a visit to a shrine ([Wikipedia/Faith healing](#)). Spiritual healing is the attempt to cure by appeal to the supernatural, without link to a religion ([Wikipedia/Energy medicine](#)). If these techniques work, they could be evidence for the supernatural.

Unfortunately, they don't. Scientific studies have repeatedly shown that faith healing does not increase the chances of healing over a placebo. According to the American Cancer Society, "available scientific evidence does not support claims that faith healing can actually cure physical ailments" [[American Cancer Society / Faith Healing](#)]. Reported effects of faith healing can all be attributed to one of the following:



[Found in: [Progressive Secular Humanist](#)]

Spontaneous remission

This is "the unexpected improvement or cure from a disease that appears to be progressing in its severity" [[Wikipedia/Spontaneous remission](#)]. Some serious ailments like cancer and multiple sclerosis abate for months or years for reasons we don't understand [[Skeptic's dictionary](#)]. However, these effects happen independently of any faith healing. Some instances of faith healing have entailed spontaneous regression, others did not. Hence, we may not conclude that faith healing cures ↗. On the contrary, Littlewood's law states that even if a thing has a chance of happening of 1 in a million, an average person will observe such a thing on average once a month ([Wikipedia/Littlewood's law](#)).

Psychology

Quite a number of physical ailments are caused by psychological factors ([Wikipedia/Somatoform disorder](#)). For example, conversion disorder is a somatic symptom disorder involving the actual loss of bodily function such as blindness, paralysis, and numbness due to excessive anxiety [ibid]. Pain disorders are subjective experiences of pain due to psychological causes (ibid). Such ailments are real, measurable physical sufferings, but they have a psychological reason. Therefore, it is in some cases possible to heal them with psychological methods. Faith healing is undoubtedly one of these methods. However, such healing is a purely natural process. It does not pop a god into existence ↗.

Fraud

Faith healers have an interest in making the public believe that their methods work. Several have been found to deceive their patients or followers ([Wikipedia/Faith Healing/Fraud](#)). One of the most notorious cases was Peter Popoff, who would put able people into wheelchairs and then "heal" them ([Wikipedia/Peter Popoff](#)). It is easy to fake the inability to walk, the inability to see, or pain. It is equally easy to fake that these ills have suddenly disappeared. Stories of successful healings are also eagerly promoted and disseminated by believers – either bona fide or in an attempt to boost the legitimacy of their religion.

Placebo effect

It is well established that if the patient believes that a cure will have an effect, the cure will indeed have an effect, even though the cure is useless in itself ([Wikipedia/Placebo](#)). Since faith healing patients believe that faith healing works, they are susceptible to a cure. However, this works with any technique that the patient believes in, no matter whether it refers to supernatural beings or not.

Falsehood

Some claims of faith healing are outright false. In 1956, a woman appeared in a faith healing TV show testifying that she had been miraculously healed, with the evangelist's prayers, of cancer. Twelve hours after the show was taped, the woman was dead. In the same year another woman appeared in this show, giving an enthusiastic testimonial about her miraculous cure of spinal cancer. She succumbed to the disease three days later. [[Pascal's wager / Faith Healing](#)]

Unproven illness

In some cases, an illness is "healed" that was never a confirmed illness in the first place. For example, a televangelist would claim that "There is a woman in Cincinnati with cancer of the lymph nodes. I don't know whether its been diagnosed yet but you haven't been feeling well, and the Lord is dissolving that cancer right now!". So if there is any women in Cincinnati who doesn't feel well, she will think she has a cancer, and will then feel miraculously healed – of a cancer that was never a cancer in the first place ([Pascal's wager / Faith Healing, Marjoe](#)).

Shotgunning

In TV shows, the faith healer would announce the curing of a disease of an unnamed individual. For example, he would say things like "There is a woman in Kansas city who has sinus. The Lord is drying that up right now. Thank you, Jesus!". Either there no such healing takes place, and then no-one would be able to complain. Or there is such a healing that takes place spontaneously, and then that woman would call the show and tell of her miraculous healing. She would then be brought forward as a proof for the faith healing [[Pascal's wager / Faith Healing](#)].

Unfalsifiability

If the faith healing does not work, the standard reasoning is that the patient did not have enough faith in it. With this, we can always explain why the healing did not work. However, we can never predict upfront whether faith healing will work in one particular case or not ↗. This means that we can never prove that faith healing doesn't work. Hence, the statement that faith healing works is unfalsifiable and thus nonsense ↗.

These shortcomings are the reason why faith healing is only ever applied to illnesses that are subject to spontaneous remission or subjective improvement. Faith healing is never successful when applied to defects that are physically impossible to cure, such as an amputated limb. There is not a single case where an amputated limb has been restored through faith healing ([WhyWontGodHealAmputees.com](#)). Hence, faith healing cannot be used to prove the existence of the supernatural.

*You don't see faith healers work in hospitals
for the same reason that you don't see fortune tellers win the lottery.*

By anonymous

I talk to God!

A person's personal relationship with God is often presented as evidence for the existence of God ↗ ↗. If God did not exist, then believers would basically imagine this relationship, and talk to themselves when they pray. So, do atheists claim that people who pray talk to themselves?

Yes. To an atheist, people who pray talk to themselves. They subvocalize their thoughts. This is nothing unnatural or rare. Most people talk to themselves, often constantly. This is known as "intra-personal communication", as "internal monologue", or as "private speech" ([Wikipedia/Self talk](#), [Wikipedia/Private Speech](#)). Self-talk helps us order our thoughts, memorize things, concentrate, de-stress, and learn. It fulfills essential functions for our psychological comfort. Both theists and atheists use it. Some people imagine that they talk to their deceased spouse or grandparent. Others conduct imaginary dialogues with their friends in order to formulate their thoughts and wishes. Some people call that friend Jesus ("What would Jesus do?"). The reader is invited to try it out. It suffices to imagine talking to a person under the hypothesis of complete confidence, and say what you always wanted to tell that person. This is a very helpful technique. Yet, it remains self-talk.

When people pray, God does not answer. He answers neither physically ↗ nor verbally. What happens when people say God talks to them is that they become aware of their own thoughts. While this has undoubtedly a positive function ↗, it is no proof of the supernatural. On the contrary: If there were really a god, then it would be sufficient

to talk to this god in order to sort out religious conflicts. People could just ask him whether Jesus is the son of God, how many gods there are, or whether a particular prophet was sent by him. Clarifying this once and for all would appease roughly half of the world's most deadly conflicts ↗. And yet, God seems to say different things to different people. To be precise, he always tells people what they believe anyway ↗. And the reason is that God is imaginary ↗. He exists only in the believer's head. Hence, he tells the believer always what their conscience or social background would tell them anyway.

To see this, let's say that the all-powerful, all-knowing creator of the universe was going to transmit personal messages to believers. Wouldn't you expect the people receiving these messages to blow the rest of us away in every intellectual endeavor? God could, for example, tell the believer how to build a nuclear fusion reactor that will completely solve the world's energy problems! However, what the believer typically gets from God is more like "Also search for your keys behind the couch". That message, of course, is the believer's own reasoning. Never has God said anything that the believer could not think for himself anyway. This shows that talking with God is just talking to yourself. [GodIsImaginary] If God really talked to people, Church services would look very different: Everyone would just sit quiet and let God speak to all of them together. When finished, they could all compare notes and they would have all heard the exact same thing from God. The fact that this doesn't happen tells us that God is not speaking to people. The fact that we need pastors, priests, and preachers shows us that God is not speaking himself [Marshall Brain: How God works / 205].

The president of the United States has claimed, on more than one occasion, to be in dialogue with God. If he said that he was talking to God through his hairdryer, this would precipitate a national emergency. I fail to see how the addition of a hairdryer makes the claim more ridiculous or offensive.

By Sam Harris in his book "Letter to a Christian Nation"

Numerology

Several arguments for the supernatural are based on numerology, i.e., on supernatural interpretations of letters and numbers. Examples are:

- The Quran code is the discovery that the number 19 occurs in various forms in the Quran. The Quran's first verse, e.g., consists of 19 letters. Each of its words occurs in the Quran in multiples of 19: The first word "Isim" (Name) occurs 19 times. The second word, "Allah" (God) occurs 2698 times (19×142). The third word "Al-Rahman" (Most Gracious) 57 times, 19×3, and so forth. [Wikipedia/Quran code]. This is sometimes seen as a proof for the divinity of the Quran.
- In Judaic numerology, 36 is the number of those people who could potentially be the Jewish Messiah. In gematria (a form of Jewish numerology), the number 18 stands for "life", because the Hebrew letters that spell the word "chai" (living) add up to 18. Since $36 = 2 \times 18$, the number 36 represents "two lives" [Wikipedia/Numbers in Judaism].
- The Bible code is the assumption that, by taking every n-th letter of the Bible, secret messages can be revealed (Wikipedia/Bible code). For example, by taking every 50th letter of the Book of Genesis, we find the word "torah". This method has been used to postdict the appearance of Osama Bin Laden. These discoveries are seen as proofs for the divinity of the Bible.



Numerology doesn't always work.
[unknown source]

The problem with these calculations is that the parameter space is so large that we can find anything in it. Let us take the Bible code as an example. The idea is to arrange the Bible text in a square, and to find vertical sequences of letters that yield words. Since we may choose the width of the square to be anywhere between 2 and 1000 characters, and since we may start our vertical sequence anywhere we like, there are millions of possible combinations. If one of them coincides with a word or phrase, that is just to be expected. Indeed, the Skeptical Inquirer was able to find such secret codes also in a 1987 United States Supreme Court judicial opinion (Dave Thomas: Hidden Messages and The Bible Code. Skeptical Inquirer, 1997-11-01). In a similar vein, Cornelis de Jager has found that a bicycle can accurately predict the physical constants of our universe ("cyclosophy"). Let P be the diameter of the pedal of the bicycle, L be the lamp diameter, and B be the bell diameter. Then $P^2 \times L^{1/2} \times B$ is exactly the proportion of the mass of the proton to the mass of the electron! In a similar way, de Jager can reconstruct the

gravity constant, the distance to the sun, and many other constants! (Cornelis de Jager: Adventures in Science and Cyclosohy. Skeptical Inquirer, Vol 16, No 2, Winter 1992; Carlo H. Séquin: Music of the Spheres / Slide 32). This phenomenon is known as the *look-elsewhere effect*, or the problem of multiple comparisons: the more variables we analyze, the more likely it is that one of them will show the desired behavior just by chance ([Wikipedia / Look-elsewhere effect](#), [Multiple comparisons problem](#)).

It is the same with the Quran code: any correlation of numbers would have been accepted as miraculous. For example, if the number of suras was a multiple of the number of words in the first sura, and if this factor was the same as the number of letters in the first word of every 10th sura – that would have done the trick. Since there are arbitrarily many of such constellations, one of them was poised to work.

In general, such mysterious correlations are only ever found after the fact. No Bible researcher could predict that Bin Laden would become the head of a terrorist organization. Otherwise, they could have warned the United States not to support him financially when he was still an ally ([Wikipedia/Operation Cyclone](#)). Only when Bin Laden turned against the United States did the researchers find the message in the Bible. And the reason is that such numerical correlations are only ever found after the fact has been known anyway ↗. Hence, they are no proof of the supernatural.

Picking the results you want, and ignoring the ones you don't is a great way to reinforce whatever it is that you want to believe. It's just not a great way to arrive at truth.

By Scott Berry on Quora.com

Predictions

Many religions have sacred scriptures. Some of them contain very accurate descriptions of things that science discovered only centuries later.

Predictions from scripture

Examples for predictions made by holy scripture are:

Hindu Scripts

The Hindu short script "Hanuman Chalisa" says: "Yug sahastra yojan per Bhanu ". This means "The sun is at a distance of yug shastra yojan". Now, 1 Yug = 12,000 years, 1 Sahastra = 1,000, 1 Yojan = 8 Miles. Multiplying these numbers yields 153 million kilometers – which is nearly exactly the distance we know today.

Quran

The Quran predicts "Their skins will bear witness against them as to what they have been doing" [Quran/41:21]. This accurately describes that fingerprints will be used one day to identify criminals.

Bible

The Bible contains a large number of prophesies ↗. Among other things, it says that, in Israel, God will "turn the desert into pools of water, and the parched ground into springs [...] so that people may see and know that the hand of the Lord has done this, that the Holy One of Israel has created it.". This predicts the creation of Israel as a wealthy state in the desert – something which indeed happened.

The argument goes: Nobody knew these things when these books were written. The fact that they turned out to be right hundreds of years later prove that the books are divine.

Skepticism

We first note that people only ever accept the predictions of their own holy books. No Muslim will accept the miraculous predictions in the Hindu scripts. No Hindu will accept the predictions in the Bible, and no Christian will accept the predictions in the Quran. That should make us suspicious. Why is that? There are several reasons:

Counting the hits and not the misses

The holy books make thousands of predictions. If they make thousands of predictions, then it is quite natural that some of them will be correct. However, many of them will be false. The Quran, for example, predicts that "of every thing [God has] created pairs" [Quran/51:49]. This was widely hailed as a prediction about the two genders in animals and plants. And yet, there are animals that have only one gender ([Wikipedia/Asexual reproduction](#)). Hence, the Quran was just wrong ↗. As long as we do not have a comprehensive account of the predictions made by the holy books, we cannot judge whether they are generally correct or not.

No proof of divinity

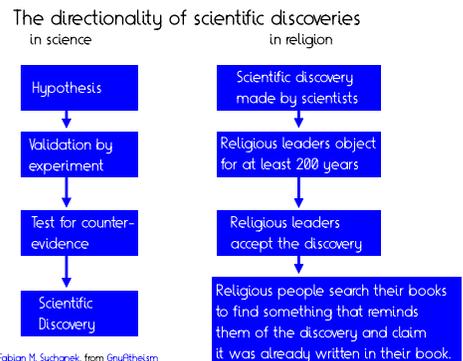
Even if a book makes a correct prediction, this does not mean that the book would be divine. For example, the ancient Greek philosopher Democritus predicted that matter would be composed of atoms. He correctly stated that atoms were physically, but not geometrically, indivisible; that between atoms, there lies empty space; that atoms are indestructible; have always been, and always will be, in motion; that there are an infinite number of atoms, and kinds of atoms, which differ in shape, and size [[Wikipedia/Democritus](#)]. This is a remarkably accurate description 2000 years before science discovered the atom. Does that make Democritus divine? Surely not. He just happened to say something that turned out to be correct. Or consider Nostradamus ([Wikipedia/Nostradamus](#)). The medieval sage predicted hundreds of things that turned out to be true in modern times ([Web search](#)). And yet, does that make Nostradamus divine? Surely not.

Contradictions with Science

If we grant science the authority to judge that a religious theory is correct, then we must also grant science the authority to judge that a religious theory is wrong. So if a religion says that evolution is false, and science says that evolution is true ↗, then we have to abandon the religious theory. This conclusion, however, is never drawn. People are happy to use science as a proof for their religion, but they dismiss it as soon as it contradicts their religion. This is inconsistent: either science does have authority or it doesn't. If it does, then abandon the religion where it contradicts science. If it does not, then do not use it to confirm religion.

Scripture makes only postdictions

The main argument, however, why the "predictions" of the holy books are not convincing is that they are actually "post-dictions": They make a prediction only ever after the fact. To see this, assume that your favorite holy book really has predictive power. Now, please tell us what will be the next scientific breakthrough. Unfortunately, it is unlikely that you can tell us the next scientific breakthrough. You can only find that breakthrough in your holy book once the discovery has been made. Then, however, the book is not actually making a prediction. It is making a post-diction ↗. The easiest proof for this is that an adherent could just place a bet on tomorrow's next big scientific discovery. He could also invest in the stocks in that market segment, or just give a hint to a researcher who is working in that area. Once the discovery materialized, the adherent would be rich. However, this does not happen.



In fact, no tangible advantage ever came out of the predictive power of the holy books. If the Quran really contained scientific wisdom, the Muslim countries should be the most scientifically advanced places in the world. Yet, they are actually the most disadvantaged places ↗. The Christian world, in contrast, is in many aspects scientifically advanced. Yet, this is not due to its Bible researchers. When was the last time that a Bible researcher made a big discovery in medicine, a breakthrough in physics, or a technological advance in computer science?

The reason why this does not happen is that the holy verses are usually so vague that nothing can be deduced from them ↗. Only after the fact do we find that they can be interpreted in the right way ↗. Then, however, they do not make predictions. They make post-dictions ↗.

Please break an analog wrist watch. I guarantee that tomorrow it will accurately show the time twice – on the second! The problem is that in order to know the moment when it shows the right hour, you need to know the right hour from another watch. And it is the same with religious predictions.

By Noam Kaiser on [Quora](#), 3rd and 4th sentence mine

Something Good

Sometimes, some really terrible things happen in our lives: We lose a loved one, our marriage breaks up, or we get fired. And yet, it seems that, whenever something bad happens, something good comes out of it. For example, if you're fired, you may find afterwards the job of your life. If you had not been fired, you would never have gotten that job. Doesn't that show that there is somehow a deeper pattern in life – that life is more than just a series of coincidences? And couldn't this deeper pattern be the divine? ↗

The belief that everything bad turns into something good is very popular in the Western world. However, this belief only makes sense in a country that generally works well, has public welfare, a medical care system, and a stable society. It makes much less sense to believe that everything bad turns into something good if you happen to live in a war-torn zone of an underdeveloped country. Every week, hundreds of people are killed in the most brutal forms in war. Thousands of children die of hunger. Hundreds of women are raped. Millions of people suffer from crippling, painful, and ultimately degenerating diseases. Take the case of a woman, who was raped, gave birth, and then saw her child die of hunger. Would you go and tell her that this will somehow turn into something good? And then, what if, a few months later, she gets carried away by a malaria infection. What good came out of this for her? Or take victims of the Nazi concentration camps. Do you think that, the day before their death, they said to each other "Don't worry, this will somehow turn into something good"? Well, if they did, then they were wrong. Millions of people perished. This shows that the theory that everything bad turns into something good is, unfortunately, wrong ↗.

We tend to believe in the theory mainly because we have the habit of counting the hits and ignoring the misses ↗. Those whose life did not turn into something good, and who perished from their mishap, do not get the opportunity to talk about it.

Luck is statistics taken personally.

By Penn Jillette

Karma

Some people believe that a bad deed entails future suffering. For example, if you steal something, then something will be stolen from you in the future. This is the idea of Karma, a concept that is very prevalent in the Indian religions ↗, and in particular in Buddhism ↗. Now, if this is true, does this not prove the existence of an overall world justice?

There are two variants of Karma: Some people believe that you will pay for your sins in your next life. In that case, we are assuming that the supernatural takes care of your Karma. This is an assumption of the supernatural, and not a proof for it ↗.

In the other variant of Karma, you pay for your sins in this life. However, this variant of Karma typically leaves open how exactly you will pay for your sins. It just says that "something bad will happen to you". For example, the bad thing may just be that you miss the bus. Now, bad things happen all the time. In particular, people who have done no harm also occasionally miss the bus. Hence, the theory is no better than chance in predicting what will happen ↗.

Now let's make the theory more concrete. Let's say: "If you commit a serious crime, then you will suffer consequences that are as severe as the punishment that the secular law provides for them." This theory is still quite vague, but it is concrete enough to show that it is false. Out of the world's 100 most brutal dictators, 50% ruled until their deaths by natural causes [Matthew White: The great big book of horrible things, 2011]. 11% enjoyed peaceful retirement, and 8% died peacefully in exile. Only 9% were put on trial and executed, 8% were assassinated, 4% were imprisoned, and 4% committed suicide [ibid]. As an example, take Chinese dictator Mao Zedong: He was responsible for the torture and killing of more than 30 million people (that is half the population of France). And yet, Mao died peacefully while still in office at the age of 82.

So, unfortunately, the theory of karma is wrong... Thus, it cannot be used to prove the existence of the supernatural.

That a particular specified event or coincidence will occur is very unlikely. That some astonishing unspecified events will occur is certain. That is why remarkable coincidences are noted in hindsight, not predicted with foresight.

By David G. Myers

On Proofs

The two parents

A friend of mine tells the following story: There was once a young girl who wanted to become a singer. She sang at various events, always hoping to be “discovered”, and brought to fame. Her mother believed in her, and supported her. Her father, in contrast, told her that she has no chance whatsoever to become famous. She should rather focus on school and on finding a job. One day, she was invited to participate in a talent-finding TV show. She did – and won the contest. With flying colors, she proved her father wrong. Her father saw that, during all these years, he actually hindered her success. He acknowledged his error, and apologized. In her thank-you speech, however, the girl did not talk about the father. She thanked her mother, who had always believed in her.

This story shows that there is no value in acknowledging something that is obvious (that the girl won the contest). There is value only in believing something that is **not** obvious (that she would succeed eventually). And, the argument goes, it is the same with God: God cannot be proven. If he could be proven, then there would be nothing to believe – there would only be to acknowledge his existence. Such an acknowledgment, however, does not have any value. What has value is believing in him even though his existence cannot be proven.

While belief without proof has its value, it is also a dangerous endeavor: It can be used to justify belief in just about anything. Imagine that the girl had wanted to become an alchemist. Her dream was to convert sand into gold. Her mother believed in her, and her father discouraged her. She starts mixing chemicals in the basement. She spends months with her passion, and even drops out of school. For years, she mix different materials, ignite them, and re-mix them – without success. Her father tells her that nobody has ever succeeded making gold out of sand, and that it is a futile endeavor. He tells her that she should go back to school, and then enroll in university to study chemistry. Only her mother kept believing. But that was of no use: the girl never produced a single grain of gold. She died impoverished.

This shows that a belief in something is only of value if that something has a chance of succeeding. Now apply this to the belief in God. There are thousands of gods ↗. Of course, one can choose one of them (most likely the god we were brought up with), and devote one's life to that particular god. However, none of these gods has ever appeared. And so, from an atheist's point of view, devoting one's life to one of the gods is no more reasonable than devoting one's life to converting sand to gold.

But unfortunately, nobody talks about the alchemists who failed to convert sand to gold. Nobody talks about the people who wanted to cure cancer by spiritual means ([Wikipedia/Disproven cancer treatments](#)). Nobody talks about the thousands of young girls who also dreamed of being a singer. Nobody talks about thousands of people who aspired to be an actor – and work as waiters ([Los Angeles Magazine: Actor-Waiter](#)). People talk only about the one person who made it – and assume that they, too, are on the right track.

Ontological argument

The ontological argument goes as follows: By definition, God is perfect. If he did not exist, he would not be perfect. Hence he exists. This argument defines God in such a way that he must exist. It was first put forward by Anselm of Canterbury. However, a definition cannot pop something into existence. For example, Bertrand Russell's famous set of all things that do not contain themselves can be defined, but it cannot exist ([Wikipedia/Russell's paradox](#)).

To show the flaw of the ontological argument, we can use it to prove the existence of unicorns: A unicorn is a horse with one horn. If unicorns did not exist, they would not have a horn. Hence they must exist. Nevertheless, they don't. In fact, we can use the ontological argument to prove the existence of nearly everything. A French monk, Gaunilon,

wrote a reply to the argument entitled "On Behalf of the Fool": Suppose that beyond the boundary of man's known world (this was in the eleventh century), there is an island. Suppose that this island is perfect and greater than all islands: an island than which none greater can be conceived. To use Anselm's logic, if this island exists only in the imagination it would be less great than that which exists in reality. Hence the "island than which none greater can be conceived" must exist in reality. [\[Rejection of Pascal / Ontological Argument\]](#).

Since the argument can be used to prove anything, no matter whether it exists or not, the argument cannot be valid ↗.

*Strawberry cake with whipped cream –
the only proof of God that I can accept.*

By Hans Strehlow

It is impossible to prove inexistence

It is easy to prove that something exists. We can simply show it to people and then people will see that it exists. In contrast, it is much harder to prove that something does *not* exist. Since positive atheism holds that God does not exist, atheism can never be proven right.

Atheism can indeed never be proven right ↗. The reason is that theism can never be proven wrong. There is nothing that a believer would accept as a proof that God does not exist. As the attentive reader will immediately notice, this means that theism is not falsifiable ↗. This means that theism is meaningless ↗. It does not make any predictions about the world ↗. It is just a hypothesis without any consequences.

Atheism, in contrast, can be proven wrong: As soon as a god appears, atheism is proven wrong ↗. Until that day, it makes concrete predictions such as "Prayer does not work" ↗. This makes atheism meaningful.

Atheism cannot be proven right. Theism, in contrast, can be proven right. It's just that it has never been.

Remark: To elaborate on this quote: In "Faith versus Fact", the biologist Jerry Coyne argues that the existence of the abrahamic god is a perfectly testable hypothesis. The Bible's historical accounts could have been corroborated by archeology, genetics, and philology. The Bible could have contained uncannily prescient scientific truths such as "Thou shalt not travel faster than light". We might discover that intercessory prayer can regrow amputated limbs, or that anyone who speaks the Prophet Muhammad's name in vain is immediately struck down while those who pray to Allah five times a day are free from disease and misfortune. [Steven Pinker: Enlightenment Now]. And yet, none of this has ever happened.

The Burden of Proof

Many people think that if we want to discuss the existence or inexistence of gods, then the burden of proof lies on atheists, because theism is the normal state.

Atheists believe that the burden of proof lies on theists. This is because it is very easy to claim something that can only be disproven with an immense amount of effort. Bertrand Russel has illustrated this idea with his flying teapot analogy. He wrote: "If I were to suggest that between the Earth and Mars there is a china teapot revolving about the sun in an elliptical orbit, nobody would be able to disprove my assertion – provided I were careful to add that the teapot is too small to be revealed even by our most powerful telescopes. But if I were to go on to say that, since my assertion cannot be disproved, it is intolerable presumption on the part of human reason to doubt it, I should rightly be thought to be talking nonsense." ([Wikipedia/Russell's teapot](#)). The reason is that there is no evidence for this teapot. If there is no evidence in favor, then there is no need to find evidence against it either. The hypothesis is just a baseless invention. As Christopher Hitchens put it: "What can be claimed without evidence can be dismissed without evidence."

There are people who do not agree with this conclusion. Let us therefore postulate more entities: There are also three-headed flying snakes on Jupiter. Since this belief cannot be proven wrong, it is as valid as theism ([Rejection of Pascal / Definition of Atheism](#)). Some people argue that orbiting teapots and flying snakes are different from

gods, because gods are non-material or grander. However, we can easily ascribe any of these properties also to our teapots and snakes. The flying snakes are not material, and they are omnipotent and grand. This claim is still completely absurd. We would require proof in favor of it rather than proof against it. Atheists apply the same logic to gods.

Atheism cannot be proven true, because there is nothing that can happen in the present or future that a believer would accept as a proof that God does not exist. Thus, technically speaking, the claim "God exists" is unfalsifiable ↗. This entails two things: First, the claim does not tell us anything about the real world. There is no tangible conclusion that we could draw from "God exists" ↗. We are just as wise as before. Second, we can come up with arbitrarily many contradictory claims. For example, we can say "Two gods exist", or "Gayatri exists and created God" ↗. These claims are also non-falsifiable and hence equally non-sensical. Unfalsifiable claims are just literally meaningless ↗, and hence there is no use in proving them wrong.

While atheism cannot be proven true, it can at least be proven wrong ↗. This distinguishes it from theism.

- *I have superpowers! I can fly if I want to!*
- *That is nonsense! Prove it!*
- *What do you mean, prove it? Prove me wrong!*

By Ricky Gervais (adapted)

All beliefs are equally valid

We may argue that all beliefs deserve equal respect until proven false. This seems a democratic and tolerant solution to the conundrum of gods.

People are usually happy to subscribe to the principle of "equal validity", as long as it is applied only to their own belief. However, if we go for equal validity, then the principle will apply to all beliefs. It is a mistake (in fact, the principal fault of many religions) to assume that there would be only one god ↗. There are hundreds of religions, and thousands of gods ↗. If all beliefs are equally valid, then all of these gods exist the same way our gods exist. We should start believing in Allah, as well as in Vishnu, in Brahma, in the Horned God of the Wicca religion, and in all the other gods. We would not even know how many gods we have to believe in. Few people will consider this world view plausible.

Worse, the beliefs are all contradictory. Each supernatural system usually has one or more powerful gods, which are assumed to dominate over the others. This cannot be upheld if all beliefs are true. Particular instances of this phenomenon are the monotheistic religions, which all claim that their god is the only one ↗. One cannot believe in this god and in other gods. This is one of the main problems of the abrahamic religions ↗. Insidiously, this problem will also apply to a Hindu (or to an adherent of any other non-abrahamic religion) who wishes to uphold the principle of equal validity: As soon as this person starts believing in the abrahamic God, they have to believe that this god is the only god. Thereby, they catapult all the other gods into non-existence. This, in turn, contradicts the principle that all supernatural beliefs would be equally valid.

Worse, each god usually comes with his or her own ideas of how people should behave. Some gods require us to follow certain dietary restrictions, others want us to pray to them, and again others want us to perform certain rituals. Most gods want all of this. Even the abrahamic god requires different things according to different religious beliefs. The Muslim belief, e.g., requires fasting during the month of Ramadan, while the Jewish belief prohibits pressing elevator buttons on Saturdays ↗. If all beliefs are equally valid, then we should follow all of these constraints.

In addition, all other supernatural beliefs will also claim equal validity. Unicorns, ghosts, fairies, and good and evil spirits will all be equally true. If our children believe in tooth fairies, we have no right to disturb that belief. We have to respect their belief in tooth fairies as we wish that others respect our belief in gods. Superstitions will deserve the same validity. Some people pray to God, others touch their testicles in order to avoid bad luck ↗. All of these beliefs would deserve equal respect.

Furthermore, atheists will take the opportunity to invent all types of other unfalsifiable entities. Bertrand Russell has proposed a teapot that orbits the sun between the Earth and Mars ↗. Bobby Henderson postulates the existence of

the flying spaghetti monster ([Wikipedia/FSM](#)). An entire religion has been built on the Invisible Pink Unicorn ([Wikipedia/Invisible Pink Unicorn](#)). Theists usually oppose these beliefs as heretic, and ridiculing. Yet, under the principle of equal validity, they would have to believe in all of the entities that atheists postulate.

It quickly becomes clear that such a world view cannot be upheld. It is nonsense. Not all beliefs are equally valid. On the contrary, it is dangerous to accord all beliefs equal validity, as we discuss in the [Chapter on Criticism of Religion](#).

*If two people disagree, this does not mean that they are equally right.
It may mean that one is wrong, or the other, or both.*

By Karl Popper

We believe so many things

In our daily life, we believe many things without proof: we do not verify whether a medicine really has the desired effect, whether Barack Obama really had more votes than his opponent, or whether a signature on a contract really stems from the person who supposedly wrote it. We just believe these things ↗. So then the question arises why we should not just believe in God in the same way.

When we believe without proof, we risk a lot when the belief turns out to be wrong. We may be taking a harmful medicine; we may follow a president who was never duly elected; or we may do injustice to the person who supposedly signed the contract but never did. The same goes for the case of God: If God does not exist, our prayers, our time spent in Church, and our tithes are in vain. Worse, our life choices such as whom we trust, how we educate our children, which value system we follow, and whom we marry may be wrong ↗.

Now, in all of the worldly cases, we would eventually find out if we were wrong. If a medicine consistently does not deliver results, we would become suspicious. If election results grossly differ from the exit polls, we would demand a re-count. If the person did not really sign the contract, they will for sure tell us when we ask them. In the case of God, however, none of this will happen. We can never find out if we are wrong. This is because the belief in God is unfalsifiable ↗. There is nothing that a believer would accept as a proof that the belief in God is wrong.

Thus, the belief in God gives us restrictions for our lives, but makes it impossible to find out whether it is wrong. This is, in atheist eyes, a folly.

"Happy are those who have not seen yet still believe."

If you think about this statement, what you realize is that it creates the perfect cover for a scam.

By GodIsImaginary.com

Logical proofs are inadequate

Some people argue that logical proofs are not the right way to argue about God.

Logical proofs and scientific proofs are so popular because they can predict the truth. For example, if it has been shown by the laws of science and logic that a stone dropped from a tower will fall down, then the stone will indeed fall down. This predictive power makes science and logic highly useful. If you have an alternative technique that can predict facts with verifiable certainty, you are invited to propose it ↗.

If you have no alternative technique of predicting unknown things with verifiable certainty, then your arguments will not convince people – simply because the arguments may not lead to true conclusions. ([Wikipedia/Scientific method](#)).

The very act of considering the validity of reason already presupposes the validity of reason.

By Thomas Nagel

God is outside the realm of science!

The "Non-overlapping magisteria" (NOMA) is a view advocated by Stephen Jay Gould. It holds that science and religion each have their domain of teaching authority, and these two domains do not overlap ([Wikipedia/Non-overlapping magisteria](#)). In practice, this means mostly that religion is responsible for the sense of life, the very beginning of the universe, and the questions of ethics, while science is responsible for all natural phenomena on Earth and in the Universe. In the NOMA view, these domains are disjoint, and science should not address questions about the divine while religion should not address questions of the physical universe.

In this view, we should not (and cannot) prove or disprove the existence of gods with scientific means. The NOMA protects religious statements from scientific intervention, because it states that the realm of science and the realm of faith are strictly separated. Yet, few people actually believe in the NOMA. The following assumptions go against the NOMA:

Praying

Asking gods for something in a prayer assumes that the gods are able to have an influence on Earth. Praying may assume divine ability to make certain things happen, to influence people's thoughts, or to prevent certain things ↗. All of these items belong to the realm of science. People who pray do so because they believe that their god will increase the probability of something to happen. This is a scientifically verifiable hypothesis. Thus, people who pray for something to happen do not believe in the NOMA.

Divine design of man and animals

Some religions teach that gods designed the animal kingdom, including man ↗. The animal kingdom, however, as well as human anatomy, psyche, and social behavior, fall into the domain of biology, psychology, and the social sciences. Thus, people who believe in divine creation do not believe in the NOMA.

Divine creation of the World

Many people believe that God or gods created the world ↗. The creation of the world is a physical act, which falls in the domain of science. Even the assumption that God only initiated the cosmos is a scientific theory, because it assumes that the cosmos has a definite starting point. It may be that science finds that the universe oscillates, is part of a larger universe, or alters time ↗. Thus, people who believe that the world was created by a supernatural being defy the NOMA.

Miracles

Some believe that God or gods perform miracles ↗. Miracles intervene in the physical world in a way that can be measured by science. Thus, people who believe in divine miracles believe in an interaction between the divine and the physical, and thus not in the NOMA. This is independent of whether the miracles happened in the past or present, because science can extend to the past by carbon dating, archeology, and an ever-growing array of other techniques.

Proofs of the divine

Science has its limits. There are many things that it cannot yet explain, and may never be able to explain. When people hear that science has encountered a problem, they are quick to point out that only God can be the explanation ↗. Yet, by attempting to explain a problem in scientific discovery with God, these people defy the NOMA.

Rituals with a purpose

Some religions put forward rituals in order to win the grace of God or gods. In fact, many people perform rituals of one kind or another in order to avoid bad luck. As soon as a ritual is assumed to have an effect on the world, it falls into the domain of science. Thus, people who are superstitious, or who perform religious rituals in the hope or belief of changing their fate do not believe in the NOMA.

Prophecies

Some religious books contain prophecies ↗. They make statements about what will happen on Earth, or how certain things behave, even though these were supposedly unknown at the time of the writing. The Quran, e.g., explains the development of the human embryo in the womb. The Bible predicts the end of the world. These are statements about the physical world that fall into the domain of science. It does not help that it is usually claimed that the holy books are not books of science. As soon as they contain one prophecy about the physical world, they defy the NOMA.

Exceptions from birth and death

Christianity teaches that Jesus was killed, and then came back to life. Islam teaches that the Prophet Mohammed did not die, but rose to heaven. Catholicism teaches that Mary (the mother of Jesus) physically rose to heaven. Christianity teaches that Jesus had no human father, and that Mary was a virgin before and after his birth. Many other religions have birth myths about their founder. All of these assumptions interfere with science. Science could (at least in theory) show the remains of a prophet, and identify him by DNA analysis. Thus, any claim about the birth or death of a person is a physical claim and falls in the realm of science. Hence, a person who makes such claims does not believe in the NOMA.

To illustrate this point further, assume that one day, scientists discover the mummified corpse of a human in Jerusalem. Carbon dating shows that the person was born around 4 BCE, and died around 33 CE. A DNA analysis makes a surprising revelation: The person is missing chromosomes that were thought to be essential. This discovery suggests that this person had a mother, but no father. Do you think that for a single moment, Christian leaders will hesitate to declare that science has proven the existence and divine provenance of Jesus? If they do, then they defy the NOMA. They would uphold the NOMA only as long as science does not confirm their belief, and abandon it as soon as is convenient to them (Richard Dawkins: *The God Delusion*). A similar argument can be made for other religious beliefs: As soon as people hear that science would have proven a miracle or shown a fact predicted by a holy book, they are happy to accept this as proof of their religious belief. This shows that they do not believe in the NOMA.

Thus, we are left with the conclusion that few people really believe in the NOMA.

The good thing about science is that it is true whether or not you believe in it.

By Neil deGrasse Tyson

Deistic view

Deism is a philosophy that holds that God created the universe, but then retired ↗. Related to this view are metaphysical philosophies ↗ that hold that "God" is just a different name for a metaphysical phenomenon. Both view points say that god does not interact with the universe (a hypothesis called the "NOMA" ↗). In this view, God does not have any particular properties. He is mainly the abstract cause of existence, and nothing more.

This point of view has two consequences: First, we cannot deduce anything from this hypothesis. If the assumption of god is disconnected from the physical world, then nothing about the physical world can be deduced from it. Thus, we will know nothing more about this world than people who do not believe in God.

The second consequence is that there can be arbitrarily many contradictory, and equally abstract beliefs. For example, there could be no god, but rather a "universal principle of justice" – like the Tao in Taoism ↗. Or there could be several abstract gods – one that is the principle of justice, one that is the reason for our existence, one that is the principle of one-ness in this world ↗. Why not? Since none of these beliefs can be proven right or wrong, any belief about a god or gods is as valid as any other belief about a god or gods.

These are the problems that come with beliefs that do not concern the physical world: (1) they cannot make any prediction about the world and (2) there can be arbitrarily many contradictory beliefs. In the end, such beliefs are all nothing more than manipulations of words. These problems are so fundamental that this book proposes that such beliefs cannot be called "true" at all. They cannot even be called "false". They are just meaningless ↗. Thus, what the NOMA ↗ really entails when it is taken seriously is meaninglessness.

God is subjective truth.

This argument asserts that there is objective truth and subjective truth. Objective truth is everything that can be verified, or that concerns other people. Subjective truth is everything that is in a person's mind. In a believers' subjective truth, gods exist. In an atheist's subjective truth, they don't. This does away with the problems and disputes that arise between the two world views.

This is indeed how the world looks from an atheist point of view: Gods are subjective truth, in the sense that they exist only in the imagination of some people ↗.

On Discussion

It's impossible to discuss about God!

Many people dislike discussing about God and religion in general. However, both Islam and Christianity are proselytising religions in their current mainstream interpretations. This means that adherents of these religions have the duty to bring their faith to other people ↗. Scripture tells us:

- Always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have. But do this with gentleness and respect. [Bible / 1 Peter 3:15]
- You shall invite to the path of your Lord with wisdom and kind enlightenment, and debate with them in the best possible manner. Your Lord knows best who has strayed from His path, and He knows best who are the guided ones. [Quran / 16:125]

This duty means that believers have to be willing to discuss about God.

It's impossible to discuss about faith!

It is often argued that it is not possible to discuss about gods or faith in general.

However, people apply this view exclusively to their own faith. Most people are happy to discuss about tribal religions, sects, superstition, mysticism, or Scientology ↗. This shows that a discussion about gods and faith is not only possible, but also quite common. Even if one person or the other does not discuss about faith at all, the fact that most others do shows that it cannot be impossible. In general, atheists can discuss about all faiths and gods, thus proving that it cannot be impossible.

Often, people claim that it would be impossible to discuss about faith just in order to avoid that this faith is questioned.

Historians have cataloged over 3700 supernatural beings, of which 2870 can be considered deities. So next time someone tells me they believe in God, I'll point out that they are nearly as atheistic as me. I don't believe in 2,870 gods, and they don't believe in 2,869.

By Ricky Gervais

God's existence needs no proof

It is a common claim that God does not need a proof. Whether or not this is the case depends on what goal we pursue.

If our goal is to convince atheists to believe in the supernatural, then we do need a proof. Otherwise, atheists will not believe in gods ↗.

If our goal is impact other people in any way with our belief, then we will also need proof ↗.

If we have no such goal, then indeed we do not need a proof for what we believe ↗.

I just want to believe without discussing!

A priori, nobody is forced to discuss about their faith. There are a number of exceptions to this rule:

- It may be that your religion requires you to discuss your faith. This is the case in the current mainstream interpretations of Christianity and Islam ↗.
- If you wish to convert an atheist to your religion, you will likewise have to discuss your faith ↗.
- If you wish to implement religious measures in our society, or impact other people in other ways by reason of your faith, then you will also have to discuss your religion.

However, many people have no such aspirations. For them, religion is a private matter ↗. In this case, there is indeed no necessity to discuss belief.

I believe in God and you don't, so where is the problem?

There is no problem. I assume that you are reading this book not because there is a problem, but because you would like to know more about atheism. If you do not, then you are welcome to stop reading this book at any time.

I take comfort in the thought that, in controversies as in mineral baths, the real effect comes afterwards.

By Philaletes in Arthur Schopenhauer's "Dialog about Religion"

Chapter on the God of the Gaps

Introduction

This chapter treats the argument that God is the explanation for all the things unknown in this universe – the “God of the Gaps” argument ([Wikipedia/God of the Gaps](#)). In other words, this chapter treats the question “If not God, then what?”. The chapter consists of the following sections:

- [The Universe](#): Discusses the argument that God created the universe.
- [Everything else](#): Treats the other “gaps” that are commonly filled by God.
- [The God is just Raps](#): Explains the problems with the “god of the gaps”.

A scientific theory of the universe, as well as common objections to that theory, are discussed in the [Chapter on the Universe](#).

*If you lived two or three millennia ago,
there was no shame in holding that the universe was made for us.
It was an appealing thesis consistent with everything we knew.
It was what the most learned among us taught without qualification.*

*But we have found out much since then.
Defending such a position today amounts to willful disregard of the evidence
and a flight from self-knowledge.*

By Carl Sagan

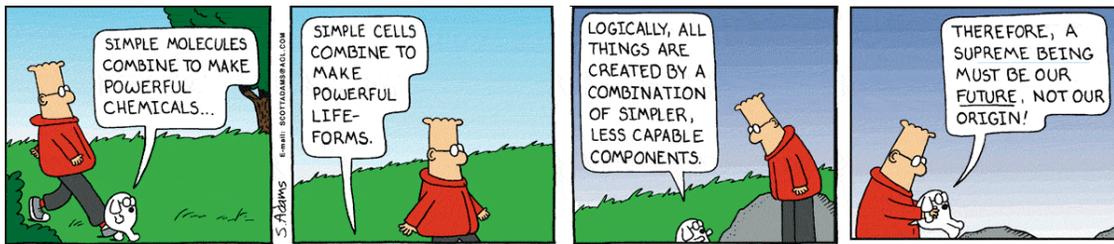
Argument by Design

The universe is an immensely complex system. This makes many people believe that it must have been designed. The main theory goes that complexity cannot arise spontaneously, but requires a “designer”.

There are several problems with this argument. First, it is wrong. Complexity can arise from simplicity, as we have seen in the [Chapter on the Universe](#) ↗ ↗ ↗.

Second, the argument contradicts itself. If complexity can arise only from complexity, then the designer must be complex as well. If it is complex, then it must have arisen from some other complexity. This is the question of “who designed the designer”. Here, it is usually argued that the designer is an exception to the rule. This, however, is an arbitrary claim. We can equally well claim that the universe itself is an exception to the rule. There is no need to add one more entity to the story.

Finally, the claim suffers from the typical problems of the “God of the Gaps” argument, which are shared among all its variations. We discuss these problems at the end of this chapter ↗. The theory cannot be falsified, and thus it does not make predictions ↗; it does not provide an explanation in the technical sense of the word ↗; it does not prove that it was really that particular god who did the job, and not some other deity or force ↗; it assumes that the world has a beginning ↗; it encourages us to stop searching for a scientific answer to the question ↗; and it wrongly assumes that theology would deliver better answers than science ↗.



[Scott Adams's Dilbert comic 1996-02-11, shortened]

Intelligent Design

This theory goes as follows: Whenever we see something smartly arranged (such as a piece of art, a rose garden, or a city), we know it has been created by some intelligent being (humans). Since the world itself is also smartly arranged, it follows that there must be some intelligent being who created it.

We first note that the theory is wrong. As we have shown in the [Chapter on the Universe](#), there are plenty of things that are arranged smartly, and that were created by purely natural processes: Snowflakes ↗, swarm behavior ↗, hands ↗, or indeed the Earth ↗. Therefore, the theory is to be rejected ↗.

Apart from that, there are plenty of things that are *not* designed intelligently:

- Some species, such as the **Neanderthal man** or dinosaurs, came into existence, but then went extinct. If the design of the world were perfect, then a species would not have been created only to disappear ↗. Some of these creatures were particularly odd: the Opabinia had **5 eyes** (see picture). It had a mouth that faced backwards ([Wikipedia/Opabinia](#)). No wonder it died out.
- The **recurrent laryngeal nerve** connects the brain to the larynx. Both brain and larynx are in the head. Yet, the nerve passes down the neck to the heart, then back up through the neck into the larynx. In a giraffe, this leads to several meters of nerves to connect two organs that are just a few centimeters apart (see illustration).
- Dolphins and whales live underwater, but cannot breathe underwater ([Rationalwiki / List of mistakes made by God](#)).
- Humans have their digestive tract and respiratory tract cross, so that they are at constant risk of **choking** (ibid).
- Bats have **solid bones**, which are difficult to fly with, and emus have hollow bones, which are easier to fly with – now that is opposite of what is required [ibid].
- During copulation, the **penis of the male honey bee explodes**, leaving part of the penis inside the female (ibid, [Wikipedia / Drone](#)).
- Bonobo apes engage in **sex for pleasure** (ibid) – between males and females, males and males, and females and females ([Wikipedia/Bonobo](#)). A god such as the one imagined by the proponents of intelligent design should never have allowed this species to exist.
- Nature is full of **vestigial structures**, i.e. structures that may have served a purpose earlier in evolution, but are now completely useless. The mole rat, e.g., has eyes, but these are completely covered by a layer of skin, so that the animal is blind ([Wikipedia / Spalax](#); [Wikipedia / Vestigial](#) ↗).
- Humans exhibit **optional vestigial structures**. These are structures that are present in some people, but that do not serve a purpose – as proven by those humans who do not have this structure but do not note its absence. The Occipitalis Minor muscle, e.g., in the back of the head, serves no purpose. While all Malays have it, only 36% of Europeans have it – without suffering from its absence. Similar examples are the palmaris longus muscle, the pyramidalis muscle, the plantaris muscle, and supplementary nipples in males and females ([Wikipedia/Supernumerary nipple](#)).
- People have a natural disposition to **love fat** and sugar. While this was useful for cavemen, it leads to **obesity** today. Obesity is one of the main health problems in rich and poor countries alike ([The Economist: The](#)



An Opabinia.
Note the 5 eyes.
[Steve Lew]



The recurrent laryngeal nerve in a giraffe
[Pixabay, adapted]

[caveman's curse, 2012-12-15](#)).

- If a baby's head is significantly larger than the pelvic opening of the mother, the baby **cannot be born naturally**. Prior to the development of caesarean section, such a complication would lead to the death of the mother, the baby or both. This is hardly a perfect design.
- The human **spinal cord** is often malformed, leading to scoliosis, sciatica and congenital misalignment of the vertebrae.
- People suffer from all kinds of **congenital diseases** and genetic disorders such as Huntington's Disease.
- **Myopia, the common cold, and allergies** cause large discomfort for people all over the world.
- Humans have an extra pair of teeth, which serve no purpose and are prone to produce medical complications – the **wisdom teeth**.
- There is a considerable amount of **evil in this world**. There is so much of it that it does not just refute the theory of intelligent design, but that it deserves a chapter on its own (the [Chapter on the Abrahamic God](#)).

These design choices are not intelligent. Hence, they invalidate the theory of intelligent design ([Wikipedia / Argument from poor design ↗](#)). We discuss other problems with this type of argument at the end of this chapter [↗](#).

You have no reason, on your theory, for ascribing perfection to the deity, even in his finite capacity; or for supposing him free from any error, mistake, or incoherence in his undertakings.

By [David Hume](#)

We need a first cause!

The atheist view of the universe can explain quite a number of things, but it cannot explain how the universe started [↗](#). So the big question is what happened before the Big Bang. Believers [↗ ↗ ↗](#) argue as follows: everything is caused by something. Thus, also the universe was caused by something. This first cause of the universe is God.

However, the question is then: What caused God? Believers say that God does not have a cause, because he exists outside time. Then, however, we can equally well argue: The universe does not have a cause. In fact, time cannot exist without matter. Therefore, the universe itself defines time. Therefore, the question of the "before the universe" does not make any sense [↗](#).

In general, the question of the "first cause" (of anything) can never be answered in a satisfactory manner. Let us look at a system that tells us for each event its cause. In such a theory, we can look for the cause of one thing, and then for the cause of that thing, and so on until we reach the "first cause". Unfortunately, one of the following cases will apply:

- There is one thing in the theory that does not have a cause.
- There is a loop in the reasoning. This means that one thing X is the cause for some other things, which are then used as causes for X. For example, it can be argued that "God loves us humans and hence he created us" and "Since God created us, he loves us". This reasoning seems to explain our existence, but it is circular and hence invalid. We could argue in a similar manner: "Everything that has an extension in space exists. Hence the universe exists." and "Since the universe exists, it has an extension in space.". This seemingly also explains our existence, but is as flawed as the theistic argument.
- The reasoning is infinite. In this case, every thing has as reason again a new thing and this sequence of things never ends. But this is what believers in God usually deny.

There are no other cases (see proof below). Therefore, the question for the ultimate cause of the universe can never be answered in a satisfactory way – with or without gods. This problem is known as the Münchhausen Trilemma ([Wikipedia/Münchhausen Trilemma](#)).

Apart from this, and just like the designer argument [↗](#), the claim suffers from the typical problems of the "God of the Gaps" argument. We discuss them at the end of this chapter [↗](#), and mention them here just for the sake of completeness of this article: The theory cannot be falsified, and thus it does not make predictions [↗](#); it assumes that the world has a beginning [↗](#); it encourages us to stop searching for a scientific answer to the question [↗](#); and it wrongly assumes that theology would deliver better answers than science [↗](#).

In the beginning the Universe was created. This has made a lot of people very angry and been widely regarded as a bad move.

Remark: Technically, a theory that explains one thing through another can be seen as a binary relation $R \subset D \times D$ over a (finite or infinite) set of things D . Here, $R(a,b)$ means that a has as reason b . Let us define, for any natural number i and element x of D , the set of things that are the i -th reason for x :

$$R^i(x) := \{ z \mid \exists y \in D: R(x,y) \wedge z \in R^{i-1}(y) \}$$

$$R^0(x) := \{ x \}$$

The argument goes as follows:

$$\text{true}$$

$$\Rightarrow (\exists x: R^1(x) = \emptyset) \vee \sim(\exists x: R^1(x) = \emptyset)$$

The first disjunct corresponds to the case that the theory does not explain everything. Let us therefore assume the second case. We derive:

$$\sim(\exists x: R^1(x) = \emptyset)$$

$$\Rightarrow \forall x: R^1(x) \neq \emptyset$$

$$\Rightarrow \forall x, i: R^i(x) \neq \emptyset$$

We keep this as an intermediate result and derive another statement:

$$\text{true}$$

$$\Rightarrow (\forall x, i: R^i(x) \cap \bigcup_{j < i} R^j(x) = \emptyset) \vee \sim(\forall x, i: R^i(x) \cap \bigcup_{j < i} R^j(x) = \emptyset)$$

$$\Rightarrow (\forall x, i: R^i(x) \cap \bigcup_{j < i} R^j(x) = \emptyset) \vee \exists x, i: R^i(x) \cap \bigcup_{j < i} R^j(x) \neq \emptyset$$

$$\Rightarrow (\forall x, i: R^i(x) \cap \bigcup_{j < i} R^j(x) = \emptyset) \vee \exists x, i, y: y \in R^i(x) \wedge y \in \bigcup_{j < i} R^j(x)$$

$$\Rightarrow (\forall x, i: R^i(x) \cap \bigcup_{j < i} R^j(x) = \emptyset) \vee \exists x, i, y, j: y \in R^i(x) \wedge y \in R^j(x)$$

$$\Rightarrow (\forall x, i: R^i(x) \cap \bigcup_{j < i} R^j(x) = \emptyset) \vee \exists z, k: z \in R_k(z)$$

The second case corresponds to a loop in the reasoning. Let us therefore assume the first case. With our previous intermediate result we have:

$$\forall x, i: R^i(x) \cap \bigcup_{j < i} R^j(x) = \emptyset \wedge R^i(x) \neq \emptyset$$

$$\Rightarrow \forall x, i: |R^i(x) \cup \bigcup_{j < i} R^j(x)| > |\bigcup_{j < i} R^j(x)|$$

$$\Rightarrow \forall x, i: |R^i(x)| > |\bigcup_{j < i} R^j(x)|$$

With $|R^1(x)| > 0$, it follows:

$$\Rightarrow \forall x, i: |R^i(x)| > i$$

$$\Rightarrow \forall x, i: |D| > |\bigcup_{j < i} R^j(x)| > i$$

$$\Rightarrow \forall i: |D| > i$$

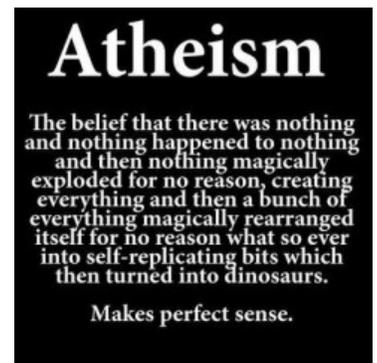
This means that the set of things that the theory uses is infinite.

Everything from nothing?

A frequent critique in the scientific model is that it seems to say that the entire universe basically came from nothing. How can everything come from nothing?

As the attentive reader will have noticed, science makes no such claim. Nowhere does this book or a scientist say that the universe came from nothing. Science says that we do not know so far where it came from (if that question makes sense at all \rightarrow). And as long as we do not have validated evidence for a theory that explains where the universe comes from, we keep searching \rightarrow . That's all.

Concerning the question of where the universe came from, science says nothing, not "nothing".



This would indeed be a stupid theory. Where did you find it?
[\[thinksee @ wordpress\]](#)

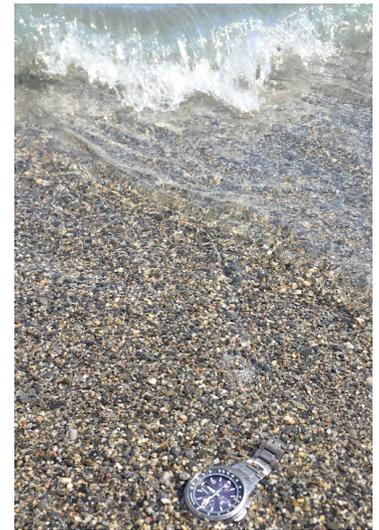
Watchmaker analogy

The so-called watchmaker analogy goes as follows: Imagine you walked on the beach and found a watch. Would you assume that the watch evolved naturally or that it was created by a watchmaker? Surely, you assume the watchmaker. In the same way, assume God as the creator of the universe.

We can continue this argument: Assume that we continue our walk on the beach and that we find a watchmaker lying on the beach. Would we assume that the watchmaker had no cause and that he was born without parents? Surely, we assume he has parents. This contradicts the claim that God has no cause.

Again, we continue our walk and we find an atomic power plant. Would you assume that the watchmaker made it? Probably not. Most likely, the power plant was built by some unrelated people. This contradicts the claim that God made everything in the universe by himself. This shows that the analogy does not hold water.

Apart from this, the watch did actually come into existence by pretty random processes, as Nassim Nicholas Taleb notes in a footnote in his book "The Black Swan". Let us elaborate this idea: It took humanity hundreds of thousands of years to make use of bronze. The metal was not found by some designer, but most likely because someone accidentally used rocks that contained copper and tin to build campfire rings. When the fire heated the stones, the metals melted and mixed, yielding bronze. When the people realized this, they started to heat these stones on purpose, and to identify those stones that yielded the best bronze – they performed a kind of "natural selection" ↗ ↗. From there, it took humanity thousands of years to arrive at the metals that we actually make watches of. Titanium (the material that the watch in the picture is made of) was found by serendipity in 1791. The clergyman and amateur geologist William Gregor realized that black sand was attracted by a magnet. He investigated, and found that the sand contained a hitherto unknown material – which was later called Titanium. Again, it was not some designer sitting down and creating some hard material, but rather someone stumbling upon the material by chance. As so many discoveries, it was first of little use, because it could not be extracted from the sand. In 1910, Matthew A. Hunter proposed a process that heats the sand to 1000°C, and then adds hydrochloric acid. In 1940, William J. Kroll had the idea to use sodium gas, which finally gave humanity a way to industrialize titanium. The solar cell that powers the watch was again not designed by an omniscient being, but rather discovered by chance when Alexandre Edmond Becquerel realized in 1839 that some conductive solution produced an electrical current when exposed to light. It took humanity 150 years of more or less systematic trial and error to stumble upon the configuration that can power watches. Thus, the watch did actually come into existence by evolution: Large-scale, distributed trials led to some interesting results by chance. The good results were kept, and submitted to the same process. Iterating this for several thousand years led to the watch that you see in the picture. Seen this way, the watchmaker argument is actually an example of an evolutionary process ↗.



Did some caveman just wake up and decide to design a watch? Of course not. It took mankind thousands of years of trial and error to find the necessary materials and techniques. Trying several, keeping the best, and trying again. Which is what we call evolution ↗.

Apart from this, the argument that the watch would prove God suffers from the typical problems of the "God of the Gaps" argument, which we discuss at the end of this chapter ↗. Sing with me: The theory cannot be falsified ↗; it does not prove that it was really that particular god who did the job, and not some other deity or force ↗; it assumes that the world has a beginning ↗; and it wrongly assumes that theology would deliver better answers than science ↗.

Can you produce, from your hypothesis, to prove the unity of the deity? A great number of men, join in building a house and a ship, in rearing a city, in framing a commonwealth. Why not several deities combine in contriving and forming a world?

By *David Hume*

Remark: The analogy also shows the approach to truth by believers: The believer is happy to find the watch, and to start believing in the watchmaker. He is also ready to believe all kinds of stories about the watchmaker that he is being told – without ever having met the watchmaker ↗. Very funny consequences of the watchmaker analogy are discussed in [WhyWont-GodHealAmputees.com / Watchmaker](http://WhyWont-GodHealAmputees.com/Watchmaker).

God is simpler!

The theories presented here (and scientific theories in general) are very complex. So then it can be argued that "God exists" is a very simple theory that explains everything by assuming only a single entity. For example, to explain why life is here, I can just say "God created life". Thus, the theory "God did it" would have an extraordinary capacity of compression ↗.

However, the theory "God created life" makes exactly the same predictions as "Life is there". There is no prediction that the first theory makes and that the second one does not make. Adding "God" does not add any new predictions. Thus, the theory is actually simpler without the god ↗.

This is the essence of explanations that involve God: They tell us only the predictions what we knew anyway, and nothing more ↗. Ceterum censeo, the theory "God did it" is unfalsifiable. It also has a number of other problems, which we discuss at the end of this chapter ↗.

"I don't know" does not mean that you can fill in the blanks with your favorite fairy tale.

By Kieran Dyke on Quora.com

Nobody knows the origin!

Believers do not know how to explain where God came from ↗. Atheists can't explain where the universe came from ↗. So, aren't both views equally unsupported?

The answer is no. We know that the universe exists, and hence it makes sense to search its origins. However, we do not even know whether God exists. Thus, before venturing into where God came from, we should prove that he exists in the first place. Believers are still stuck at that stage of the process.

Atheists are one step ahead, because they know at least that the thing whose origin they search does exist.

How do atheists explain the origin of the Universe when even science has no concrete theory about it?

A hundred years ago, someone would have asked: "How do you explain the origin of lightnings and thunderstorms when science has no concrete theory about it?". The only honest answer that an atheist could give at the time would be: "I don't know". And the theist would reply: "The explanation is God!". Today, science has advanced. Theistic thinking has not.

By Nelson Ferraz on Quora.com, paraphrased

Made for us

It seems that the world is so tailored for us that it must have been made for us. If that is so, would it not allow us to deduce that there was a "maker"?

However, the belief that the world was "made for us" is just an artifact of our self-centered thinking. If the world were made for us, we would not have evolved together with several other humanoid species, and even mated with them before they died out ↗. We would not live on the 4th of 8 planets, orbiting around a star that is in every aspect like thousands of others, moving in a galaxy that is a random place in a universe that contains billions of them. Apart from that, the world is not really "made for us". On the contrary, it is a rather hostile environment. It took humanity hundreds of thousands of years to tame the threats of nature, such as wild animals, the cold, the heat, or the drought. Many threats still remain. Every year, hundreds of thousands of us perish in illnesses, floods, famines, or natural disasters. That is not "made for us".

The world is not made for us, but we were made for the world – in the sense that all organisms that did not work were filtered out by natural selection ↗. Assuming a god is just a consequence of our inability to understand this ↗. Maybe Douglas Adams phrased it best when he told the following story:

Imagine a puddle waking up one morning and thinking "This is an interesting world I find myself in – an interesting hole I find myself in – fits me rather neatly, doesn't it? In fact, it fits me staggeringly well. It must have been made to have me in it!"

By Douglas Adams

The probability is so small!

The scientific theory of the universe relies on chance: Molecules happened to be aligned in the right way for life to emerge, cells happened to have a nucleus, and mutations happened to create eyes, wings, and feathers ↗. Isn't the chance that all of this happens too small to be real? Fred Hoyle has famously stated: "The chance that higher life forms might have emerged in this way is comparable to the chance that a tornado sweeping through a junkyard might assemble a Boeing 747 from the materials therein." [Wikipedia/Junkyard Tornado].

We first observe that the chances have to be put in the context of the universe: If the chance for life to emerge on one planet is one in a billion, this still means that there will be life on one billion planets – because the universe just has so many planets (Richard Dawkins: The God Delusion). Nature runs billions of experiments in parallel. If it takes one million years until one particular configuration of molecules appears by chance, then the likelihood that this actually happens is 99.9% – just because the universe is thousands of millions of years old.

Apart from this, most processes in nature are actually not guided by chance. Rather, they are guided by natural selection. It's not like a monkey is created from scratch by a random meeting of atoms. Rather, nature tried out thousands of different models of primitive life forms first. In each generation, thousands of models were sorted out by natural selection. Only the survivors got a chance to continue. Again, thousands of different variations of these were tried out. This process continued for hundreds of thousands of generations ↗.

To illustrate this process, think of it as a combination lock with 5 number wheels. Finding the right combination requires trying out all possible numbers: 10,000. However, evolution does not try out all possible numbers. Rather, it first tries the first wheel. When the right number is found (i.e., when the species survives), it proceeds to the second wheel. It is as if, at each wheel, there is a little click when we found the right number. If we proceed to left from right in this way, we actually only need 5 steps. (Richard Dawkins: The God Delusion)

Future humans will probably create millions of simulated universes to explore the nature of their past and their humanity. So what's the probability that our universe is the one "real" universe? Vanishingly tiny. What's the probability that we're living in a computer simulation run by future posthumans? Huge.

By Mike Heroy

Remark: Just in case Heroy's theory causes you trouble: It is unfalsifiable ↗. It can thus safely be considered nonsense.

The Fine-Tuned Universe

There are a number of physical constants that govern the processes in our universe: the gravity constant, the strength of the nuclear force, and so on. If any of these constants had a different value, then the universe would not have come into existence the way it did. If we vary the values by tiny amounts, there would probably never be life (Wikipedia/Fine-tuned Universe). This begs the question of why these constants have exactly these values – and not any of the other myriad possible values.

At this time, we have no good answer to that question ↗. Scientists have proposed several theories, including multiverses and bubble universes. However, so far, none of these has been proven true. Thus, science is still mute on



A religious explanation for the stripes of animals can be found in the Bible in Genesis 30:37-39: "Jacob took fresh-cut branches from poplar, almond and plane trees and made white stripes on them by peeling the bark and exposing the white inner wood of the branches. Then he placed the peeled branches in all the watering troughs, so that they would be directly in front of the flocks when they came to drink. When the flocks were in heat and came to drink, they mated in front of the branches. And they bore young that were streaked or speckled or spotted." This explanation is obviously wrong. Animals do not get stripes when they mate in front of almond trees.

Explaining phenomena by gods is basically an argument from ignorance: Just because we do not know, we say it's God. This is, however, wrong in the majority of cases ↗.

Finally, the claim suffers from the typical problems of the "God of the Gaps" argument, which we discuss at the end of this chapter ↗. I repeat them here for readers who did not read the other articles of this chapter: The theory that "God did it" cannot be falsified, and thus it does not make predictions ↗; it does not provide an explanation in the technical sense ↗; it does not prove that it was really that particular god who did the job, and not some other deity or force ↗; it encourages us to stop searching for a scientific answer to the question ↗; and it wrongly assumes that theology would deliver better answers than science ↗.

If I were granted omnipotence, and millions of years to experiment in, I should not think Man much to boast of as the final result of all my efforts.

By Bertrand Russell

Remark: A scientific answer to the question of why cats have stripes is that these camouflage the cats in their natural environment. Thus, cats that had some type of stripes were more likely to survive than cats that did not ↗. This explains why animals usually carry the colors of their environment (frogs are green, lions are yellow, rabbits are brown, and polar bears are white).

What makes the world go round?

This book harps on about the fact that the existence of God is unfalsifiable ↗. There is nothing that could happen in the present or future that would show that God does not exist. Now what if we say that God raises the sun every day? Isn't that falsifiable? If the sun does not rise tomorrow, then this shows that God does not exist.

The theory is indeed falsifiable. However, it falls into the same class of arguments as the Greek myth of Persephone ↗, which goes as follows: The goddess Persephone makes spring come every year. If there were no spring, then Persephone would not exist. This theory is falsifiable – just like the theory that God makes the sun rise.

However, falsifiability alone does not make a story true. A story is true only if all of its hypotheses are true. A hypothesis is true if it is either a perception statement or supported by evidence ↗. So then, what is the evidence for the fact that God raises the sun everyday? And what is the evidence that it was not Gayatri ↗? There is none... In fact, there is evidence against either ↗.

If someone tells you that you do not understand the world and that therefore you should follow his religion, he's obviously playing a cheap trick on you. If he really wanted your good, he'd encourage you to understand the world first.

By WhyWontGodHealAmputees.com

Why do things happen?

It is one of the fascinating (and sometimes frightening) facts of life that some things are just outside our control. A loved one may suffer an accident, a friend may fall terminally ill, or you may win a million dollars in a lottery. These events are beyond our understanding, let alone our influence.

Thus, believers assume that there must be some kind of superior being, who makes these things happen. This is an understandable conjecture. Let us make this hypothesis more formal: "There is a higher power who coordinates the events on Earth". Is there any way we could prove this hypothesis wrong? That is, can we imagine any event that would show that life is *not* coordinated by a supreme being? It turns out that there is no such event. Whatever happens is the will of the higher power. This means that our hypothesis is unfalsifiable ↗.

As the reader knows off pat by now, the unfalsifiability has two consequences: First, the hypothesis "There is a higher power who coordinates the events on Earth" has no implication whatsoever for our lives on Earth. There is nothing that this hypothesis tells us about what will happen or what will not happen. Thus, a believer is unable to predict the future just like the atheist is unable to predict the future – both are victims of the same random processes. It does not help at all to assume that there is a higher power ↗. Technically, the hypothesis "There is a higher power" does not imply any perception statements. It is thus literally meaningless ↗.

There is a second consequence of the unfalsifiability. It is that I can invent any other unfalsifiable hypothesis that contradicts it. For example, "There are two higher powers, who work together to coordinate the events on Earth in alternation. On Monday, Wednesday, and Friday, it is mainly the first power, and on Tuesday, Thursday, and Saturday, it is mainly the other power. Sunday is actually uncoordinated, real randomness." This hypothesis contradicts the original hypothesis, but it can also not be proven wrong (try proving it wrong!). This shows that we can come up with an arbitrary number of contradictory hypotheses, which each also "explain" the events of life, but can never be proven false ↗. And this is what humans do indeed. They call it "religions" ↗↗.

Unfalsifiable as it may be, the belief that everything must happen for a reason is not just some harmless erring. It has very concrete consequences. It entails that when bad things happen (such as an accident, a disease, a famine, or poverty), people will try to find the agent who wanted them to happen (Steven Pinker: Enlightenment Now, p. 24). If a person can be fingered out, she or he can be punished. If no individual can be singled out, then people will believe that the event must have been the will or punishment of some god or of some other disembodied force such as karma, fate, or cosmic justice ↗. This, in turn leads them to adapt their behavior, or possibly follow some leader who promises to please those forces. Throughout history, people have also readily blamed ethnic minorities, religious groups, witches, magicians, or other unfortunate individuals for disasters – all of which just because they cannot understand that sometimes things just do not happen for a reason.

This is just one of the problems with such type of arguments. We discuss the others at the end of this chapter ↗.

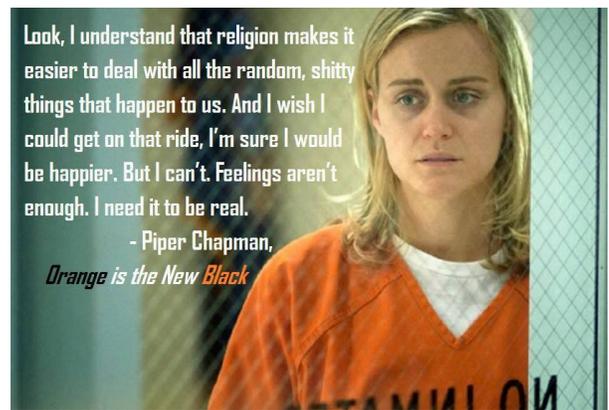
Everything happens for a reason. Sometimes the reason is that you are stupid and make bad decisions.

By anonymous

Where does moral law come from?

This argument, the Argument from Morality, goes back to Immanuel Kant. Kant argued that there exists a universal sense of moral obligation. This sense of "ought", which Kant termed the "categorical imperative", points towards an objective moral law, which source can only be the supreme being or God [Rejection of Pascal / Kant].

However, ancient cultures had moral rules long before the Christian God appeared. Babylonian and Sumerian laws, e.g., date from the year 2000 BCE. These law systems predate the major world religions by several hundred if not thousands of years. The laws codified family laws, punishments, property laws, leasing, debt, warranty, and the presumption of innocence ↗. These laws were invented long before the abrahamic God, let alone Jesus or Mohammed, entered the scene. Ancient Romans and Greeks, too, had sophisticated legal systems but had no clue of the triune God. Today, people in all regions of the world have basic moral rules, even if they never heard of the 10 Commandments – just like Christians have basic moral rules even if they never heard of Hinduism's legal framework. And the reason is that moral systems arise spontaneously in any human society ↗. Humans have a vital



self-interest in protecting their own life and limb, and moral rules are just a means to that end. Moral rules do not have divine origin at all, as we discussed in the [Chapter on Morality](#).

We could argue that God gave humans the divine moral understanding. However, moral standards are by not absolute. They change over time. Slavery, e.g., was widely considered normal in the Medieval Ages (and is approved in the Bible ↗ and the Quran ↗). Nowadays, it is shunned. Polygamy is illegal in Christian countries, but legal in Muslim ones. The death penalty is in force in some countries, but considered immoral in the others ↗. This defies the idea that moral standards would come from God.

Even if there were some basic common moral standards, this would not prove that they would come from a god, let alone from the abrahamic god ↗. Our moral standards are way above the moral standards that the abrahamic God supposedly gave us ↗.

Did people really not know that they should not kill before Moses told them?

Remark: This idea of divine law leads us to the Euthyphro dilemma, which Plato records as follows ([Wikipedia/Euthyphro dilemma](#)): Did God define what is good? Or did he just command us to do what is good? Either way leads to a contradiction: If a law is good because it stems from God, then "goodness" is something completely arbitrary. God could easily have decided that murder is "good". As Leibniz writes, if justice consists in that which is pleasing to the most powerful, then this most powerful is a tyrant [[Wikipedia/Euthyphro dilemma](#)]. If we turn it around, and assume that God gave us the law because it is good, then morality is independent from God. Thus, the argument does not prove the existence of God any more.

Why should people behave morally?

This book has argued that moral laws do not come from God ↗. No matter where the laws came from, we are left to wonder why we should actually follow the laws. The theistic response is: We should follow the law because God commands us to. In case this is not sufficient: We should follow the law because otherwise God burns us in hell for eternity.

Theists often ask "If there is no god, then what prevents you from raping as many women as you want?". The answer is simple: Atheists do rape as many women as they want. In most cases, that number is zero. Turning the question around, we may ask the theist: So if there were no god, would you rape women and kill children? Is the only reason why you don't rape women your fear of hell? If that is the case, then you are a horrible person. Now, if you have any other reason not to rape women, then how does your question prove the existence of God?

This is just one of the problems with the god of the gaps. We discuss the others at the end of this chapter ↗.

Fortunately, there is a rather simple explanation for why we should behave morally: Would you, the reader, like to live in a lawless society, where everybody can kill and plunder as he wishes? Probably not. The majority of your compatriots think the same. Therefore, the majority of your compatriots, as well as presumably yourself, behave morally ↗. That is all that is needed for the explanation of moral behavior ↗.

*It is often argued that religion is valuable because it makes men good,
but even if it were true, it would not be a proof that religion is true.
Santa Claus makes children good in precisely the same way,
and yet that doesn't prove his existence.*

By H. L. Mencken, adapted

How do you explain the soul?

As [GodIsImaginary.com](#) explains: when you accept evolution ↗, what you are automatically doing is rejecting the concept of a soul [as a separate entity in the human]. Here is why: As soon as you accept that evolution is true, you also accept that the creation story in the Bible is false. It is pure mythology. The concept of the "soul", which comes from the same book, is exactly the same sort of mythology. Simply think through the logic. What the theory of evolution says is that every living thing on this planet has evolved through a completely natural process. Every

species that we see today is derived from simple, single-cell organisms over the course of hundreds of millions of years. There is no part of the scientific explanation of evolution that says, "a mythical supernatural being reaches in right here and guides it." Evolution, by its very nature, is a supernatural-free process. Thus, in atheist eyes, the whole notion of a soul is a figment of human imagination. The concept of a "soul" has been invented by religion because many people have trouble facing their own mortality. It makes people feel better, but the concept is a complete fabrication [GodIsImaginary.com].

The concept is a fabrication, because if the soul were really given by a perfect and benevolent God, then the concept would be implemented far better. Why would a mobster have the god-given ability to enjoy his ill-gotten gains? Why would a sexual predator have the god-given ability to enjoy carnal pleasure? Why would these people have a soul in the first place? All of this would not happen if the soul was handed out by a rational and benevolent being such as the abrahamic god ↗. What we find, however, are that the "souls" distributed without any regard to human welfare – just as you would expect them to be if they were distributed by physical and biological laws. (Stephen Pinker: Enlightenment Now)

And this is also how we usually employ the word "soul". When we use the word "soul" in everyday language ↗, we do not actually refer to such a meta-physical entity. Rather, we use it as an umbrella term for human abilities such as self-awareness, feelings, suffering, or generally being alive. These, however, are not supernatural things. They are very natural attributes. "Soul" is just another word for them.

Whatever we make of the question of consciousness, positing an immaterial soul is of no help at all. It just tries to solve one mystery with an even bigger mystery.

By Stephen Pinker in "Enlightenment Now"

So many questions remain!

Science has found out an extraordinary amount of things about life, the universe, and humanity. And still, it is obvious that science is nowhere close to answering all of humanity's questions – and quite possibly never will. Does this not make the idea of a universal answer (God) plausible?

No. To see this, take again the question of who murdered John F. Kennedy ↗. Up to now, nobody knows who murdered Kennedy. So doesn't that make the answer "The Russians murdered him" plausible? Of course not! Just because we do not know the answer, this does not entitle us to invent an answer ↗. In fact, it is much better to admit that we do not know the answer, rather than inventing one and believing in it ↗. This is for several reasons: First, if we agree that the Russians did it, we will stop searching for who really did it. But we should not stop searching until we have conclusive evidence for who did it. The same goes for the origin of the universe or in fact any other question. Second, if I say the Russians did it and you say the Chinese did it, we'd have a fight for no reason. The analogy to religious conflict is obvious here ↗. Third, the assumption that the Russians did it when there is no evidence for it can get you in trouble with them – and rightly so. This is what we observe between believers of different faiths, who all claim that their god is the right one ↗.

Finally, it is much more honest to say "I don't know" rather than to believe (and teach) an arbitrary answer. We discuss this at the end of the chapter ↗.

*Those who believe they know everything
are of great annoyance to those of us who do.*

By Isaac Asimov (with tongue in cheek)

Why are believers wrong?

Atheists don't know the answer to many of humanity's conundrums. If they do not know the answer, then what entitles them to say that the theistic answers are false?

In the majority of cases, the theistic answers are not actually false. They are unfalsifiable, and hence nonsensical, but not false ↗. In order to be false, they would have to make a concrete prediction – which they usually don't.

However, there are a number of cases where an atheist can say with confidence that the theistic answer is false. For example, animals do not have beautiful stripes because Jacob made them mate in front of almond trees ↗. Now the argument goes: How does the atheist dare saying that some answer is false, if he doesn't have any other answer? Cory Radebaugh replies as follows on Quora:

It is not required to have the correct answer in order to tell that another answer is nonsense.

For example, if the problem is 765769×29310 , you don't know the answer. But you know that -3 is not the answer. This is because two positive numbers multiplied cannot yield a negative number.

In other words: Even if we do not know the answer, we can tell if another answer is wrong. For example, even if we assume that we do not know how animals get their stripes, we can experimentally verify that the story of Jacob cannot be true. Animals do not get stripes if they made in front of an almond tree. Along the same lines, validated scientific theories show that the Earth was not created 6000 years ago ↗. So no matter when the world was created, the theistic story is just wrong. Thus, we can prove a theory wrong even if we do not know the correct theory ↗ ↗.

But even if the theistic answers are not outright wrong, we are entitled to doubt: Assume that someone tells you that the answer to the above computation is 65762898798. Would you believe this person? Or would you still want to see the steps of the calculation? And if the calculation involves a step that says that you should not ask how it works? And if someone else comes, and tells you that the answer is 5345365498? At this point, you would almost certainly want to see the steps of the calculation. And what if you asked a different question, but the answer would always be the same number? You would probably start to seriously doubt that your interlocutor is right. And it is the same with atheists when they hear the "God of the Gap" argument.

How naive to believe there might be a single answer to every question. Every mystery. That there exists a lone divine light which rules over all. They say it is a light that brings truth and love. I say it is a light that blinds us – and forces us to stumble about in ignorance.

By the Assassin's Creed

The God is just Raps

Problems with the God of the Gaps

Many open questions in science, metaphysics, and philosophy can be answered if we assume a god. This includes the question of how the universe came into existence ↗, where beauty comes from ↗, and why people behave morally ↗. Adherents of the abrahamic religions often answer these questions by assuming their God ↗, and adherents of other religions use their own gods, spirits, or extraterrestrials ↗ ↗. This line of reasoning is known as "the God of the Gaps" ([Wikipedia/God of the Gaps](#)).

In the sections above, we have argued that the assumption of a god does not actually answer the questions. Here, we summarize the problems with the "God of the Gaps" argument:

- Logical problems
 - The argument is not based on evidence ↗
 - It is not falsifiable, and thus does not make predictions ↗
 - It does not prove that it was really that particular god who did the job ↗
 - It does not explain ↗
- Problems with science
 - It assumes that the world has a beginning ↗
 - It encourages us to stop searching for a scientific answer ↗
 - It assumes wrongly that theology would deliver better answers than science ↗

- Problems with God
 - It does the idea of God no favor ↗

Apart from this, the God of the Gap argument suffers from the problems that unsubstantiated theories suffer from in general ↗. It is also pretentious to assume that one's own god would be the solution to all of mankind's conundrums, as we will argue in the [Chapter on Criticism of Religion](#).

Whom do atheists turn to when faced with a situation that logic cannot explain?

I do not turn to anything. There are some things we don't know, and making up answers to fill the holes, and then believing that the made-up answers are true is completely idiotic.

By Daniel Super on Quora

No Evidence

The "God of the Gaps" argument says that God created the universe (and also accomplished a number of other things – basically everything to which we have no scientific explanation at this point of time).

It is indeed possible that God created the universe. The rule "If God created the universe, then the universe exists" is a specialization of the more general rule "If someone creates something, then that thing exists" – and that is generally true ↗.

The problem is that the rule works only in one direction: If God created the universe, then it exists. This does not mean that, vice versa, if the universe exists, then God necessarily created it. Anything else could have created the universe ↗. The universe could even have existed in eternity ↗. Using the rule the other way round is a reasoning called abduction ↗. As we have seen before ↗ ↗, this way of reasoning generally does not lead to correct conclusions.

The only way to deduce that "God did it" is to use evidence for that hypothesis ↗. Evidence for a hypothesis is a true theory that predicts the hypothesis. That is: we need a true rule that has "God did it" not in the premise, but in the conclusion. Up to now, no such rule has been found (see the [Chapter on Proofs for God](#)). Until then, the idea that "God did it" is just a hypothesis that hangs in the air.

Absence of evidence is evidence of absence.

By the [New Atheism movement](#)

Unfalsifiability

Many questions in life could be answered by assuming a god ↗. For example: Where does the universe come from? God created it! Or: Why do cats have pretty stripes on them? Cats have pretty stripes because God wants them to have stripes!

Interestingly, we can never prove such theories wrong. There is nothing that could happen in the present or future that the believer would accept as a proof that God was not the ultimate cause ↗. For example, even if we found one day why animals have stripes, the believer can still argue that God caused whatever was the reason. There is no way to show that God did not ultimately do it.

By now, the reader is well-versed in the concept of falsifiability ↗. Thus, the reader will have spotted immediately that the claim "God ultimately did it" is unfalsifiable: It cannot be proven wrong, even hypothetically. As always, this has two consequences: First, we can come up with arbitrary many contradictory theories, which also explain why cats have stripes. We discuss the range of these theories further down ↗. Second, the claim makes no predictions. By assuming that "God did it", we are no wiser than before. A believer knows nothing more about this world than an non-believer. Not a single concrete prediction about how the world is, or how the world is not, can be derived from the statement "God did it". And this is why religious people fare no better in the randomness of this

world than non-religious ones (they fare worse, actually ↗). No religious book told us how many species there are, how to make electricity, or how to cure Ebola. A religion always just summarizes the knowledge of the era when it was created – despite claims to the contrary ↗.

What was it God revealed to man? He did not reveal science. The whole structure of physical science was built up very gradually and tentatively by man. He did not teach man geology, or astronomy, or chemistry, or biology. He did not teach him how to overcome disease, or its nature and cure. He did not teach him agriculture, or how to develop a wild grass into a life-nourishing wheat. He did not teach man how to drain a marsh or how to dig a canal so that it might carry water where it was needed. He did not teach him arithmetic or mathematics. He taught him none of the arts and sciences. Man had no revelation that taught him how to build the steam engine, or the aeroplane, or the submarine, the telegraph or the wireless. All these and a thousand other things which we regard as indispensable, and without which civilization would be impossible, man had to discover for himself.

By Chapman Cohen in "Morality without God"

God or other gods

The "God of the Gaps" argument says that anything that is not currently known was caused by God – most notably the creation of the universe. We have already seen that this claim is unfalsifiable ↗. One consequence of this is that we can come up with arbitrarily many other theories about the creation of the universe. By careful design, these theories can be made unfalsifiable as well. This means that there is nothing we could do to prove to an adherent of some theory that the theory is false. Hence, we find ourselves with a large array of theories, each with their respective adherents, and each of them unable to see what is wrong with their theory.

And indeed, there exist quite a number of such theories. To a Christian, Jewish, or Muslim believer, for example, it is obvious that there is only one possible deity who could achieve the creation of the world: their God ↗. However, it could also be a very different god. In Hinduism ↗, for example, Brahma, the Hindu deva of creation, emerges from a lotus risen from the navel of Visnu, who lies with Lakshmi on the serpent Ananta Shesha [Wikipedia/Creation Myth]. Interestingly, this Hindu story also tells us where the creator came from (he emerged from a lotus) – a question to which the abrahamic religions still owe us an answer ↗. In the present book, the universe was created by the goddess Gayatri ↗. She deliberately created different religions with convincing characteristics in order to confuse mankind.

As we have seen before ↗, there could also be several creators of the world. In Raëlism ↗, Earth is a big scientific experiment by extraterrestrials (Wikipedia/Raelism). Other religions know of a male and a female deity instead. The so-called world parents are commonly identified with the sky (usually male) and the earth (usually female). Creation is then the result of a sexual union, and serve as genealogical record of the deities born from it [Wikipedia/Creation Myth]. The Wicca faith ↗, e.g., holds that the universe was created by the female Moon Goddess and the male Horned God (Wikipedia/Wicca).

Atheists have taken this occasion to add some more creation stories. Bobby Henderson started the religion of Pastafarianism. In this religion, the world was not created by God, but by a creature called the Flying Spaghetti Monster (FSM). Henderson claims that all arguments that can be brought for God as the creator can equally well support the FSM as the creator. Consequently, he wrote a letter to the Kansas State Board of Education to demand that Pastafarianism be taught, along with the Christian theory of Intelligent Design and evolution ↗, in school classrooms as a theory of the origin of the world (Wikipedia/Flying Spaghetti Monster).

At the same time, our focus on gods is mainly due to our lack of imagination. There are much more philosophical and colorful explanations of how the world came to existence. Buddhists ↗, for example, assume no creation at all. In their view, the universe has always existed ↗. The Daoist creation story, in contrast, goes as follows: "The Way gave birth to unity, Unity gave birth to duality, Duality gave birth to trinity, Trinity gave birth to the myriad creatures. The myriad creatures bear yin on their back and embrace yang in their bosoms. They



[Found in: Evangelical Pastafarianism]

neutralize these vapors and thereby achieve harmony" [by Daodejing, 4th century BCE, [Wikipedia/Creation Myth](#)]. This may sound highly philosophical, but that is certainly adequate for something as foundational as the creation of the universe. It would be implausible to assume that the universe is like a watch, just bigger ↗. There are plenty of other creation stories, which we discuss later ↗.

These theories cannot all be true at the same time. They contradict each other. And yet, none of them can be proven wrong. This is the dilemma that comes with unfalsifiability ↗. Unfortunately, the adherents of these theories cannot understand that unfalsifiability is the problem, because if they did, they would have to abandon their own theory as well ↗.

Ignorance is of a peculiar nature. Once dispelled, it is impossible to re-establish it. Though man may be kept ignorant, he cannot be made ignorant.

By Thomas Paine

Not an Explanation

Many things in life could be explained by assuming that God (or another god) did them. For example, by saying "God created the universe", we learn where the universe came from. This looks like a very simple explanation ↗.

Let us look into this more closely. Assume the following facts:

Next Tuesday, the sun shines, it rains, and there is a rainbow.

Next Friday, the sun shines, it rains, and there is a rainbow.

Next Saturday, the sun shines, it rains, and there is a rainbow.

Next Sunday, the sun shines, it rains, and there is a rainbow.

The supernatural explanation is:

God wants that next Tuesday, the sun shines, it rains, and there is a rainbow.

God wants that next Friday, the sun shines, it rains, and there is a rainbow.

God wants that next Saturday, the sun shines, it rains, and there is a rainbow.

God wants that next Sunday, the sun shines, it rains, and there is a rainbow.

The problem is that we do not learn anything more from the supernatural explanation than from the facts themselves. The fact that "God wants it" does not tell us anything more about how long the rainbow will last, how strong it is, or where we will see it. Not a single verifiable prediction follows from the assumption that "God wants it" ↗. Thus, both the original facts and the explanation make the same predictions. At the same time, the supernatural explanation is not in any way shorter than the original list of facts. We say that the explanation does not compress information ↗. Therefore, it is not a valid explanation in the sense of this book ↗.

A scientific explanation, in contrast, goes as follows:

Next Tuesday, the sun shines and it rains.

Next Friday, the sun shines and it rains.

Next Saturday, the sun shines and it rains.

Next Sunday, the sun shines and it rains.

Whenever it rains and the sun shines, there is a rainbow.

This theory is shorter than the original list of facts. And as we add more days, the scientific theory will become even shorter in comparison to the original set of facts. We say that the scientific theory compresses information ↗. It captures a pattern the data. Therefore, the scientific theory carries additional insight. It has explanatory power, and is therefore a valid explanation in the technical sense ↗. The theory that "God wants it" is not. On the contrary, it makes our explanation longer than just stating the facts themselves.

Furthermore, the theory with God adds a layer of complexity. To illustrate this, consider an example: Small children like playing the game of "Why". They simply always ask "Why?". Each answer entails again a "Why?" and the game continues until the unnerved parent finally says "Because it's like that". A theist can handle many questions that an atheist cannot answer, because he can answer with "Because God did it", or "Because God wants it that way". However, the next "Why" (namely why does God want that?) will finally force him to say "It's like that" as well. Thus, the "It's like that" is only postponed, but not avoided. On the contrary, the hypothesis of a god entails many other

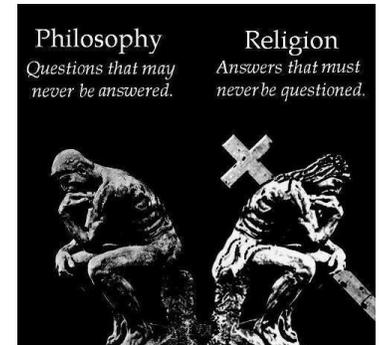
questions: "Where is god?", "How does he interact with the world if he is not physical?", "How do we know there only one god and not many?", etc. Thus, instead of answering the original question, the assumption of gods just adds plenty of new questions ↗. For this reason, Ibn Abi-l-Awja, an 8th century critic of Islam, reportedly refused to accept any answer that implied that something was done by God. In his view, this merely pushed the question farther back to someone who was not present ([Ibn Warraq: Why I am not a Muslim / Chapter 10](#)). Of course, he was executed swiftly ↗.

Many religious metaphors see humanity as children who listen to a "teacher". I kept wondering who this "teacher" could be, until I realized that it is simply the first person who declares themselves so.

The "beginning" of the universe

The question of how the universe began is one of the most exciting questions in philosophy, theology, and physics. Yet, it might be an ill-posed question.

All our thinking goes that the universe must somehow have "started". That might be a wrong assumption in the first place. As Bertrand Russell observed: "There is no reason to suppose that the world had a beginning at all. The idea that things must have a beginning is really due to the poverty of our thoughts." [[Budsas.org / The Origin of the World](#)]. There are several alternatives to the assumption that the universe "started". Summer and winter, for example, come and go. It could be similar with this universe. It could come and go – and have always existed. As David Hume wrote, looking at it this way, the "first cause" has as much meaning as the "largest positive number". Maybe there is no such first cause.



[Found in: [We fucking love atheism](#)]

Buddhism ↗ holds a similar view: The beginning of this world and of life is inconceivable since they have neither beginning nor end. Buddhism never claimed that the world, sun, moon, stars, wind, water, days and nights were created by a powerful god or by a Buddha. Buddhists believe that the world was not created once upon a time, but that the world has been created millions of times every second and will continue to do so by itself and will break away by itself. According to Buddhism, world systems always appear and disappear in the universe. In the eyes of the Buddha, the world is nothing but Samsara – the cycle of repeated births and deaths. To him, the beginning of the world and the end of the world is within this Samsara. Since elements and energies are relative and inter-dependent, it is meaningless to single out anything as the beginning. [[Budsas.org / The Origin of the World](#)]

Jains ↗ do not believe in a creator either. According to Jain doctrine, the universe and its constituents (soul, matter, space, time, and principles of motion) have always existed. All the constituents and actions are governed by universal natural laws. It is not possible to create matter out of nothing and hence the sum total of matter in the universe remains the same. [[Wikipedia/Religion and Science](#)] The Piraña, a society in the Amazon forest, likewise have no concept of the "beginning" ([The Guardian: The power of speech, 2008-11-08](#)).

Science, too, may yet point us to something that is not a "beginning" in the proper sense. The reason is that time runs slower in the vicinity of large masses (yes, really). Since the nucleus of the Big Bang had a practically infinite mass in a single spot, time may just have stopped. Science is also considering the possibility that the universe oscillates between expansion and contraction ↗.

With all this, the question of the "beginning of the universe" may be simply ill-defined.

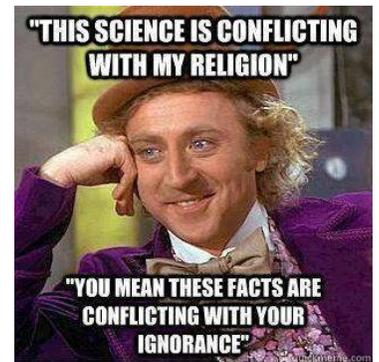
*We do not even know the question,
and some people already claim to have an answer.*

Inhibiting science

Gods can be used to explain many things in life. With gods, we can explain natural phenomena, such as the birth of our universe, the working of the human mind, or the nature of ethics. The problem is that if we assume a

supernatural explanation for these phenomena, we inhibit the scientific enquiry of the question.

This obstacle appears first in our mind: If we assume that God created the world, for example, we have a hard time even to imagine that this was not the case. We are so fixed on the idea that the universe must have started, that we cannot even consider alternative ways of thought ↗. This hinders us to come up with and explore different ideas about the universe – such as the idea that it oscillates, or that its mass slows down time. The same goes for other phenomena: If we assume that God gave us a soul, we keep searching for that soul, without giving room to alternative views of the human mind. Maybe there is no soul. The same is true for the question of morality: If we assume that moral laws are given by God, then it takes 5000 years to come up with the idea that humans themselves should create their laws.



[Found in: Atheist World]

But the obstacles are not just of psychological nature. If God is the answer to one particular question, then it follows that any other answer is denial of God and hence blasphemy. Many societies had stringent laws against blasphemy, and some still do ↗. History has shown us that stubborn insistence on unverified beliefs has led to the inhibition, prosecution, and even execution of some of the great thinkers of mankind. This is well known for the case of Christianity ↗. Islam says it has an easier relationship with science. And yet, many variants of Islam punish apostasy by death ↗. Thus, it is impossible in these variants of Islam to investigate a world model without God.

Science, in contrast, has no such constraints. Nobody is put to death if he questions the principle of gravity. In science, a theory is valid if it makes true predictions ↗. If it ever makes a wrong prediction, it is abandoned ↗. If we assume supernatural gap-fillers instead, which do not succumb to these conditions, then we inhibit the scientific analysis of the questions of life. Only if we acknowledge that we do not have an answer, we will be able to find one.

All great truths begin as blasphemies.

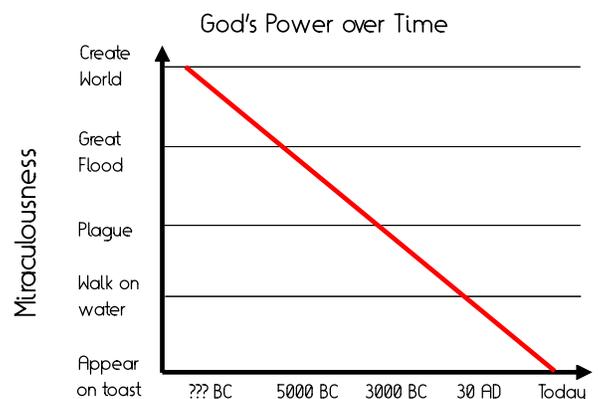
By George Bernhard Shaw

The record

There are many things in life that we do not understand. Hence, we have a tendency to assume that a god did these things. Thus, we build the theory ↗.

If we do not know what caused X, then a god did X.

Unfortunately, this theory is wrong. It has made numerous false predictions in the past. In early human thinking, gods were responsible for the fire, for rain, for day and night, for the creation and design of animals, and for the movement of the sun. Yet, in the end, none of these explanations turned out to be true: Fire is a chemical reaction, rain is a meteorological phenomenon, day and night come from the rotation of the Earth, animals were shaped by evolution, and the apparent movement of the sun stems from the orbiting of the Earth. In all of these cases, the theological explanation was nowhere near what we know today. Therefore, gods have a bad track record for explanations.



© Fabian M. Suchanek in "The Atheist Bible", idea anonymous

Science, in contrast, has made an extraordinary series of revelations. Chemistry has explained the nature of the elements, and how they react with each other. Biology has explained the working of the cells, the multitude of species, their behavior, and their evolution. Physics has explained the growth of the universe up to the very first milliseconds. Social science has given us models for human group behavior. Psychology has taught us how humans react to different stimuli. Technology has given us printed books, computers, and airplanes. All of these discoveries are consistent with each other, confirmed by repeated evaluation, and very useful. This gives science a good

history of reliability. If we have to choose who should answer questions based on the track record, then it is clearly science that deserves our trust, not faith.

So what has science told us about the conundrums of life? Quite something, as we discussed in the [Chapter on the Universe](#). However, science has been mute so far on the origin of the universe. We do not yet know the answer to the origin of the universe (if there is one at all ↗). Most notably, science has not claimed that there would be "nothing" at the beginning of the universe ↗. Science has just not yet found an answer, and maybe never will. This leaves us with the answer that we should give in all modesty to the yet unexplained conundrums of life: We do not yet know. But we will do our best to find out. Meanwhile, there is no use in inventing supernatural entities ↗.



[picture: NASA; text: anonymous]

I would challenge anyone here to think of a question upon which we once had a scientific answer, however inadequate, but for which now the best answer is a religious one.

By Sam Harris

Pushing God away

Many conundrums in life can be answered by assuming a god. This is apparently a abrahamic tradition, as Buddhism ↗ has no such aspirations. As a Buddhist Web site explains: The explanation of the origin of the universe is not the concern of religion. Such theorizing is not necessary for living a righteous way of life and for shaping our future life. However, if one insists on studying this subject, then one must investigate the sciences, astronomy, geology, biology and anthropology. These sciences can offer more reliable and tested information on this subject than can be supplied by any religion. [[Budsas.org / The Origin of the World](#)].

This is a very reasonable statement in Humanist eyes ↗. It is also reasonable from a believer's perspective: In the past, gods or God were assumed behind a great number of conundrums of life. But nowadays, gods are no longer necessary to explain the rising of the sun, the design of animals, or the provenance of man. All of that has been explained by science ↗. Thus, the explanatory space allocated for the supernatural has steadily shrunk. If human knowledge continues to progress as it does, the room for God will become smaller and smaller. Thus, if believers want to save their faith, it is best to remove it from the physical realm, and to focus on the non-physical – on moral values such as generosity and charity, on hope in the afterlife, and on a positive view on life in general ↗.

This observation was maybe best phrased by Dietrich Bonhoeffer, a German Lutheran pastor:

How wrong it is to use God as a stop-gap for the incompleteness of our knowledge. If in fact the frontiers of knowledge are being pushed further and further back (and that is bound to be the case), then God is being pushed back with them, and is therefore continually in retreat. We are to find God in what we know, not in what we don't know.

By [Dietrich Bonhoeffer](#)

Chapter on Gods

Introduction

This chapter explains the nature of gods from the point of view of a positive atheist ↗. The chapter consists of just two sections:

- [An Atheist View](#): Explains how a positive atheist sees gods.
- [Questions](#): Discusses objections to the atheist view point.

An Atheist View

Cinderella

Cinderella was a poor girl whose mother died. One day, the prince of her country gave a ball. Cinderella wanted to go, but her stepmother did not allow her to, and she did not have a dress either. While Cinderella stayed home all alone, a good fairy appeared and gave her a marvelous dress. Cinderella went to the ball, and the prince fell in love with her.

As you know, this story is a fairy tale. The oldest known version of this tale was recorded by the Greek geographer Strabo in around 7 BC. In that variant of the story, a magic eagle helps a slave girl called Rhodopis, and she marries the king of Egypt. Other variants of the story exist across the world, including China (where the girl befriends a fish), Korea (with a magic ox), and the Middle East (where she is helped by a demoness). Today, the version with the good fairy is the most popular one in the West. It was first published by Charles Perrault in "Histoires ou contes du temps passé" in 1697, and later by the Brothers Grimm in their folk tale collection "Grimms' Fairy Tales" [[Wikipedia/Cinderella](#)].



Cinderella looked indeed awesome in her dress. Seems almost too good to be true. [[Annie Leibovitz](#)]

There may indeed have existed a poor girl (or several) who inspired these tales. However, the part of the story with the magic fish, ox, demoness, or fairy was made up. Maybe someone came up with the idea during a long winter's evening, or at a campfire. People liked the idea that some magic spirit helped the poor girl. The story caught on, and it got passed on through the generations.

Gods as Fiction

The story of Cinderella is a very popular fairy tale ↗. While a girl called Cinderella may have existed, the fairy in the story did not. The fairy is a fictional character, which was later added to the story in order to make it more appealing. That worked, and the story caught on.

For an atheist, religious stories (as recorded in the Bible or other scripture) are just the same. These stories were maybe based on some true events. They were then later embellished ↗ with miracles, spirits, and gods. The gods in these stories are just like the good fairy in the Cinderella tale: they are fictional additions to the story. They are magical characters invented by people, and added to historical tales. These stories have been passed on through the generations, and were recorded in books and oral traditions. However, that does not make these stories true. In

particular, this does not pop the gods into existence – just like fairies, magic animals, unicorns and other products of human imagination do not exist in reality either.

Let us make this more concrete: When we read the story of Cinderella, we are pulled into the story. We are eager to learn what happens, we feel with the main character, and we are excited when the good fairy steps in to give her the dress. However, when we close the book, the good fairy is gone. When we look around, there is no fairy. Only children believe that the fairy is really there.

Atheists hold that it is the same with supernatural characters. Gods are heroes and sometimes villains in the books. The stories are inspiring, exciting, and sometimes enlightening. Yet, when we close the book, the characters are gone. They do not exist in reality. They are legendary beings. God is imaginary.

Religion confuses cause and effect:

It's not God who created man, but man who created God.

By Hans Reinhardt

Remark: Muslims may object that their god is not an addition to a story, but the author of the story. However, their god is much older than the Quran. He the same god as the Jewish god, and this god reportedly created the Earth and parted the waters. That was the time when the god was invented.

Why would gods be fictional?

Atheists believe that gods are fictional characters – just like the good fairy in the Cinderella tale ↗. If we want to understand this kind of thinking, we have to ask ourselves why we believe that the fairy in the Cinderella tale is fictional. Why are we convinced that the good fairy does not really exist?

There are several reasons ↗:

1. The good fairy is unknown outside the Western culture. The Eastern cultures rather tell the story of a magic fish. This fish, vice versa, is unknown in the Western cultures. This indicates that the story is not some objective truth, but rather a legend.
2. The good fairy does magical things that defy the laws of nature. In reality, the laws of nature cannot be defied.
3. There is no evidence for the good fairy other than the story. Our only source of information about the good fairy is the tale.

Atheists hold that the same is true of gods:

1. Just like every culture knows their own magic fish, ox, or fairy for the tale of Cinderella, every culture knows their own gods and spirits in their religious stories. The same god does not arise in different regions. We discuss the different gods in the [Chapter on Religion](#).
2. Gods usually do magical things that defy the laws of nature. They make people walk on water, make virgins pregnant, part the waters, or heal miraculously ↗. All these things are acts of magic that are typical for fairy tales, but impossible in the real world.
3. There is no evidence for gods other than the original book or myth. Evidence is a validated theory that confirms the existence of a god ↗. As we have discussed in the [Chapter on Proofs for Gods](#), there is no such evidence.

Hence, atheists conclude, gods are fictional characters just like the others.

For the same reasons that the Aztec gods showed up only to the Aztecs, the Japanese gods showed up only to the Japanese, and Yahweh only showed up in the Middle East.

By anonymous

EVERY SINGLE ACTION



**OF GOD IN THE BIBLE, THE
QURAN AND THE TORAH TOOK
PLACE INSIDE THAT LITTLE CIRCLE**

[Found in: Progressive Secular Humanist]

Do you have a proof?

Nobody has a proof that God does not exist. This is because there is nothing that a believer would accept as a proof that his god does not exist. The Earth explodes tomorrow? It was God's will! Prayer does not work? God will fulfill your wish later in a different form! There is pain and hunger in this world? It's all a test for the afterlife. Nobody has ever seen God? That's because he's invisible. No matter what argument we come up with, none is accepted as a proof that God does not exist.

This means that there is no X such that

If X , then God does not exist.

The same is true for any other god or supernatural being. We can never prove that Zeus does not exist, that the good fairy does not exist ↗, that Khonvoum does not exist ↗, or that "God" is not the first cause of the universe ↗. We call such a belief unfalsifiable ↗.

Fortunately, it is also not necessary to prove that these gods don't exist. This is because the above If-then statement can be transformed ↗ into the following logically equivalent form:

If God exists, then not X .

We agreed before that there is no such X . This means that if God exists, we cannot draw any conclusion from this. We do not know anything more about this world if we assume that God exists. Not a single concrete thing about this world can be predicted. To see this, let's assume that the abrahamic god exists. What can we conclude from this assumption? Maybe that it was him who created the world, that there is paradise, and that there is hell. Unfortunately, all of these statements are again unfalsifiable. They can't be proven wrong either. This means that they also don't tell us anything about the real world. If we assume that God created the world, we still don't know anything concrete: We don't know how many animal species there are, we don't know when the Earth will be destroyed, we don't know how the human brain works, we don't know how to solve the problem of world hunger. The assumption of God tells us nothing about the real world ↗. This is actually a characteristic property of fictional entities. The claim that they exist is unfalsifiable ↗. Thus, it is literally meaningless ↗. This applies to all gods.

Another consequence of the unfalsifiability is that we can come up with arbitrarily many other unfalsifiable claims ↗. For example, I can say "There is not one god, but two gods". This claim contradicts the claim "There is only one god", but it is also unfalsifiable. This means that we have two claims that cannot both be true, and yet none of them can be proven false. Therefore, people have come up with numerous contradictory supernatural theories ↗. Since none of them can be proven false, they are the main ingredient for religious disputes ↗.

*If you cannot prove it wrong
that doesn't make it true.*

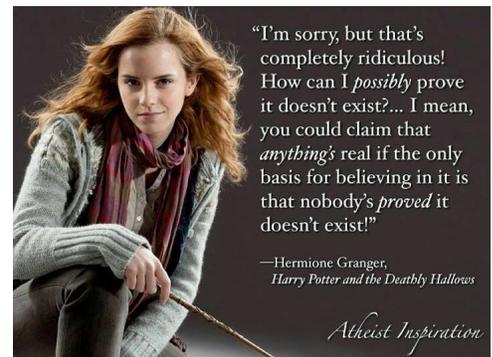
Isn't the creation falsifiable?

This book argues that the existence of gods is not falsifiable. There is nothing that a believer would accept as a proof that his god does not exist ↗.

Now let's look at the hypothesis "God created the world". Isn't that one falsifiable? If God had not created the world, then the world would not exist. Hence, we have a possibility to prove the hypothesis wrong, and hence the hypothesis is falsifiable ↗.

This line of reasoning is tempting, but false. Falsifiability asks for what would have to happen (in the present or future) to prove the hypothesis wrong. What could I do now to show to you that God did not create the world? What has to happen to shake your belief that God is not the creator?

It turns out that there is no such thing. No matter what happens, you would still believe that it was God who created the world. Even if the world ceased to exist, it could still have been God who created it originally. And thus,



the thesis "God created the world" is still unfalsifiable. It is just empty words stacked on top of whatever we observe.

Isn't the subjective God experience falsifiable?

We have argued that the existence of God cannot be falsified, and that the claim "God exists" is hence meaningless ↗. We can object that there are quite a number of feelings linked to God ↗. When we pray, we feel better; when we believe that God protects us, we feel relieved; when something good happens, we feel thankful. Are these not real, perceptual experiences ↗? And can these experiences not be predicted by the assumption of God ↗? And if yes, does this not give "God" a meaning, in the sense that the hypothesis of God has predictive power ↗?

These experiences are indeed perceptions in the sense of this book ↗. Thus, the theory "If I pray to God, I feel relieved" does make falsifiable predictions ↗. These predictions are well studied, and the present book dedicates a section to them ↗.

However, such theories always concern an action by the believer – and never an action by the god. It is the belief in God, the prayer to God, or the devotion that has the effect – and never the god himself. Technically speaking, the rules are never of the form "If God does X, then...", but always of the form "If I do X with respect to God, then...". It follows that such theories can only ever predict psychological experiences. They can predict feelings of relief, the illusion of control, or the abatement of fear. However, they cannot predict that God created the universe, that we have to follow his commandments, or that he has objective physical existence. Thus, "God" is an auxiliary notion that we use to describe our subjective psychological experiences ↗. In this sense, God exists. But he exists only in our heads.

Atheism and Falsifiability

We have argued that the hypothesis "God exists" cannot be falsified ↗. Therefore, atheism holds that gods are the work of fiction ↗. Now how about atheism? Can the claim "God does not exist" be falsified?

To answer this question, we have to find things that we would count as proofs that God exists. Here is a list of things that atheists would accept as a proof that God exists:

- Praying to God makes things possible that are otherwise impossible ↗
- God reveals himself in a scientifically verifiable way
- God intervenes in this world a verifiable and identifiable way ↗

All of these things would be proofs that God exists. Hence, the claim "God does not exist" is falsifiable. This makes the claim meaningful. Its meaning is: None of the above things will ever happen ↗. The claim predicts that, no matter how much we pray, we will never obtain anything that would not happen anyway. Praying, observing rites, or following superstitions will never have any effect other than psychological. This is indeed what we find ↗. The claim also predicts that no god will ever reveal himself in a scientifically verifiable way. Again, this is what we find. Finally, the claim predicts that no god will ever intervene in this world in a way that we can identify him. In other words: There are no miracles. Again, this is what we observe ↗. Thus, the claim is not only meaningful, but also correct ↗. It makes concrete and true predictions about the real world. This is more than any religion can say of itself.

This is the central asymmetry between theism and atheism: Theism says there is a god, but does not say what will happen or not happen. Hence, theism is not falsifiable and thus meaningless. Atheism says there is no god, and uses this to make predictions – which we find to be true.

Why I am an atheist?

I spoke to God.

He said that for all practical matters, he doesn't exist.

By Suhas Karanth on Quora

Remark: Interestingly, as soon as God intervenes in this world in a verifiable way, he ceases to be supernatural ↗. Thus, atheists could start believing in his existence, but still reject the supernatural. Thus, they would remain atheists. It's just that they would start believing in that god, because that god ceased to be supernatural.

Why would people invent gods?

In an atheistic world view, gods are the works of fiction ↗. This begs the question of why some people would invent gods.

There is a wide variety of reasons why people came up with gods. One of the earliest reasons might be the desire to explain the phenomena of nature. People did not know why the sun rises every day, and so they suspected that there must be someone who moves the sun. This thought gave rise to the fictitious entity of a god. Similarly, people did not know where rain comes from, and hence they assumed that there is a god of the rain. Indeed, some religions have different gods for different phenomena of nature. There can be also be psychological reasons. Children, for example, are afraid of an evil ghost under their bed. In the same way, ancient people may have been afraid of ghosts, spirits, or higher powers. Some of these may have evolved into full-fledged fictional entities later on. People can also create fictional entities out of a dream, hallucination, or epileptic seizure. Such experiences can give rise to the belief in things that are not real. People can also start personifying a dead person. They can believe that they can talk with them, and this belief can give rise to the notion of an afterlife, or of spirits. In other cases, simple stories and myths may have become so popular that they were taken for true. It is sufficient that some shaman tells a story, and that people pick it up, so that it becomes a belief. Still today, people create, share, and believe urban legends – even though they are false. In the [Chapter on the Founding of Religions](#), we dedicate an entire section to the things that inspired the stories about the gods.

In some cases, religious beliefs may also have been actively promoted by those in power. Kings of all eras loved claiming that their power and laws were sanctioned by the gods. This kept the people quiet and obedient. The people in power also realized that they could easily control a population by threatening it with hell. Therefore, some people may have actively invented or supported stories of gods. In some cases, people may have benefited personally from the stories that they invented. This is widely acknowledged in the case of Scientology ↗. However, it may also be true for other religions. The prophet Mohammed of Islam, for example, granted every Muslim man up to 4 women – but he himself could have an unlimited number of women, as per God's order. It is clear that such a power may tempt people to invent gods and stories. We discuss them later in this book ↗ ↗. We also dedicate an entire section to the motivations that people had for nurturing a religion ↗.

Over the centuries and millennia, the stories of gods were shared, altered, amended, and merged. Some were abandoned, others became very powerful. We discuss this process in detail in the [Chapter on Memes](#).

How do we know that the gods are imaginary? Simply imagine that one of them is real. If one of these thousands of gods were actually real, then his followers would be experiencing real, undeniable benefits. These benefits would be obvious to everyone. The followers of a true god would pray, and their prayers would be answered. The followers of a true god would therefore live longer, have fewer diseases, have lots more money, etc. There would be thousands of statistical markers surrounding the followers of a true god. All the other false gods would have fallen by the wayside long ago, and there would be only one religion under the one true god. And yet, this is not the case.

By [GodIsImaginary.com](#)

Why would people believe in gods?

For an atheist, gods are the work of fiction ↗. We have discussed why people would come up with such fiction ↗. Here, we discuss why people would believe and follow such fiction.

One factor that might have played a role is that people were much less skeptical than they are today. Imagine that I tell you that I heard about a man who could walk on the water. You would probably not believe me. You would want to know where I heard that, and whether there is proof for it. Without such proof, you would not remotely consider that I might be right, let alone follow me and start sharing this story. Yet, this is what ancient

people did. Of the people who wrote the New Testament of the Bible, no one ever saw Jesus walking on the water. All authors of the New Testament, including the evangelists, but including also Paul, lived decades, if not centuries after Jesus ↗. They possibly never met that Jesus. Still, people believed their stories.

All of this worked because people had no modern means of verification. The idea that a hypothesis should be formalized and tested before it is taken for true is a modern one. In ancient times, stories were considered true if they were reported by authoritative people, or if they were sufficiently prevalent ↗.

Once a belief has established itself in society, it is deepened through iteration and habit. Children learn the belief from their early years on, and hand it on to the next generation ↗ ↗. It is often also prohibited to question that belief. Thus, people are quasi brainwashed into the belief. As an example, consider the belief in fairies. Adults tell children about fairies, and many children believe that fairies exist. Now assume that the belief in fairies would be taught at school. At the same time, it would be prohibited under penalty of death to tell children that fairies do not exist. (This is indeed how it is in some Muslim countries with respect to God ↗.) Any thought or argument that fairies do not really exist would be wiped out from our lives. This way, an entire generation of children would be brought up believing that fairies exist – much to the helpless surprise of their parents. These children would tell their own children about fairies. Imagine if this were iterated for hundreds of years. Then an entire culture would incorporate fairies as a natural part of life, and it would not be surprising at all that everybody believes in fairies. This is how the world's major religions work ↗.

Furthermore, belief in higher powers can also be convenient. Higher powers seem to explain many questions that would otherwise go unanswered. Belief in higher powers might also fulfill a basic human desire for control. By imagining that someone is responsible for the randomness of life, we can imagine that we influence that someone – through prayers, sacrifices, or rituals. Thus, we have at least the illusion that we can do something about the arbitrariness that surrounds us. Religion also caters to the human desire for emotional comfort, safety, absolution, and group feeling. Religious beliefs can also appease people, give power to whoever claims to be in contact with the gods, or establish certain practices in a society. For all these reasons, many people embraced religion. All of this, however, works no matter whether the religion is true or not. We discuss why people believe in gods in the [Chapter on Following Religion](#) and the [Chapter on the Benefits of Religion](#).

*Insanity is believing that your hallucinations are real.
Religion is believing that other people's hallucinations are real.
By Evangelical Pastafarism*

Religion is like Internet Explorer



You either use it because

- You're not smart enough to change it
- You're afraid to download anything new
- It was there when you started

Idea from [Evangelical Pastafarism](#)

Logo from [Microsoft Internet Explorer](#)

IE Image from [Wikimedia Commons](#)

No line whatsoever with Microsoft

© Fabian M. Scharner in "The Atheist Bible"

Questions

Gods are not fictional!

For atheists, gods are fictional characters just like the fairy in the Cinderella tale ↗. However, most people think that gods are by nature different from fictional characters.

This hypothesis is wrong. In fact, everybody believes that gods are fictional characters – as long as it is the gods of the other religions ↗. The majority of people on Earth believe, e.g., that the Horned God of the Wicca religion is a product of fiction ↗. Likewise, the majority of people on Earth believe that Vishnu and Brahma are myths. It may come as a surprise to Christians, but the majority of people on Earth also believe that the Triune God is a human invention. The majority of people, likewise, believe that Allah is the creation of a prophet. Everybody thinks that the gods of the other religions are fiction. If something is a god to one group of people, it is a fictional entity to all the others.

Atheists apply the same logic to all gods at once. To an atheist, all gods are human inventions.

I contend that we are both atheists. I just believe in one fewer god than you do. When you understand why you dismiss all the other possible gods, you will understand why I dismiss yours.

By Stephen Roberts

Remark: It is surprising that the Sumerians did not know the Christian god. After all, according to a literal interpretation of the Bible, the Christian God created the Earth just after the Sumerians had built their cities. For sure, they would have noticed an event such as the creation of the Earth. Even more surprising are the Japanese, who made pottery 4000 years before the Christian God created the Earth.

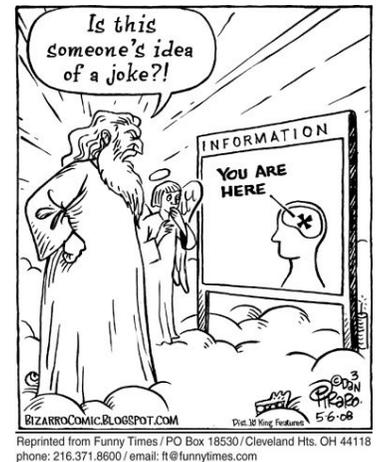
My god created the universe!

From an atheist point of view, gods are fictional characters that do not exist ↗. Believers contort that their god is the all-powerful being and the creator of the world ([Chapter on the Abrahamic God](#)). Hence, he cannot be a fictional being.

Atheists note that it does not matter how much power we ascribe to a fictional character – it still remains a fictional character. If we say that the fairy in Cinderella story has magical powers, that she can live forever, and that she is smarter than any human, then she still remains just a fictional character ↗.

Why is it that human beings can detect fairy tales with complete certainty when those fairy tales come from other faiths, but they cannot detect the fairy tales that underpin their own faith?

By GodIsImaginary.com



Reprinted from Funny Times / PO Box 18530 / Cleveland Hts. OH 44118
phone: 216.371.8600 / email: ft@funnytimes.com

My scripture is from God!

Some religions hold that their scripture came directly from God: Christians believe that God inspired the writers of the Bible. Muslims believe that the Quran was dictated by God. Hindus believe that the Laws of Manu were dictated to the first human (Manu) by a god, or that the Vedas were handed down from mythical ancestors. Does this supernatural origin of the stories not vouch for their correctness?

For an atheist, these stories about the origin of the scripture are no truer than the scripture itself. The stories about the scripture were made up in just the same way that the scripture itself was made up ↗. God did not inspire the writers of the Bible – that was just something the writers would say, or that others would say about them. God did not dictate the Quran – the Prophet Mohammed just made up the verses himself and then claimed that God dictated them ↗. The Laws of Manu were not dictated by a god – the Brahman made up the story to cement their own power in the society. Thus, in atheist eyes, even the story about the scripture is a myth.

As an example, consider the tales of "1001 Nights". Legend has it that a woman called Scheherazade was to spend a last night with the king before being executed. She told the king a story, but did not end it. The king, curious about how the story ends, postponed her execution – and so it goes on for 1001 nights. The stories she told were then collected in the book of "1001 Nights". While the stories themselves are known to be fictitious, many people believe that Scheherazade actually existed. Yet, she did not. The entire frame story for the book is a fabrication, too (Wikipedia/Scheherazade). In other words: not just the stories of "1001 Nights" themselves are made up, but also Scheherazade did not exist.

To atheists, it is the same with the tales about gods: Not just the stories themselves are fictitious, but also the legends that surround them.

You know exactly what it is like to be an atheist with respect to the beliefs of Muslims. Isn't it obvious that Muslims are fooling themselves? Isn't it obvious that anyone who thinks that the Quran is the perfect word of the creator of the universe has not read the book critically? Isn't it obvious that the doctrine of Islam represents a near-perfect barrier to honest inquiry? Yes, these things are obvious.

Understand that the way you see Islam is exactly the way devout Muslims view Christianity. And it is the way I view all religions.

By Sam Harris

Jesus and Mohammed existed!

For an atheist, gods are the products of fiction ↗. However, believers contort that certain figures of the religions were real. For example, there is little doubt that Jesus, Mohammed, and Buddha existed. Then does this not mean that everything else is real as well?

Fictional stories often mix reality with inventions. Consider for example the Harry Potter stories – a children's book by J. K. Rowling. Harry, the hero of the book, uses the train at King's Cross railway station. This railway station exists in reality. Even the conductor of the train may exist in reality. It's just that everything else in the story is fiction woven around these items. In a similar vein, some items in the legends about gods are definitively real. However, that does not make the gods real.

Sometimes, the inventor of the stories is himself a character of the story. In Dante Alighieri's "Divina Commedia", e.g., Dante tells the story of how he has been traveling through Hell, Purgatory, and Heaven ([Wikipedia/Divine Comedy](#)). Even though Dante exists, he did not really make this trip. He just made up a story and wrote it in first person. Today, the story is considered one of the greatest works of world literature. In a similar vein, the prophets can have created stories in which they themselves appear (as the son of God, e.g.), but this does not make the stories real.

Sometimes, a story attaches a legend to a real character. For example, Shakespeare develops his famous play "Macbeth" around King Macbeth – who was a real king of Scotland ([Wikipedia/Macbeth](#)). Even though real people and real events make it into the play, the largest part of the play is fiction. The real King Macbeth probably never said the famous words "Is this a dagger which I see before me / The handle toward my hand?". Likewise, the Lady Macbeth who appears in the play has no historic equivalent. She did not exist in reality. In a similar vein, stories about prophets and gods can mix reality and fiction. They can ascribe fictional phrases or stories to people of the real world. This does not make these stories true.

Sometimes, the story references itself. For example, in the Harry Potter books, the main character reads a book called "Fantastic Beasts and Where to Find Them". This book does not exist in the real world, and neither does its purported author, Newt Scamander. However, later, the author of the Harry Potter books, J. K. Rowling, decided to write a book "Fantastic Beasts and Where to Find Them" in the real world. So there is a real-world book called "Fantastic Beasts and Where to Find Them". What is more, she published the book in the real world under the pseudonym Newt Scamander. Thus, what was a fiction in the first book became reality later on. Whoever reads the first book could believe that it refers to the real book that exists in the real world. In a similar manner, religious books can mix imaginary and real authorship. For example, the Quran (the holy book of Islam) repeatedly refers to itself as the holy book revealed by God. However, the Quran was written years after the death of the prophet who received these revelations ↗. Thus, the book claims that it was revealed by God even though it did not exist at the time of the revelations.

*I find it funny that some people are comparing John Lennon and God...
I mean, he was great, and all, but he's no John Lennon!*

By Evangelical Pastafarism



Did this man really travel to hell and back? Of course not.
[Picture taken of the statue of Dante Alighieri in Florence / Italy]

The prophets were honest

In atheist eyes, gods are the work of fiction ↗. Therefore, atheists do not believe that gods are real. Believers retort that the prophets who told us about the gods were honest people. If they were honest, then their experiences were real, and the gods really exist.

Unfortunately, it is very hard to figure out whether the prophets were honest, let alone whether they existed. Current scholarly opinion holds that the Gospels of the Bible, for example, were not written by the 4 apostles. Rather, the stories were most likely compiled from different sources by different authors. Furthermore, they were written about 20 to 100 years after Jesus' death. It is difficult to uphold the honesty of an author whom we do not even know. Most likely, no author of the Bible actually met Jesus ↗.

Islam, for its part, traces the Quran to the authorship of the prophet Mohammed. Mohammed, however, was illiterate. He did not write the Quran. The stories were memorized by his followers, and written down near or after the death of the prophet. While Muslim consensus holds that the stories were transmitted truthfully, and verified through cross-validation, nobody knows what happened 1500 years ago with these stories ↗.

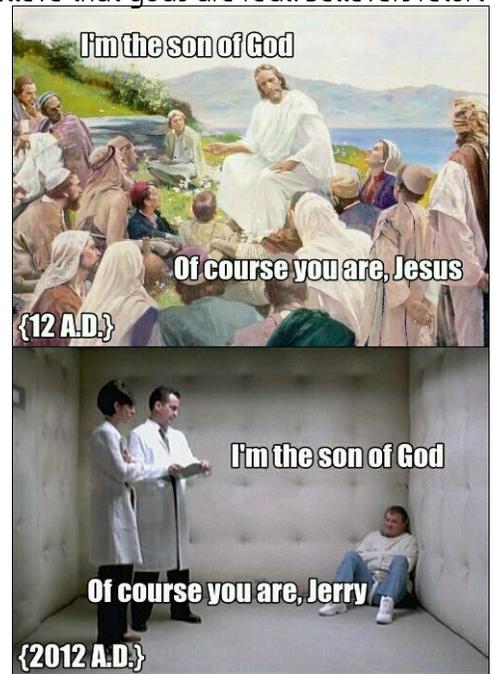
East-Asian religions are older, and it is even more difficult to trace the prophets. Newer religions (such as Scientology, the Wicca faith, Mormonism, or the Bahai faith ↗) can typically trace their holy book in a verifiable way to their prophet. These books also claim the existence of the supernatural. However, they find only few adherents. For some reason, the majority of people prefer to believe prophets that are dead for a longer time.

And the reason is simple: What would you do if someone came and told you that God talked to him? Probably, you would not take him seriously. If he continues to say that God talks to him, you would refer him to psychological treatment. And rightly so: We have no verified case where a god really talked to a human, and hence we regard this a sign of mental problems ↗. The reasons for such purported encounters can be several: Epilepsy, hallucinations, schizophrenia, missing skepticism, or psychological overtaxation. Every year, for example, dozens of people claim they saw God in Jerusalem. This is known as the Jerusalem Syndrome ([Wikipedia/Jerusalem syndrome](https://en.wikipedia.org/wiki/Jerusalem_syndrome)). We give these people psychological treatment. Then why should we believe a person any more who talked to God hundreds of years ago? The same reasoning applies there, too: If this person really said to be in contact with gods, then the most likely explanation is that he was psychologically unstable. However, we seem to draw that conclusion only when the prophet is alive, and not when he's dead. That is inconsistent.

There is another argument against the honesty of the prophets. It applies to all religions, and goes as follows: If the prophet of a religion was honest, then there is no reason to assume that the prophets of all other religions were not honest. We should give these prophets the same confidence. However, religions rarely know about the other religions ↗. No religion grants the prophets of the other religions honesty, and literal accuracy. If they did, then they would have to believe in a plethora of gods and contradictory convictions. Thus, for every prophet, atheists simply side with the majority of people – by not believing his stories.

Men think epilepsy divine, because they don't understand it. We will one day understand what causes it, and then cease to call it divine. And so it is with everything in the universe.

By Hippocrates



(by anonymous)

Scripture says that God exists!

Religious books such as the Bible, the Quran, the Dianetics Book, or the Hindu Scriptures are often taken as evidence for the existence of gods. Yet, taking these books as proof for the existence of gods is no different than taking a Cinderella book as proof for the existence of the good fairy. Such books cannot prove the existence of something.

Adherents of different religions typically provide proofs for the authenticity of their books. Yet, these usually convince only those who believe in it anyway, and not the adherents of other religions who have themselves proof for the authenticity of their books. We discuss the holy books in detail in the [Chapter on Religions](#), with the Christian Bible [↗](#) and the Muslim Quran [↗](#) in their own articles.

Proof that God exists!



It is a telling fact that, the world over, the vast majority of children follow the religion of their parents rather than any of the other available religions.

By Richard Dawkins

Proof that Spider-Man exists!



[Evangelical Pastafarism]

Are abstract things also fictitious?

To an atheist, gods are fictional entities [↗](#). So then we can argue that other abstract things should also be fictional entities to an atheist. This, in turn, would render the atheist world model nonsensical. As an example, take the concept of "love". Is that not also a fictional entity?

It is not. "Love" is the name for the feeling of intense affection [[Oxford Dictionary/Love](#)]. Whenever we have such a feeling, we use the word "love" for it, because saying "feeling of intense affection" would be too clumsy. Thus, "love" is a label for a phenomenon of the real world. We do not need to use that label (we can use any other label), but the way we employ it in common usage, the word is a name for a thing of the real world. It is not a fictitious entity. In particular, "love" implies something in the real world. It implies a feeling, the desire to be with the other person, and to help the other person [↗](#). A similar argument goes for other abstract concepts. As far as they are meaningful, they are all abbreviations for real-world phenomena [↗](#).

The same cannot be said of gods. The statement "God exists" does not imply anything in the real world that we could not also imply without this assumption [↗](#). The statement "God exists" is irrelevant for the real world, and thus literally meaningless [↗](#). It is just empty words.

When inventing a god, the most important thing is to claim that it is invisible, inaudible, and imperceptible in every way. Otherwise, people will become skeptical, when it appears to none, and does nothing.

By anonymous

Chapter on Religion

Introduction

This chapter formally defines gods and religion, and then shows the diversity of today's religious practices. The chapter consists of the following sections:

- [Definition of Religion](#): Formally defines religions, mythologies, and denominations.
- [Gods](#): Formally defines spirits, deities, godheads, and supra-systems.
- [Different Beliefs](#): Gives an overview of religious practices in today's world religions.

Definition of Religion

Belief systems

For the purposes of this book, a belief system is a set of statements [↗](#), some of which concern the supernatural [↗](#). Typically, belief systems also contain a moral framework [↗](#), and a set of rites.

Consider for example the following set of beliefs [\[Wikipedia\]](#):

- *Life on Earth was scientifically created by a species of extraterrestrials, the "Elohim".*
- *The Elohim appeared human when having personal contacts with the descendants of the humans that they made.*
- *You shall not be violent.*
- *You shall strive for world peace, sharing, and democracy.*
- *You shall grant the right to form new religions or new political parties as long as they do not promote violence.*
- *You shall not discriminate against anybody, including gay people.*
- *You shall be open to sex, but never engage in sex with minors.*

As the reader has noticed, the claim that there are entities that are not humans, but that appear human, is not falsifiable [↗](#). It evades human perception. This makes this claim supernatural [↗](#). Hence, our set of beliefs includes a statement about the supernatural. The set also includes a moral framework. Hence, the set is a belief system in the sense of this book. We will use the notion of "belief systems" as an umbrella term to talk about religions [↗](#), sects [↗](#), denominations [↗](#), cults [↗](#), mythologies [↗](#), interpretations of religions [↗](#), and spirituality [↗](#).

It is not always possible to nail down a belief system as a comprehensive list of statements [↗](#). However, for most belief systems, we can define at least the basic tenets in this way. As soon as these tenets include the supernatural and a code of ethics, the tenets qualify as a belief system. Beyond that, the full set of beliefs may be more complicated. This is why we will never fully spell out the entire list of beliefs of a religion. We will not say "The beliefs of religion X are...", but only "The beliefs of religion X include...".

New Religious Movements

A New Religious Movement is a belief system [↗](#) that is not yet large and old enough to be a religion. For example, the belief system that we just saw (with the extraterrestrials [↗](#)) is the belief system of a New Religious Movement called Raëlism. Its leader, Raël, is still alive.

When such a movement gains more adherents, and when it stands the test of time, it becomes a religion ↗. Usually, the leader has to die for it to be accepted as a religion. The transition from new religious movements to religions can still be observed today: The Bahai Faith ↗, for example, was considered a New Religious Movement until not so long ago. Today, it is considered mostly a religion. This is because its leader is dead, it has grown old enough (150 years), and it has gathered enough adherents (a few million). Scientology, in contrast, is still mostly regarded as a New Religious Movement ↗. This is because it has only a few hundred thousand adherents, and started only 60 years ago. However, as time passes, it may start to qualify as a religion. In the US, for example, Scientology is recognized as a religion, because its fanbase is large enough in that country. Thus, the difference between a New Religious Movement and a religion is gradual.

Cults

A cult is a group with socially deviant or novel beliefs and practices [\[Wikipedia/Cult\]](#).

As Ira A. Lipman explains, many people join cults because of frustration with established religion. Some are desperately searching for acceptance. The cultist group becomes their surrogate family. The cult leader becomes a father figure. A cult serves the specific needs of its followers. Recruits are not usually passive targets overpowered by mind controllers. [Ira A. Lipman: "How to be safe", p.214]

Cults are often distinguished from religions because they are perceived as more dangerous than religions – for the following reasons: Cults have unique characteristics that may include a charismatic and controlling leader who claims to have a direct line to a higher power, brainwashing techniques that instill fear, guilt, and shame, and foster dependence on the leader, pressure to cut ties with family and friends, an intolerance of questioning of the cult's beliefs and practices, financial exploitation, criminal activity, and often an apocalyptic belief about the imminent end of the world. [Ira A. Lipman: How to be safe / p.214]

It turns out that some religions share these characteristics in their early stages ↗. Take Islam ↗. Islam had a charismatic and controlling leader (the Prophet Mohammed) who claimed to have a direct line to a higher power. By his adversaries at the time, he was considered a criminal ↗. Islam instills guilt through various techniques ↗, shows intolerance to questioning its beliefs ↗, encourages adherents to cut ties with family members who have left the faith ↗, and believes in the coming end of the world (called "Yawm al-Qiyamah", [Wikipedia / Islamic eschatology](#)).

Thus, there is not much difference between a "cult" and a New Religious Movement that can turn into a world religion. Therefore, this book does not use the term "cult".

In a cult, there is a person at the top who knows it's scam.

In a religion, that person is dead.

By [anonymous](#)

Sects

A sect is a subgroup of a religious, political or philosophical belief system, usually an offshoot of a larger religious group [\[Wikipedia/Sect\]](#).

Traditionally, a sect is regarded as something bizarre. And yet, most religions were sects in the beginning, in the sense that they split away from a majority religion. For example, the followers of Jesus Christ were first only a small group of Jews ↗. After the death of Jesus, the early Christians were still regarded as Jews. They were a kind of Jewish denomination ↗. Later, the followers decided to abolish circumcision in order to make the new religion more attractive to non-Jews ([Wikipedia/Apostolic Age](#)). At this time, Christianity began to develop into a belief system on its own – it ceased to be a denomination of Judaism. At that time, Christians were hated and persecuted. They were a sect in all senses of the word – a small group of people who have split away from the majority religion. Only when Constantin the Great made Christianity the state religion of the Roman Empire, the group ceased to be a sect and became a majority religion ↗.

Thus, what was once considered a sect can yet turn into a world religion. Therefore, this book does not use the word "sect", and stays with "New Religious Movement" instead ↗.

Mythology

A mythology is a collection of myths. A myth is a traditional story, especially one concerning the early history of a people or explaining a natural or social phenomenon, and typically involving supernatural beings or events [Google's definition]. Examples for such mythologies are

- the mythology of the ancient Greeks, with Zeus, Persephone, and the other gods ↗
- the Old Nordic myths ↗
- the myths of the Maya ↗

Interestingly, people believed in these myths with the same fervor that people believe in religions today. For example, the ancient Vikings were such ferocious warriors also because they believed that they go to a sort of heaven when they die in battle ↗. Therefore, this book looks at mythologies and religions in the same way: both are primarily belief systems ↗. The main difference between the two is simply that the followers of a mythology are dead, while the followers of a religion are alive. Once all followers of a religion die, it becomes a mythology ↗. One era's religion is another era's mythology.



Zeus, a god in the Greek mythology
– pensioned off to a museum.
[Picture taken in Athens/Greece]

Religion

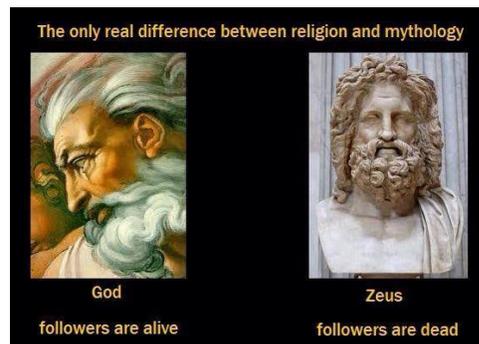
For the purposes of this book ↗, a religion is a belief system ↗ such that

1. its followers are alive (otherwise it would be a mythology ↗).
2. it is sufficiently old and large. Most notably, its leader has to be dead (otherwise it would be a new religious movement ↗).
3. there is no sub-set of the beliefs that is still shared with other believers under the same name (otherwise it would be a denomination ↗).

Whether a belief system qualifies as a religion or not has nothing to do with its content. Any belief system can become a religion, no matter what its beliefs say. The distinction of being a religion comes purely from the number of adherents and their being alive.

Religions that have a very large number of adherents (typically more than 10 million) are called world religions.

Remark: If you meet someone who defines the word "religion" differently, don't argue with them saying that "religion" is what this book defines it to be. "Religion" is just a word. It is a vehicle that we use to convey ideas ↗. Try to see what your interlocutor means with this word ↗, and then use the word in their sense. In a large number of cases, the only point your interlocutor wants to make is that they use the word in one particular sense. In that case, you can just agree. As Allan Kardec argued in his book "The Spirits' Book": it would be childish to regard as a contradiction what is often only a difference of words.



(anonymous)

Interpretations

A religion is a belief system that is widely shared, and whose followers are alive ↗. For example, the religion of Christianity ↗ is a belief system that includes the following beliefs:

1. *There is only one God*
2. *Jesus is the son of God*

Religions often allow for several interpretations. For example, liberal Christian churches allow gay people to marry, while conservative churches don't ↗. Progressive Hindus will allow their daughter to marry a non-Hindu, while conservative Hindus won't ↗. For this book, such interpretations are extensions of the belief system of the religion by more beliefs ↗. For example, a conservative interpretation of Christianity will contain the following beliefs:

1. *There is only one God.*
2. *Jesus is the son of God.*
3. *Marriage can only happen between a man and a woman.*

Such an interpretation can be considered one particular "flavor" of the religion.

Denominations

We have seen that a religion can allow for several interpretations ↗. If an interpretation "operates under a common name, tradition, and identity", it is called a denomination [[Wikipedia/Religious denomination](#)]. For example, the "Catholic denomination of Christianity" is an interpretation of Christianity ↗ that includes the following beliefs:

1. *There is only one God*
2. *Jesus is the son of God*
3. *During mass, the bread used during the ceremony transforms physically into the body of Jesus.*

The "Protestant denomination of Christianity", in contrast, is an interpretation that includes

1. *There is only one God*
2. *Jesus is the son of God*
3. *During mass, the bread used during the ceremony is a symbol of the body of Jesus.*

Thus, each such denomination is again a belief system in the sense of this book ↗. Since Christianity is a subset of the beliefs of the denominations, every adherent of a denomination of Christianity is also an adherent of Christianity as a whole.

Most religions have several such denominations ([Adherents.com / Major Branches of Religions](#)). Christianity, for example, is split into Catholic, Anglican, Protestant and Orthodox traditions, and into several denominations of finer granularity ↗. The same applies to Islam ↗, Hinduism ↗, Judaism ↗, and other religions.

*A Christian was walking across a bridge one day, and he saw a man about to jump off.
He ran over and said "Stop! Don't do it!"
"Why shouldn't I?" he said.
"Well, there's so much to live for!"
"Like what?"
"Well... are you religious or atheist?"
"Religious."
"Me too! Are you Christian or Jewish?"
"Christian."
"Me too! Are you Catholic or Protestant?"
"Protestant."
"Me too! Are you Episcopalian or Baptist?"
"Baptist."
"Wow! Me too! Are you Baptist Church of God or Baptist Church of the Lord?"
"Baptist Church of God."
"Me too! Are you Original Baptist Church of God, or are you Reformed Baptist Church of God?"
"Reformed Baptist Church of God."
"Me too! Are you Reformed Baptist Church of God, reformation of 1879, or Reformed Baptist Church of God, reformation of 1915?"
"Reformed Baptist Church of God, reformation of 1915!"
"Fuck you!" said the Christian, and pushed him off.*

By anonymous

The true interpretation

Denominations and interpretations are variants of the belief system of a religion ↗ ↗. Each such interpretation carries a label. For example, the belief system of Shia Islam is called "Shia" ↗. It looks roughly as follows:

Shia:

1. *There is only one god*
2. *Mohammed is the final prophet of this god*
3. *Ali, Muhammad's son-in-law, is the divinely appointed successor to the prophet Muhammad* ([Wikipedia/Shia](#))
4. ...

This is all fine – until one interpretation of a religion X claims to have the label "True X". For example, Shias can claim that Shia Islam is "The true Islam". Similarly, conservative Christians ↗ can claim that their belief system is "The true Christianity". This will upset believers of other interpretations of religion X, because, by the common understanding of the word "true", it implies that the true interpretation is better than the others. Most notably, it implies that the other interpretation cannot have the label "true". Much conflict results from this ↗, in particular in Islam ↗.

An alternative would be to use a different label for each interpretation – such as "Modern Shia Islam", "Progressive Hinduism", or "Conservative Catholic Christianity". Such labels could co-exist peacefully. However, such labels would also make it evident that the choice of the interpretation is an arbitrary choice among several possibilities. This is something that many adherents prefer not to see this way. Therefore, they claim the label "true X" for their interpretation. In some cases, they resort to synonyms. For example, the word "Catholic" means "all-embracing". The word "Orthodox" means "correct". Thus, Catholic Christianity and Orthodox Christianity each consider themselves the true Christianity.

This book takes no sides in these questions. It is not the task of an atheist to decide which interpretation of a religion is the "true" one. In any case, none of them can be true, because the others cannot be false. This is because they are all unfalsifiable ↗. Hence, for this book, each interpretation of a religion is simply a set of beliefs with a label. To avoid taking sides, we will never use the label "the true X".

Remark: Christians have discarded some parts of the Old Testament of the Bible. For example, they have abandoned the prohibition of pork ([Wikipedia/Christian views on the Old Covenant](#)). Muslims, in contrast, believe that these parts of the Bible still form a valid part of God's message. Thus, Muslims accuse Christians of not following the "true Christianity".

Wrong labels

For this book, a religion is a set of beliefs ↗. For convenience, each such set of beliefs has a label ↗. For example, we label with "Hinduism" the set of beliefs that includes the idea of karma, reincarnation after death, and rituals ↗.

You might object to this labeling if, in your view, Hinduism does not mandate the rituals. Thus, there seems to be a conflict between the Hinduism that you know and the Hinduism that this book describes.

However, there is no conflict. This book simply describes a set of beliefs. For convenience, it calls this set "Hinduism". If you believe that "Hinduism" is the wrong label for this belief system, then you are very welcome to use any other word instead. Maybe the right label in your view is "Indian Ritualism". If you think so, then you are invited to load this book into a word processor, and to replace the word "Hinduism" by the word "Indian Ritualism". After this change, you will agree with this book that Indian Ritualism prescribes rituals. You will also agree that "Indian Ritualism" is a religion, because it is a belief system that involves the supernatural ↗. You will also agree that Indian Ritualism has a huge number of adherents (who are, in your view, those who misinterpret Hinduism). Thus, you will in fact agree with all the claims that this book makes – just under another name. But that is not a problem: This book is about concepts, and not about how you call them.



A Hindu ritual
[Picture taken in Bali/Indonesia]

Questions of words are of little importance for us. It is for you to formulate your definitions in such a manner as to make yourselves intelligible to one another. Your disputes almost always arise from the want of a common agreement in the use of the words you employ [...] For spirits, and especially for those of high degree, the idea is everything, the form is nothing.

By the spirits in Allan Kardec's "Spirits' Book"

Groups of religions

We sometimes group together several religions that share some beliefs. For example, the abrahamic religions (Islam, Bahai Faith, Christianity, Judaism) all share the following beliefs:

1. There is exactly one god
2. Abraham was a prophet of that god
3. After death, humans go to either heaven ↗ or hell ↗ (both mystical places)

This set is in the intersection of the sets of beliefs of the abrahamic religions. The set is not a religion itself, because it has too few beliefs, and does not contain rites or a moral framework. The set just serves to group together different religions that have similarities.

Scripture

Many religions are based on scriptures. These are books, narratives, or laws that are considered holy. Christianity, e.g., has the Bible ↗, Judaism ↗ has the Torah (pictured right), and Hinduism has the Vegas ↗.

Technically speaking, a scripture is a set of statements. Usually, a scripture includes some supernatural elements, and thus, one could be tempted to call the scripture itself a religion in the sense of this book ↗. However, the scriptures are rarely followed in their entirety. For example, Christianity has abandoned the prohibition of pork that the Bible prescribes (Bible/Leviticus 11:7-8, Deuteronomy 14:8). Since a set of statements can only be a religion in the sense of this book if it is followed by people, the Bible itself does not qualify as a religion ↗. Not every holy scripture is automatically a religion.



The Torah
[Picture taken in the Beth Hatefutsoth Museum in Tel Aviv/Israel]

However, a religion may incorporate beliefs from the scripture. For example, the Bible says that there is only one god, and the Christian religion takes over this belief. Technically, the set of beliefs of Christianity and the set of statements in the Bible overlap. In addition, religions usually also incorporate beliefs *about* the scripture. For example, Christianity contains the belief "The Bible is the word of God".

Talking about a religion

For this book, a religion is a set of beliefs ↗. Thus, a religion is just a list of statements. We will use the word metonymically as follows:

Religion X believes/holds/says/... that Y

The statement Y is part of the set of beliefs of X. For example, we will say: "Christianity believes in the triune God".

Religion X condemns/shuns/punishes/... Y

The beliefs of X include a moral statement ↗ that condemns Y. For example, we will say: "The Bahai Faith condemns homosexual relationships".

Variants/Interpretations/Denominations/... of Religion X do Y

There exist interpretations ↗ of X that do Y. These interpretations have a substantial proportion of the adherents of X. For example, we will say: "Variants of Hinduism believe in several gods".

Historically, Religion X did Y

There exists a historical interpretation of X that did Y. For example, "Historically, Confucianism had very brutal punishments".

The scripture of Religion X says Y

The statement Y appears in the scripture ↗ of Religion X. This does not necessarily mean that it also appears in the beliefs of X. For example, we can say "The scripture of Christianity denounces the consumption of pork and shellfish" – even if these beliefs are not part of Christianity today.

Adherents of Religion X generally believe Y

The majority of adherents of Religion X believe in Y. Therefore, Y is assumed to be part of X. For example, we say "Polls show that Muslims generally reject homosexuality" ↗.

Religion (in general)

The phenomenon that religions exist. For example, we will say "Several wars were supported by religion", to mean that "Several wars were supported by the fact that religions exist" ↗.

Sources of religions

A religion is a set of beliefs ↗. These beliefs can come from different sources.

Scripture

Most world religions are based on scripture ↗. While many world religions hold that their scripture was divinely inspired, or even dictated by a god, all scriptures were ultimately written down by men ↗. It was always a human who held the pen. Some of the tenets of these scriptures were taken over into the belief system of the religion.

Culture

Some religions have incorporated habits from other cultures. For example, the primary scripture of Islam (the Quran ↗) does not mention the practice of circumcision or the Halal slaughtering method ↗. These practices were added to the belief system of Islam from other cultures: circumcision from the Jews, and the five prayers from the Zoroastrians. Today, both practices are part of Islam.

Power struggles

Some denominations were born out of a struggle for power. In such cases, the new denomination received some new tenets to distinguish it from the mother religion. For example, Anglicanism split from Catholicism because the English king wanted to get a divorce that Catholicism would not allow him. Hence, he created a new denomination of Christianity that would allow him the divorce. This new denomination received some beliefs about the religious role of the king, and some others that denounce the pope as "the antichrist, man of sin, and son of perdition" [Westminster Confession of Faith / XXV / VI]. Shia Islam, for its part, was born out of a power struggle for the succession of the Prophet Mohammed. Shias believe that a man called Ali is the righteous successor of Mohammed. Therefore, the Shia profession of faith goes "There is no god except Allah, Muhammad is the messenger of Allah, and Ali is the Wali (guidance) of God". Thus, in both cases, beliefs about particular leaders made it into the belief system of these denominations.

Scholarly decisions

Some beliefs of a religion are decided by scholars. For example, Christian scholars decided in 325 CE that God was triune ↗. Since that time, the trinity is a belief of Christianity.

Preachers

In areas where few people can read, religion is spread mainly by tradition and preachers. These preachers can to some degree define the beliefs of the religion. The adherents then consider these beliefs part of their religion. Variants of Hinduism follow this scheme ↗.

Other religions

Buddhism ↗ and Sikhism ↗ have taken over concepts from Hinduism ↗. Islam ↗ took over ideas from Christianity ↗, and Christianity from Judaism ↗. The Bahai Faith ↗ incorporates concepts from the Abrahamic religions, Hinduism and Buddhism. Spiritualism ↗ took over ideas from Christianity and the Indian religions.

In all such cases, man-made tenets were added to the belief system of a religion. In all these cases, the beliefs now form an integral part of the religion. Anglicanism is as much a denomination as Catholicism, even if its belief system includes beliefs that were added during a power struggle. Buddhism is a religion in its own right, even if it took over concepts from Hinduism. The five prayers are a natural part of the belief system of Islam, even if they were added only after the Quran was finished. Hinduism is a proper religion in its own right, even if some of its tenets were most likely added by Brahmans. Thus, the belief system of a religion may contain elements that were added by humans, and these are considered integral parts of the religion today.

From an atheist point of view, of course, this applies to all parts of a religion. All tenets of a religion were ultimately made by humans. A religion is a completely human construction. None of the beliefs comes from a god – every single belief of a religion was ultimately made up by a man.

Therefore, it is futile, from an atheist point of view, to argue that some religion would be “mis-interpreted” by humans against God’s will. God’s will appears nowhere in a religion. A religion is just a man-made set of tenets, which were then declared divine.

Gods

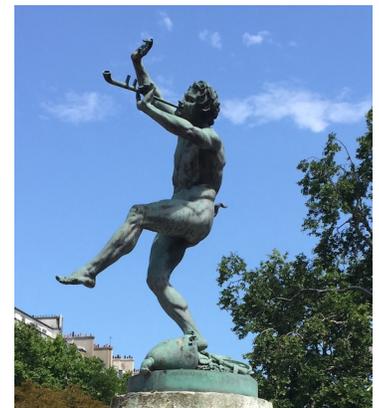
Spirits

For the purpose of this book, a spirit of a belief system ↗ is an entity that is described in the beliefs as

1. acting independently according to its own will
2. supernatural, i.e., whose existence is unfalsifiable ↗

Examples for spirits are the angels in Christianity, the Jinns in Islam ↗, the fauns in the Roman mythology (pictured right), the Elohim in Raëlism, and the spirits in the Chinese religions ↗.

Some religions aim to enter into contact with the spirits (most notably Spiritism ↗). In such cases, special people (called “mediums”) receive messages from the spirits. Thus, one may think that the spirits are a physical phenomenon, and that their existence is falsifiable. Yet, it is not. There is nothing that an adherent of such a religion would accept as a proof that the spirits do not exist. For example, the first mediums of Spiritism later admitted that they had faked the contact with the spirits. Still, Spiritism continued to believe in the spirits ↗. Thus, even a proof that the contact was faked was not enough to prove to adherents that spirits do not exist. Hence, their existence is unfalsifiable.



A faun
[Picture taken in the Jardin du Luxembourg
Paris/France]

Local Spirits

A local spirit is a spirit ↗ that is bound to a particular physical object or location. Examples would be the spirit that lives in the big fig tree down the valley; or the spirit of a certain river.

Most early religions worshipped most likely local spirits ↗. Only later did universal deities appear – such as the Roman goddess of love, or the Hindu god of destruction.

Spirits of the Dead

A spirit of a dead is a spirit ↗ that is thought to rise from a dead person, and to continue to interact with this world. Spirits of the dead are particularly present in Spiritualism ↗. One particular form of such spirits are ancestor spirits, which are worshipped in animist religions ↗. But also the saints of Christianity are technically spirits of the dead.

Deities

For this book, a deity (or god) of a belief system is a named spirit ↗ that has sole responsibility for one domain or all domains of life. Examples for deities are: Vishnu in Hinduism ↗ (responsible for the domain of preservation), Allah in Islam ↗ (responsible for everything), or Neptune in the Roman mythology ↗ (responsible for the domain of the sea).

This book understands a deity as an entity that is described in a religious belief system. We do not care about the metaphysical quality of deities, or about their relation to reality. We understand, categorize, and describe deities like characters in a book.

Not every spirit of a religion is necessarily a god. For example, Christianity knows the spirit of the Archangel Michael, but he does not have universal responsibility in any domain. Hence, he is not a god. Local spirits ↗ and ancestor spirits ↗, likewise, do not have universal or sole responsibility in a domain of life. Other cases are less clear-cut: Deities of cities are commonly called deities – assuming that the city is a domain of life. The patron saints in Christianity are very similar to deities, but closely miss the mark in official theology: they do not have sole responsibility for a domain, but merely advocate it with the supreme god ([Wikipedia/Patron saint](#)). The abrahamic devil ↗, likewise, is usually not considered a deity.



A Hindu deity
[Picture taken in Bali/Indonesia]

Dualism

Dualist belief systems know two important deities ↗: a positive deity and a negative deity. The positive deity works for order, justice, and happy humans, while the evil deity works for chaos, suffering, and injustice. These two forces are not sub-ordinate to each other. Rather, they compete on an equal footing.

One of the first dualist religions was Zoroastrianism ↗. Dualist traits can nowadays also be found in religions that know a devil (such as Islam and Christianity). In these systems, though, the devil is not on equal footing with the good god.

Godhead Deities

A godhead deity is a deity ↗ that consists of several spirits ↗. The most prominent example in the West is the Christian God: Christianity reveres God the Father and the Holy Spirit. These two entities qualify as spirits in the sense of this book, because they are supernatural entities that act independently ↗. They are not, individually, deities, because there is no domain for which they (and they alone) are responsible. Christianity groups these spirits together with Jesus as one deity – the triune god. Another example is Hinduism ↗: this religion knows several deities. Some variants of Hinduism ↗ say that these deities are different aspects of the same, all-embracing godhead deity.

How exactly the spirits are grouped together is not always easily understandable. But it also does not matter for this book. We will just call any deity that groups several spirits together a "godhead".

Supra-Systems

Some belief systems have what we will call a supra-system. A supra-system is a set of statements that describe the fate of humans after death, a connection of human deeds to the fate they will meet, or an underlying world order of the universe. Different from a god ↗, a supra-system does not consciously act according to its own will. It is merely a description of the way things supposedly work. A supra-system is supernatural, because its existence is unfalsifiable, and it evades human perception ↗.

An example of a supra-system is the Hindu ↗ belief in reincarnation: Humans will have another life after their death, and their status in that life depends on their deeds in the current life. Another example of a supra-system is

the Confucian notion of "Heaven" ↗. The Confucian Heaven punishes bad deeds, but it is not a conscious entity. Rather, people are punished much in the way that things fall down: It just happens this way. Still another example is the "Tao" in Taoism ↗. It is an overall world order, i.e., mainly a set of statements that say that the world is ordered.

In such systems, gods ↗ may exist or may not exist. If they exist, they co-exist with the other creatures of nature, i.e., with humans, elephants, and apple trees. They all are subject to the same supra-system.

Abstractions

Some modern belief systems (which we call "metaphysical philosophies" in this book ↗) know neither gods ↗ nor supra-systems ↗. In their view, "God" is just a different name for a metaphysical phenomenon such as the "first cause of the universe". This god does not have any physical attributes. In particular, he does not have the characteristics that are commonly ascribed to the abrahamic god ↗.

Some of these philosophies hold that "God" is a name for the abstract first cause of the universe ↗. Others ↗ hold that "God" is a name for the universe at whole. Again others hold that "God" is a name for the "sense of life" ↗, the "universal principle of existence" ↗, the concept of "meaning" ↗, or for the perceived one-ness of nature ↗.

We will call such interpretations of the word God "abstractions". They have in common that they assume a non-falsifiable cause or quality of a natural phenomenon. They are thus supernatural beliefs in the sense of this book ↗ ↗.

Extraterrestrials

Some religions hold that the Earth was created by extraterrestrials. Extraterrestrials by themselves are not supernatural entities. They are hypothetical, but their existence in the observable part of the universe could be proven wrong.

However, the religions that involve extraterrestrials ↗ typically ascribe unfalsifiable properties to them: they cannot be perceived, they live outside our laws of physics, or they live in a supra-universe. These statements are then supernatural.

Different Beliefs

Overview of today's religions

There exist hundreds, if not thousands of religions and denominations. We will discuss the main ones in the [Chapter on the World Religions](#). They can roughly be classified as follows:

Indian religions ↗

These include Hinduism ↗, Jainism ↗, Buddhism ↗ and Sikhism ↗, with around 1.5 billion adherents. These religions believe in several gods (variants of Hinduism), no gods in the abrahamic sense (Buddhism, Jainism, variants of Hinduism) or one god (Sikhism, variants of Hinduism). They share the concept of a supra-system ↗ that enables reincarnation and nirvana.

East Asian religions ↗

In East Asia, we find Shintoism ↗ in Japan and the Chinese folk religions ↗ in China. The Chinese religions include the particular flavors of Taoism ↗, Chinese Buddhism ↗, and Confucianism ↗. The East Asian religions revere several local spirits and deities. Together, they have around half a billion adherents.

Tribal religions ↗

These include traditional African religions, Asian Shamanism, Native American religions, Austronesian and Australian Aboriginal traditions, and Chinese folk religion, with around half a billion adherents. These religions

are characterized by ethnic membership, and are centered on the concept of magic, rituals, and the power of certain objects, i.e., non-scientific procedures to ward off evil. They are usually animist, i.e., they believe in local spirits ↗

Abrahamic religions ↗

These include Christianity ↗, Islam ↗, Judaism ↗, Spiritualism ↗, and the Bahai Faith ↗, with around 3.4 billion adherents in total. The main belief is a single, omnipotent God who created the universe.

New religious movements

These include the Wicca, the Rastafari, Unitarian Universalism, Scientology and others, with several million adherents. These religions are those that emerged since the 19th century. They often syncretize, re-interpret or revive aspects of other religions. Other modern philosophies reject the concept of religion, and hold metaphysical or spiritual view points instead ↗.

Gods and Spirits

Most of today's religions ↗, but not all, have the concept of supernatural beings ↗. The beliefs can be classified as follows:

Polytheistic religions

Polytheistic religions worship many gods ↗. These gods can be worshipped in addition to spirits ↗. Often, both gods and the spirits are subordinated to a supra-system ↗. Classical examples of such religions in ancient times were the Greek and Roman religions ↗. Today, the following religions are polytheistic: Hinduism (in some of its variants ↗), Chinese Folk Religions ↗, and Shintoism ↗, Wicca ↗, and Druidry ↗. Together, they have slightly more than a billion adherents.

Monotheistic religions

Monotheistic religions worship exactly one god – possibly in addition to spirits, but without a supra-system ↗. The most prominent monotheistic religions are the abrahamic religions (Judaism, Christianity, Islam, Bahai, Spiritualism ↗), but also Zoroastrianism ↗, Yazdanism ↗, and Sikhism ↗ are monotheistic. Spirituality may also be de facto monotheistic ↗. Together, these religions have around 4 billion adherents.

Supra-system religions

Supra-system religions believe in a supernatural world-order ↗, which usually involves reincarnation. In such systems, gods and spirits may exist or may not exist. If they do, they are in any case subordinated to the supra-system, and thus of lesser importance. The most prominent representative of these religions is Buddhism, with around half a billion adherents ↗. Others are Taoism ↗ and Jainism ↗.

UFO religions

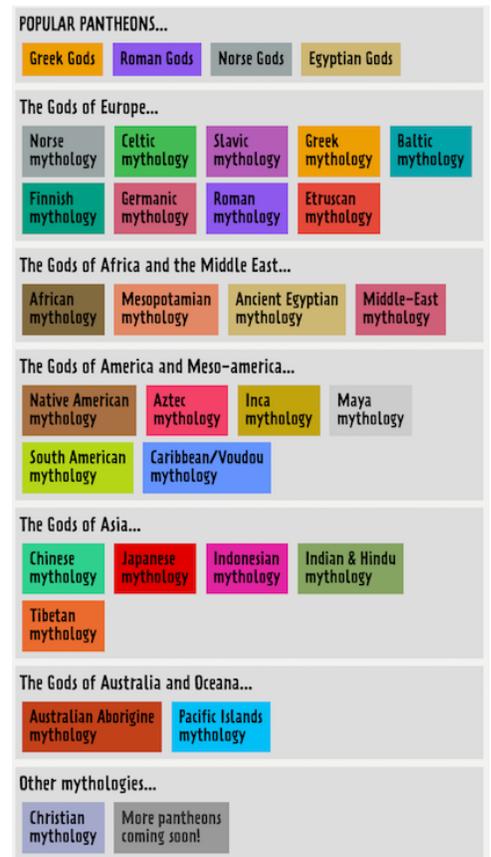
UFO religions believe that there are extraterrestrial intelligent beings ↗. Examples for such religions are Scientology and Raëlism, with several hundred thousand adherents ↗.

Animist religions

Animist religions believe in local spirits ↗, i.e., they hold that natural physical entities (such as animals, plants, or inanimate objects) possess a spiritual essence. Examples for such religions are tribal ↗ and neopagan religions ↗, with probably a few million adherents. These religions also sometimes venerate ancestor spirits ↗.

Metaphysical philosophies

Metaphysical philosophies hold that "God" is just a different name for a metaphysical phenomenon ↗. These philosophies do not know spiritual beings at all.



[Godchecker]

Thus, around half of the world believes in one god. It is not clear whether this god is the same god ↗. The other half of the world believes in several gods, no gods, or spirits. The website GodChecker.com maintains a list of gods, currently counting 4000 of them from past and present.

Y. N. Harari argues in his book "Sapiens" (p. 239) that polytheistic religions are inherently tolerant towards other people's spirits, gods, beliefs, and religions. There is no difficulty for the devotees of one god to accept the existence of other gods. Polytheistic religions do not try to spread the faith, or punish believers of other faiths. Monotheistic religions, in contrast, cannot accept that other gods are worshipped. They typically aim to make the faith in the one god universal (with the exception of Judaism, in which God remained focused mainly on one group of people).

Birth of the Universe

Different religions ↗ have different stories as to how the world came into existence. These can be classified as follows:

Single divine creator

In the large monotheistic religions ↗, the universe was created by God. God himself is eternal and was not created.

World parents

The world parents are a male god (commonly identified with the sky) and a female god (the earth). These procreate, and the result is the world, humans, animals, and possibly other deities. This concept appears in tribal religions ↗, and also in some neopagan religions ↗.

Extraterrestrials

In some UFO religions, the Earth was created by extraterrestrials ↗. In Raëlism, e.g., the Earth is a big scientific experiment by extraterrestrials.

Transformation

In some creation stories, divine beings transform into others or into physical parts of the world. In Hinduism ↗, e.g., Brahma, the god of creation, emerges from a lotus risen from the navel of Visnu, who lies with Lakshmi on the serpent Ananta Shesha [[Wikipedia/Creation Myth](https://en.wikipedia.org/wiki/Creation_Myth)]. Brahma then goes on to create the world.

Abstract

Some religions provide an abstract, non-physical explication for the beginning of the universe. The Taoist creation story ↗, e.g., goes as follows: "The Way gave birth to unity, Unity gave birth to duality, Duality gave birth to trinity, Trinity gave birth to the myriad creatures. The myriad creatures bear yin on their back and embrace yang in their bosoms. They neutralize these vapors and thereby achieve harmony" [[Daodejing](https://en.wikipedia.org/wiki/Daodejing), 300 BCE].

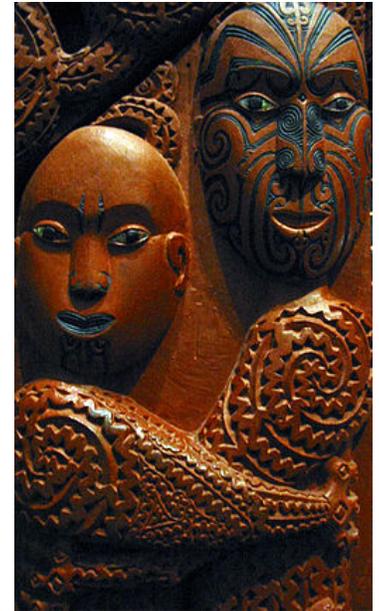
Existence for Eternity

Some religions do not believe that the universe has always been there. According to Buddhism ↗, world systems always appear and disappear in the universe. Buddhists believe that the world has been created millions of times every second and will continue to do so by itself and will break away by itself. Jainism ↗ holds that it is not possible to create matter out of nothing. Hence, according to Jainism, the universe and its constituents have always existed.

Others

Tribal religions ↗ offer a wide variety of other creation stories. Many people believe, e.g., that the current civilization arrived here from a series of previous civilizations in subterranean worlds.

This list is complemented by an equally diverse list of legendary first humans ([Wikipedia/List of protoplasts](https://en.wikipedia.org/wiki/List_of_protoplasts)).



In one Maori creation myth, the world parents are Rangihoua and Papatūānuku, depicted holding each other in a tight embrace
[anonymous]



The Pueblo peoples believe that the ancestors first emerged from a small round hole in the floor
[Wvbailey @ Wikipedia]

Places of worship

Most large religions have buildings or places for worship. These are called synagogues in Judaism, Churches in Christianity (except Protestantism), mosques in Islam, and temples in most other religions. We show here some of today's places of worship.



The seat of Orthodox Christianity near Istanbul/Turkey



Saint Peter's Dome in Rome / Italy, the seat of Catholic Christianity



A Buddhist temple in Shanghai/China



The Blue Mosque in Istanbul/Turkey



The Lotus Temple of the Bahai Faith in Delhi/India



Borobudur, the largest Buddhist temple. In Indonesia.



A Confucian temple in Shanghai/China



A Taoist temple in Hangzhou/China



A Hindu temple in Bali/Indonesia



A Jewish synagogue in Jerusalem/Israel

Supernatural Interaction

In most large religions, people aim to interact with the supernatural or spiritual in some way. This can happen in a variety of ways. Christianity, Islam, Judaism, and Buddhism know the concept of prayer, i.e., an imagined conversation with the supernatural ↗ ↗. Judaism and Confucianism know the concept of writing letters to the gods. Hindus have automated the process by so-called prayer wheels. These are wheels on which the prayers are written down. Turning the wheel equals sending the prayer to the gods.



A Buddhist mass in Bodhgaya/India



Letters with wishes in a Confucian Temple in Shanghai/China



Buddhists praying in the Longhua Temple in Shanghai/China



Letters with prayers in the Jewish Wailing Wall in Jerusalem/Israel



Praying in the Holy Sepulchre in
Jerusalem/Israel, where Jesus is said to
be buried

Hindu prayer wheels in
Bodhgaya/India

Chapter on the World

Religions

Introduction

This chapter traces the history of religion from ancient rites to today's world religions. The chapter consists of the following sections:

- **History of Religion:** Discusses the earliest traces of religion.
- **Abrahamic Religions:** Discusses Judaism, Christianity, Islam, the Bahai Faith, and Spiritualism.
- **Indian Religions:** Discusses Hinduism, Buddhism, Jainism, and Sikhism.
- **East Asian Religions:** Discusses Chinese folk religion, Confucianism, Taoism, and Shintoism.
- **New Religions:** Discusses new religions movements, and Wicca, Scientology, Spirituality, Deism, and Metaphysical Philosophies in particular.
- **Tribal Religions:** Discusses non-formalized religions.
- **Questions:** Answers objections to the present chapter.

*Study one religion, and you're a believer.
Study two, and you're an atheist.*

History of Religion

Earliest Religions

It is difficult to determine when religions started in the history of mankind. It is probably safe to assume that the common ancestors of humans and chimpanzees, 6 million years ago, were not religious ↗. This is because a religion requires the ability to share a belief, and these species did not have the capability to speak. If this common ancestor had been religious, then we would likely see religion in chimpanzees, too – which we don't.

When we move forward in time, we come to the Ardipithecus (4 million years ago ↗), the Australopithecus (3 million years ago ↗), the Homo habilis and Homo ergaster (2 million years ago ↗ ↗), and finally to the Neanderthals (100,000 years ago ↗) and our species ↗. Now where did religion start?

It is hard to tell when an ancient species is religious. We mostly rely on ↗

- findings of grave goods, such as food, weapons, pottery, flowers, or jewellery. Grave goods are superfluous from a materialistic view point, but could indicate belief in some life after death.
- symbols, figurines, or paintings of in-existent beings, such as unicorns, people with more than two arms, or hybrid creatures of people and animals. These could be indications for belief in supernatural beings.

We will now trace these indicators through history.

Neanderthal Burials

Animals usually do not bury their dead. Likewise, early ancestors of humans did not bury their dead. From a materialistic perspective, there is no reason to bury a dead animal. It would just be a waste of time and effort. Bodies were probably just left to rot. Maybe they were at least removed from where the clan lived. The problem is that bodies left in the open air leave no archeological traces, and so we do not know about these practices ↗.

Some of the earliest hint for an intentional burial stems from 200,000 years ago. In Atapuerca in Spain, over 32 individuals of *Homo heidelbergensis* were found at the bottom of a deep shaft. These bones might have arrived there by chance, or by an unrelated event, but one possible interpretation is that they were intentionally buried. Concentrated remains of Neanderthals ↗ were also found in La Quina and L'Hortus in France, and in the Krapina Cave in Croatia, dating to around 100,000 years ago.

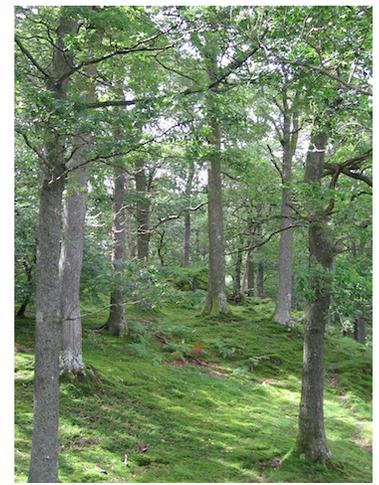
These latter ones were defleshed – meaning that the flesh had been removed from their bones before their burial. It is not clear why this was done. It might have been a burial ritual, and thus the first evidence of religious thinking. However, it might as well just have been cannibalism.

Around 70,000 years ago, there are at least two dozen examples of intentional Neanderthal burials in France, the northern Balkans, and the Near East (Israel and Syria), with more ambiguous examples in the Mezmaiskaya Cave in the Caucasus and at Teshik Tash cave in Uzbekistan near the Afghan border.

Neanderthals placed their dead in simple graves, with apparently no concern for grave goods or elaborate markers. On occasion we find limestone blocks within or atop the graves. The latest burial from the Neanderthals dates to around 35,000 years ago, and was found in St. Cézaire in France. After that, *Homo sapiens* superseded the Neanderthals [[British Archeology Magazine / August 2002 / Issue 66](#)].

We may interpret the burials as a concern for the spirits of the deceased or as a method to ease their transition to the underworld. However, burying the dead may also have had purely pragmatic reasons: Buried bodies don't stink and they don't attract big animals. Burial could also be an artifact of extrapolated empathy ↗. I do not want to be eaten by wild animals, so I don't want my family members to be eaten by wild animals – even if they are dead. Thus, it is difficult to determine whether these burials are evidence of religious thought.

As the British Archeology Magazine points out: We often forget that it is only in the modern, Western world that burial of the dead has been a more or less universal and commonplace practice. Not only in the earliest periods but throughout prehistory, humans disposed of the bodies of their loved ones by a variety of means, most of which have left no traces and can be only be guessed at by scholars today [[British Archeology Magazine / August 2002 / Issue 66](#)].



Bodies that are not buried leave no archeological trace (bottom right in the picture).

Human Burials

The earliest trace of an intentional burial by *homo sapiens* ↗ is found in the Skhul and Qafzeh caves in Israel. A number of men, women and children were explicitly deposited there in what we would interpret as a grave. This was around 100,000 years ago. In this burial, as well as in those that followed it, the bodies of the deceased were heavily colored with red ochre.

Several possible reasons for the ochre have been suggested. We can hypothesize that the ochre was part of a ritual – i.e., a behavior that serves no direct physical purpose, but which may have psychological, social, or spiritual purposes. Another possible reason is that the ochre deters scavengers. Some experiments suggest that the ochre has a particular taste, a smell, or bacterial properties that make it less attractive as food to animals ([Red Ochre Experiment](#)).

In any case, the procedure testifies a certain care for the deceased. It serves no direct purpose for the living to color the bodies of the deceased. From a subsistence point of view, this is just a waste of time (and ochre). Hence, it is tempting to think that supernatural belief played a role. However, we may possibly never know for sure.

Grave goods

Humans buried some of their dead with red ochre ↗ as early as 100,000 years ago. When we scroll forward in time to 27,000 years ago, we find burials with grave goods – items that were deliberately placed with the dead. In many cases, these are the bones of large herbivores such as aurochs, mammoth, bison or reindeer. These burial sites were discovered in Europe.

More spectacular still are burials in Sungir, Russia, which were accompanied by several thousand mammoth ivory beads, several hundred fox teeth pendants and a panoply of ivory artefacts. At Arene Candide Cave in Italy, a young male – the Italians call him “The Prince” – was buried with a cap of mammoth ivory beads, four enigmatically-shaped, holed and incised antlers known as “batons”, a flint blade sourced from over 100 km away, and several other valuable possessions. Interestingly, all people who have been found buried in this way had some pathologically malformed body: deformed spines, bone disease, short limbs, or other disabilities. This, in addition to the fact that we have found only very few of these burial sites compared to the population of humans at the time, suggests that burial was never the norm for “ordinary” people. We have to assume that most people were just disposed of in ways that are now archaeologically invisible. [[British Archeology Magazine / August 2002 / Issue 66](#)]

Still, grave goods pose a conundrum: Why would people spend time and effort to collect items to place with their dead? This does not serve any earthly purpose. Hence, it is commonly assumed that this was done for ritual or religious reasons. It is tempting to think that people gave the goods as gifts to the deceased for an afterlife.

Venus figurines

Between 35,000 years ago and 11,000 years ago, people produced what we call “Venus figurines”. These are statuettes of women that vary in size between 4cm and 25cm. They are roughly diamond shaped, with a small head without facial details, big breasts, a large belly and wide hips, large thighs, and small or absent feet. Over a hundred of such figurines have been found in the area of Europe and Eurasia. They were carved from soft stone (such as steatite, calcite or limestone), bone or ivory, or formed of clay and fired. The latter are among the oldest ceramics known. [[Wikipedia/Venus figurine](#)]

The oldest known figurine is the “Venus of Hohle Fels”, which was carved from a mammoth’s tusk around 35,000 years ago. The youngest is the “Venus of Monruz”, from about 11,000 years ago. These figures have no known connection to the Roman goddess Venus – the name was just given because archeologists conjectured that they would represent a beauty ideal. Interestingly, the figurines are shaped consistently across tens of thousands of years. It is also striking that representations of the female form make up the great majority of unearthed sculptures from the past 30,000 years [[Wikipedia/Venus figurine](#)]. Some of the Venuses were found in graves. Remarkably, some of the Russian figurines were deliberately broken; while the “Black Venus” of Dolni Vestonice had been repeatedly stabbed by some sharp implement [[British Archeology Magazine / August 2002 / Issue 66](#)].

Venuses seem to represent something imaginary or symbolic, because women usually have feet and faces. Since the figurines have no practical use in the context of subsistence, archeologists speculate that they may be emblems of security and success, fertility icons, or representations of a mother goddess [[Wikipedia/Venus figurine](#)]. Carving Venuses looks like an endeavor with no practical use – which is what atheists commonly associate with religion. However, they could also just be works of art, representing an ancient beauty ideal. Finally, they could also be biased representations of reality. Much like children draw people with only heads and legs, ancient people could have drawn women with only hips and breasts.



The Venus of Willendorf
[Picture taken in the Natural History Museum of Vienna/Austria]



The Roman Goddess Venus. Yes, I know.
[Sandro Botticelli]

Local Spirits

The early religions were most likely animist ↗. People believed that the physical objects of nature had a spirit ↗. They personified ↗ the local river, a particular mountain, or an apple tree. They would ask the apple tree spirit to produce many ripe fruits, then harvest the fruits, and apologize to the apple tree spirit for having taken away his apples (Y. N. Harari: "Sapiens", p. 237).

However, once kingdoms and trade networks expanded, people needed to contact entities whose power and authority encompassed a whole kingdom or an entire trade basin [ibid]. This gave rise to the belief in more universal gods ↗, such as the god of love, the god of war, or the god of wine. People probably continued to worship local spirits and ancestor spirits in parallel – and many religions today still do ↗. We now trace this development over time in different parts of the world.

Australian Aboriginal Myths

In Eurasia, Venus figurines might be evidence for early religious traditions ↗. In Australia, we have a completely different indication for religious tradition. The indigenous Australians arrived on the continent around 50,000 years ago, and evolved into different tribes, languages, and traditions. Different tribes have different mythological stories, and some of them have been recorded by modern linguists. Some of these myths tell the story of how geological features (such as a lake, a mountain, or a reef) came into existence. When we compare these stories to how the features really came into existence (based on geological evidence), we sometimes find a striking similarity.

For example, the Lake Euramoo myth goes as follows:

It is said that two newly-initiated men broke a taboo and angered the rainbow serpent Yamany, major spirit of the area ... As a result, the camping-place began to change, the earth under the camp roaring like thunder. The wind started to blow down, as if a cyclone were coming. The camping-place began to twist and crack. While this was happening there was in the sky a red cloud, of a hue never seen before. The people tried to run from side to side but were swallowed by a crack which opened in the ground. [Robert Dixon: The Dyirbal language of North Queensland, 1972]



The Great Barrier Reef in Australia was once a coastline.

In reality, Lake Euramoo came into existence by a volcanic eruption, and the myth can be interpreted in this way. Other myths talk about other features: Port Phillip Bay formed in the ice age by rising sea waters, and a myth describes it as once dry land. The Great Barrier Reef is an ancient coastline, and a myth describes the land between the ancient and current coastline. Lake Eyre nowadays never has water permanently, but we know that it once did. A myth describes the lake permanently filled, and the deserts around the lake as a continuous garden. All of these stories can be interpreted as describing some real geological phenomena. The stories describe some truth, and intertwine it with mythological content ↗.

The interesting thing is now that these geological phenomena took place up to 10,000 years ago. If the stories really describe these phenomena, then the stories must have been handed down from generation to generation for 10,000 years. Assuming that the addition of mythological content happened early on, this would mean that the Australian indigenous people had mythological stories 10,000 years ago.

Australia is pretty remote from everywhere else, and extremely sparsely populated. This entails that a particular indigenous culture could persist with absolutely no influence from other cultures for thousands of years. Most likely, the cultures changed little, or not at all, during this time.

Neolithic religions

The Neolithic period of human history ranged from 10,000 BCE to roughly 3000 BCE and counts as the last period of the Stone Age. It was characterized by the development of farming, the domestication of animals, and the invention of metal tools. The main development happened in the Middle East, Egypt, Europe, South and East Asia, and Central America. The first cities, states, and kingdoms emerged. By this time, the only human species was the *Homo sapiens* ↗.

It is commonly believed that religion in the modern sense evolved during this period. However, few reliable facts are known – also because writing was not yet available. We only know of several places that could have served as places of worship:

Göbekli Tepe

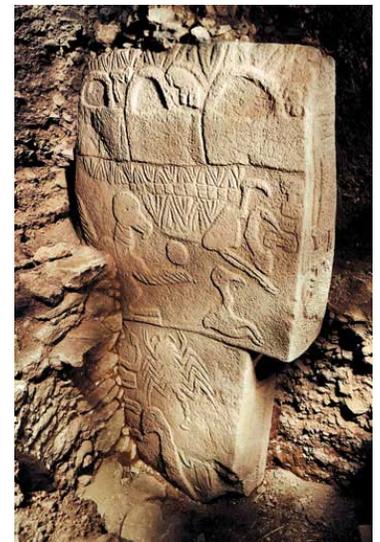
Göbekli Tepe is a site in Southern Turkey, close to the border with Syria. It dates to the 10th–8th millennium BCE. Its most impressive feature are remains of circles of massive T-shaped stone pillars. More than 200 pillars in about 20 circles are currently known. Each pillar has a height of up to 6 m and a weight of up to 20 tons. Many pillars have carvings of animals. It is speculated that the site may have been one of the earliest temples yet discovered. ([Wikipedia/Göbekli Tepe](#))

Çatalhöyük

Çatalhöyük is a settlement in Southern Turkey that existed from approximately 7500 BCE to 5700 BCE. The inhabitants buried their dead in their own houses, often tightly flexed and placed in baskets. In some cases, the heads were severed and placed in other parts of the settlement. Excavations found around 2000 figurines and several murals. Predominant images include men with erect phalluses, hunting scenes, red images of wild cattle, and deer, and vultures swooping down on headless figures. Female figurines have been found within bins used for storage of cereals, and have been interpreted as deities that protect the grain. Heads of animals, especially of cattle, were mounted on walls. ([Wikipedia/Çatalhöyük](#)) All of these items and practices are commonly interpreted as evidence for religious belief – although we do not have certainty on this assumption.

Stonehenge

Stonehenge is a site in South England. It is mainly known for its ring of standing stones. The stones were erected between 3100 BCE and 1600 BCE, i.e., in the Bronze Age. However, already in 8000 BCE, people erected four pine posts that were around 0.75 metres in diameter. These, as well as the stone circle, may have served ritual purposes, but we have no certainty on this ([Wikipedia/Stonehenge](#)). Newgrange in Ireland is a comparable site, dating to 3200 BC ([Wikipedia/Newgrange](#)).



Carvings at Göbekli Tepe
[\[Berthold Steinhilber\]](#)

All of these might have been sites with religious purposes.



Stonehenge

American Religions

The earliest trace of religious activity in Central America dates to the Olmec culture, which flourished between 1200 BCE and 400 BCE. The Olmecs believed in several gods, and their rulers derived their legitimacy from them [↗](#) ([Wikipedia/Olmec Religion](#)).

The Maya culture flourished between 2000 BCE and 1500 CE in Central America. The Mayas had an elaborate system of beliefs, priests, rituals, sacrifices, and divination. Their calendar and the prediction of apocalypse in the year 2012 briefly made headlines in the Western world in that year. They believed in ancestors spirits [↗](#), mythical heroes, goblins, dwarfs, demons, spooks, animal persons, and several gods. The Mayas built several pyramid-shaped temples, some of which survive until today (pictured). They also wrote down their beliefs in scriptures that still exist [↗](#).



Chichen Itza, built by the Mayas between 900 CE and 1200 CE in Mexico, was a temple to a feathered serpent god

The Inca empire lasted from roughly 1200 CE to 1500 CE in Western South America. The Incas believed in gods that lived in 3 different realms (heaven, the surface of the Earth, and the inner Earth), with gods for the moon and the sun, weather phenomena, the sea, or wisdom. The Inca also practiced human sacrifices.

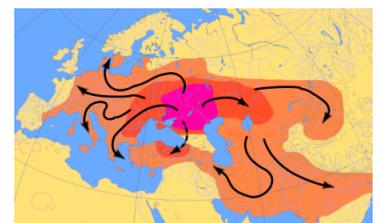
The Aztecs dominated Central America between 1300 CE and 1600 CE. They believed in several gods, and often adopted gods of other regions into their beliefs. They divided the cosmos into the upper world and the underworld, and had gods associated to each. As the previously mentioned indigenous populations, they practiced religious festivals and human sacrifices.

In North America, the indigenous tribes typically each had their own religious beliefs. The tribes believed in one or several gods, and/or in spirits. The spiritual culture included dances, rituals, and the use of herbal drugs. The traditional beliefs were usually passed down face-to-face to the next generation.

The Europeans arrived first in 1492 CE, and then in greater numbers. Finally, their culture came to dominate the local cultures. Today, all of the indigenous religions have been overridden nearly completely by Christianity.

Proto-Indo-European Religions

The Proto-Indo-Europeans (PIEs) lived around 4000 BCE in the region between the Black Sea and the Caspian Sea. They later migrated to Europe in the West and to India in the South. This migration has been traced back through common linguistic and genetic traits ([Wikipedia/Proto-Indo-Europeans](#)). Most of what we know about their culture stems from the analysis of the descendant cultures. These are the ancient Greek culture, the ancient Roman culture (speaking Latin), the ancient Indian culture (which used Vedic Sanskrit as language), the ancient Celtic culture (in Europe), the Illyrian culture (on the Balkans), the Germanic culture, the Norse culture (in Scandinavia), the Hittites culture (in today's Turkey), the ancient Persian culture (in today's Iran), and the ancient Slavic cultures (in Eastern Europe). Since these descendant cultures had writing, we know their stories. We can then use this data to find commonalities between the stories, and deduce that these must have been shared by the PIEs [↗](#).



Migrations of the Proto-Indo-Europeans
[Dbachmann @ Wikipedia]

Based on these commonalities, it is commonly assumed that the PIEs practiced a polytheistic religion that had moved away from local spirits ↗, and invented universal gods. It centered most likely on sacrificial rites, probably administered by a priestly caste. Common elements of the PIE religions are:

A sky father

Zeus in Greek, Jupiter in Latin, Dyáus Pita in Sanskrit, and Dei-pátros in Illyrian.

A goddess of the dawn

Eos in Greek, Aurora in Latin, Ushas in Vedic.

A river goddess

This goddess was called "Danu", and she gave her name to the rivers of Dnieper, Dniester, Don, and Danube, as well as to rivers in Celtic areas.

Divine twins

Germanic and Indian cultures both believed in twin brothers as the progenitors of mankind: Manu in Indic and Mannus in Germanic, with his brother Yemo in Indic and Ymir in Germanic. Romans seemed to continue this tradition in the myth of the founding of Rome by the twin brothers Romus and Remulus. Other PIE cultures have male horse twins: Polydeukes and Kastor in Greek, Castor and Pollux in Latin, the twins of Macha in Irish, Hengist and Horsa in Old English, Lel and Polel in Slavic.

A sea god

Apam Napat in Vedic, Nechtan in Celtic, Nethuns in Etruscan, and Neptun in Latin.

Triple goddesses of fate

Norns in Norse mythology, Moirai in Greek mythology, Sudjenice of Slavic folklore, Ursitoare in the folklore of Romania, Deives Valdytojos in Lithuanian mythology, and several triple goddesses in Celtic mythology.

One common myth to almost all descendant cultures is a battle ending with the slaying of a serpent or dragon. This idea can be found in

- Zeus vs. Typhon, Kronos vs. Ophion, Apollo vs. Python, Heracles vs. the Hydra and Ladon, Perseus vs. Ceto, and Bellerophon vs. the Chimera in the Greek mythology;
- Thor vs. Jörmungandr, Sigurd vs. Fafnir and Beowulf vs. the dragon in the Germanic mythology;
- Indra vs. Vrtra in the Vedic myths;
- Krishna vs. Kaliya in the Bhagavata Purana;
- Fereydun, and later Keresaspa, vs. Azi Dahaka in Zoroastrianism and Persian mythology;
- Perun vs. Veles, Dobrynya Nikitich vs. Zmey in the Slavic mythology;
- Făt-Frumos vs. Zmeu in the folklore of Romania;
- Tarhunt vs. Illuyanka in the Hittite mythology;
- analogous stories in Mesopotamian mythology, Jewish mythology, and Christian mythology (Saint George).

Another common story is the kidnapping, imprisonment, or abduction into the netherworld of the sun god. This concept is mirrored in the Vedic story of Vala as well as in the Greek stories of Persephone, Dionysus and Triptolemus ↗. The Norse, likewise, had the story of the Sun and the Moon being swallowed by the demon wolves Sköll and Hati Hródvitnisson, while in Hinduism, the Sun and the Moon are swallowed by the demon serpents Rahu and Ketu. [\[Wikipedia/PIE religion\]](#)

The PIE culture gave rise to a number of other cultures and belief systems, which we detail next.

Descendants of the PIE Religions

The Proto-Indo-Europeans emerged around 4000 BCE from a region that is today in Ukraine ↗. Their religion gave rise to a number of related religious systems, with the most notable ones being:

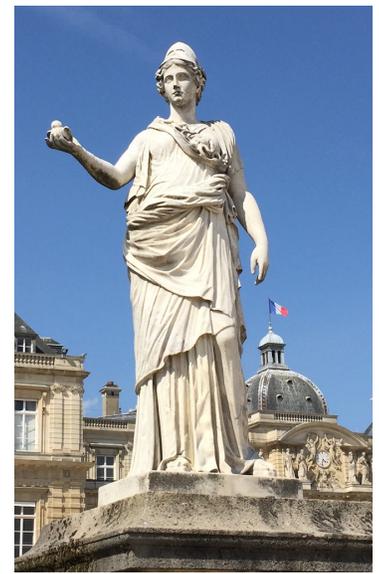
- The Greek mythology, with gods such as Zeus, Poseidon, Persephone, and Hades
- The Roman mythology, with gods such as Minerva, Jupiter, and Venus
- The Hittite mythology in modern-day Turkey
- The Indo-Iranian branch of mythology, which includes the Vedic religion in India, as well as Zoroastrianism in Persia, the Persian mythology in general, and Yazdânism in present-day Kurdistan

- The Celtic mythology
- The Germanic mythology, including the Anglo-Saxon variant (in present-day England) and the Norse mythology (in Scandinavia)
- The Baltic mythology (in Lithuania and Latvia)
- The Slavic mythology (in Eastern Europe)

[[Wikipedia/PIE religion](#)]

These mythologies share a number of concepts ↗. Most notably, all of these religions were polytheistic, meaning that they venerated several gods. Many of these religions have written records ↗, so that we know well what these people believed. Most of these religions died out with the rise of Christianity ↗ and Islam ↗ between 500 CE and today. Some of them, however, gave rise to today's Zoroastrianism and Hinduism ↗.

Zoroastrianism is practiced today by about 2.6m adherents, mostly in Iran. Adherents believe in one universal, transcendent, supreme god, Ahura Mazda, or the "Wise Lord". This belief was codified by the religious philosopher Zoroaster (aka. Zarathustra), in the 2nd millennium BCE – thousands of years before Moses, Jesus, or Mohammed set foot to this world ([Wikipedia/Zoroastrianism](#)). In addition, in a classical dualist ↗ mindset, Zoroastrianism knows Ahura Mainyu, a deity that is the evil opposing force of Ahura Mazda.



Minerva, the Roman Goddess of wisdom
[Picture taken in the Jardin du Luxembourg in Paris/France]

The Ancient Near East

While the Proto-Indo-Europeans started their migrations from Eurasia ↗, the Near East saw the development of their own cultures and religions. This development falls roughly in the time between 4000 BCE and 0 CE. The region comprised the following areas and cults:

Ancient Egypt

with the ancient Egyptian religion, the pyramids, the Sphinx, and pharaohs. This religion merged several religions ↗, and also merged their gods. For example, the gods Ra and Amun were syncretized into a single god, Amun-Ra.

Mesopotamia (in present-day Iraq)

with the Assyro-Babylonian religion, the Sumerian religion, and the Mesopotamian mythology. These religions associated gods with the Sun, Moon, and planets.

South-West Iran

with the Elam civilization.

The Levant (present-day Cyprus, Israel, Jordan, Lebanon, Palestine, and Syria)

with the Canaanite religion and Judaism ↗. The Canaanites worshipped the god El Elyon and his sons, the Elohim, the goddess Anat, and Hadad, the storm god.

Anatolia (present-day Turkey)

with the Hittite mythology and Hurrian mythology. These mythologies were influenced by the Proto-Indo-European religions ↗.

Cyprus and Crete

with the Minoan religion. This religion worshipped primarily female gods.

The ancient Near Eastern societies were typically structured in city states, and each city state had a dominating regional cult for the god of that state. The states were theocracies, i.e., the deity was officially recognized as the civil ruler and official policy was governed by officials regarded as divinely guided ↗. [[Wikipedia/Religions of the ancient Near East](#)] The religious beliefs were also frequently written down. The Pyramid Texts, for example, stem from 2400 BCE and are possibly the oldest known religious texts in the world. They accompany the grave of the



The Pyramid Texts, the possibly oldest religious text, from 2400 BCE in Egypt
[Chipdawes @ Wikipedia]

pharaoh, and explain how he will rise to heaven. This includes the use of ramps, stairs, ladders, and most importantly flying. [\[Wikipedia/Pyramid Texts\]](#)

We detail some of the beliefs of the near-eastern religions next.

Religions in the Near East

The Ancient Near East saw the development of several related religious systems [↗](#). Since writing was invented during this period, we have a better idea of what these people believed. In general, these societies were polytheistic, i.e., they venerated several gods. One of the prevalent gods across all ancient Near-East societies was Tammuz, the Sumerian god of food and vegetation. Egypt and Greece were Henotheistic societies, meaning that they worshipped a single god but acknowledged the existence of others. All of these societies believed in the descent to the underworld after death.

Other common elements were:

Rituals

for purification and cleansing.

Sacrifices

in the form of plant and animal sacrifice, libations (pouring water), and rarely (but prominently in mythology) human sacrifice.

Sacred prostitution

Divination

the attempt to predict the future by analyzing the clouds, the body parts of an animal, the flight of birds, smoke, or dreams.

Magic

the attempt to change the fate by invocations, conjurings and Talismans.

These are elements that we observe also in today's tribal religions [↗](#). The ancient Near Eastern religions and the Indo-European religions influenced each other, and gave rise to mixed systems in Greece, Anatolia, and Persia. The Near Eastern ones also gave rise to Judaism [↗](#), which would later give rise to Christianity and Islam [↗](#).

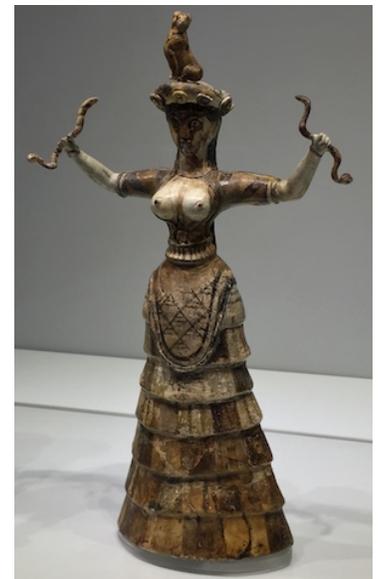
The Mesopotamian religions, under influence from Zoroastrianism [↗](#), gave rise to Yazdanism, the pre-islamic religion of the Kurds. The main beliefs include an absolute transcendental God, a cyclic nature of the universe [↗](#), and seven benevolent divine beings [↗](#) that defend the world from an equal number of malign entities. Their chief is Melek Taus, the "Peacock Angel". Yazdanism (in the form of Yazidism), is practiced by about 1m people in today's Iraq and Kurdistan. Since many Muslims believe that the Peacock Angel is identical to the devil (an evil character [↗](#) in the abrahamic religions [↗](#)), Yazidis are heavily persecuted in some Muslim countries.

If the Roman Empire had selected Mithraism as the official state religion, rather than Christianity, you'd be a Mithraist instead of a Christian. I'd still be an atheist.

By anonymous



The Great Sphinx of Giza, built 2500 BCE in Egypt
[\[Barcex @ Wikipedia\]](#)



A Minoan snake goddess from 1600 BCE.
[Picture taken in the Heraklion Museum in Crete/Greece]

Abrahamic Religions

Abrahamic religions

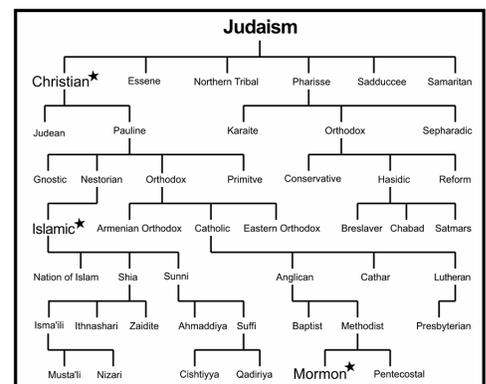
The Canaanites lived in what is today Israel since 8000 BCE. They worshipped a pantheon of different gods, in the tradition of the Ancient Near East religions ↗. The Israelites emerged as a separate culture, probably from the Canaanites, around 1000 BCE. Their culture was characterised by the lack of pork remains (whereas pork formed 20% of the Philistine diet in places), an abandonment of the Canaanite custom of having highly decorated pottery, and the practice of circumcision. By 1000 BCE, the Israelites had established a kingdom in the region, called Israel. [\[Wikipedia/History of ancient Israel\]](#)

The religion of the Israelites, like the Canaanite faith from which it evolved and other ancient Near Eastern religions, was based on a cult of ancestors and worship of family gods. Its major deities were El, Yahweh, his consort Asherah, and Baal. The cult of Yahweh seems to have originated in a region just south of Israel, and was brought north by migrants or merchants. When the kingdom of Israel began, El and Yahweh had become fused into one god. Furthermore, Asherah did not continue as a separate state cult, leaving only Yahweh and Baal as gods. The kings promoted their family god, Yahweh, as the god of the kingdom, but beyond the royal court, religion continued to be both polytheistic and family-centered as it was also for other societies in the ancient Near East. In 722 BCE, Israel was destroyed by the Assyrians, and many Israelites fled to Judah, just south of Israel. In 605 BCE, Judah (with Jerusalem) was conquered by Babylonia, and many Israelites were taken captives. They concluded that Yahweh must have been angry at them because they worshipped Baal, and started worshipping Yahweh alone. [\[Wikipedia/History of ancient Israel\]](#)

This was the hour of birth of the religion of Judaism ↗. Judaism would later give rise to Christianity ↗. Both would later serve as the basis for Islam ↗. Based on these (and other religions), the Bahai Faith ↗ was born in the 19th century. Around the same time, Spiritualism ↗ saw the light of day. These religions are grouped together ↗ as the abrahamic religions, because they are all influenced by Judaism, and Judaism traces its origin to Abraham, a mythological ancestor. The abrahamic religions share the following beliefs:

1. There is exactly one god.
2. Abraham was a prophet of that god.

We discuss the Abrahamic God in detail in the [Chapter on the Abrahamic God](#).



[Found in: Progressive Secular Humanist]

By making the mistake of proclaiming a second Messiah to come, Judaism has given rise to an infinite number of people who all claim to be that Messiah.

Judaism

Origin

In 605 BCE, Jerusalem was conquered by Babylonia ↗. Many Israelites fled the region. During their time in exile, they consolidated their identity and religion. In particular, they decided to abandon the god Baal and worship the god Yahweh alone. This constitutes the beginning of the religion of Judaism, characterized by the belief in a single god and a system of ritual practices and laws. Its adherents were the Jews. In 539 BCE, Babylon fell to the Persian king Cyrus the Great, who invited the Jews to come back to Jerusalem. [\[Wikipedia/History of ancient Israel\]](#) Since then, the region had had a turbulent history with conquests from various sides. Today, Judaism is the oldest abrahamic religion ↗, and counts about 14m adherents. Around 5m of them live in Israel, 5m in the United States, and the others are dispersed in the world, mainly in European countries.

Beliefs

The beliefs of Judaism include:

1. There is exactly one god.
2. Abraham was a prophet of that god.
3. The Torah (s.b.) is the word of this god.

4. There is a special link between the Jewish people (the "Children of Israel") and the god. In this sense, the god shares properties with the local spirits ↗, in that he centers his interest on a particular part of land.
5. After death, humans go to either heaven ↗ or hell ↗.



Jews at the Wailing Wall in Jerusalem/Israel, where the first temple once stood

Variants

Judaism comes in different interpretations ↗, and the main differences are between conservative strains and reform/liberal strains.

Scriptures

The holy scripture of Judaism is the Hebrew Bible. It consists of 24 books, which include the five books of the Torah. Scholars hold that the Hebrew Bible was compiled from multiple fragments, written by different authors. The fragments were written at different points of time between the 8th century BCE and the 1st century BCE. (Wikipedia/Authors of the Bible) The Hebrew Bible can be found [online](#). It is interpreted in the Midrash, a large body of scriptures (Wikipedia/Midrash).

Another important scripture is the Talmud. It is a 6000 page tractate dating back to 500 BCE, and consists of the Mishnah and the Gemara. The Talmud can be found [online](#).

Discussion

The name "Jew" is sometimes used for three different groups of people:

Adherents of Judaism

An adherent of Judaism is a person who believes in the tenets of the Jewish religion, as outlined above.

Jewish people

The Jewish people are an ethnicity, i.e., they share genes. Many Jewish people are adherents of Judaism. However, some are atheists, and others have adopted another religion. Vice versa, under rare circumstances, a non-Jewish person may convert to Judaism.

Israelis

Israelis are the citizens of the state of Israel. The majority of these are ethnic Jewish people. However, not all Israelis are Jewish people: around 20% of Israelis are Arabs. The majority of Israelis follows Judaism. However, around 20% of Israelis are Muslims. Vice versa, not every follower of Judaism is Israeli. Only around half of the world's adherents of Judaism live in Israel.

Christianity

Origin

Jesus of Nazareth was a Jewish ↗ preacher who lived lived 7-2 BCE to 30-33 CE in what is now Israel. Jesus had a number of followers, but was crucified by the Romans. His ideas were picked up by Paul the Apostle, who consolidated them in numerous writings. Gradually, the new religion split from Judaism ↗, and became Christianity – one of the big abrahamic religions ↗. The central tenets of Christianity are the belief in a single god (the Yahweh from Judaism), in Jesus as the resurrected son of God, and in divine judgement for the life after death. In a crucial departure from Judaism, Christianity holds that God is the god of the entire human race (not just Jews), and that this insight has to be spread to other people (Y. N. Harari: "Sapiens", p. 242). Today, Christianity has around 2.2 billion adherents, mainly in Europe, the Americas, and subsaharan Africa.

We discuss Christianity in detail in the [Chapter on Christianity](#).



Beliefs

The Nativity Church in
Bethlehem/Palestine, where Jesus is
assumed to be born

The beliefs of Christianity include:

1. There is exactly one god
2. Abraham was a prophet of that god.
3. Jesus is the son of that god.
4. The Bible (s.b.) was written by men, but inspired by the god.
5. After death, humans go to either heaven ↗ or hell ↗.

Variants

There are three major Christian denominations: Catholicism, Orthodoxy, and Protestantism (which includes Anglicanism, Pentecostalism, and others) ↗. These differ mainly in small theological details. For example, Catholicism believes that the bread at mass is literally converted into the body of Christ, while Protestants believe that this happens only symbolically. Most Christian denominations believe that Jesus, God, and the Holy Spirit form a godhead ↗, called the trinity ↗. However, some variants of Christianity do not share this belief. One of the largest such groups are Jehova's Witnesses, with 8m adherents. Another such group are the Mormons, with 15m adherents.

Scripture

Christians took over the Hebrew Bible from the Jews ↗, and added a new part, the "New Testament". The new part consists of 27 books. These books were written by Paulus and an unknown number of other, anonymous authors ↗. Some of the books were written during the 1st and 2nd century CE, i.e., several decades after the life of Jesus. Not all books were considered "canonical", and there was dispute as to which books should be in the New Testament and which should not. The decision of which books should be in the New Testament was finally made at the Canon of Trent in 1546 for the Catholics, and at other councils for the other denominations of Christianity ([Wikipedia/New Testament](#)). The Hebrew Bible (called the Old Testament) and the New Testament make up the Bible, the holy book of Christianity. It can be found [online](#).

Additional Christian beliefs were written down in scriptures called "creeds", "professions of faith", or "catechisms". Different such scriptures are valid for different denominations. The Nicene Creed, from 325 CE, codified beliefs in Heaven, sins, Jesus's resurrection, and Jesus as the son of God ([Nicene Creed](#)). The Council of Constantinople, in 360 CE, declared the trinity of God, Son, and Holy Spirit ↗. A declaration from 1854 states that Mary, the mother of Jesus, was conceived without the original sin ([Wikipedia/Immaculate Conception](#)). Other beliefs were declared at other points of time and are valid for different denominations. For Catholicism, the "Catechism of the Catholic Church" defines the complete belief system explicitly. It can be found [online](#).

The Book of Mormon is the holy book of Mormonism. It was written in 1830 by the American Joseph Smith. Smith claimed that the book was based on ancient native American sources. However, the book contains a number of anachronisms (e.g., horses, which were brought to America by the Europeans), so that this hypothesis finds no acceptance outside the Latter Day Saint movement ([Wikipedia/Historical authenticity of the Book of Mormon](#)).

*Over 90% of Christians admit that they have never read the Bible
... which is ironically one of the ways in which you become an atheist.*

By anonymous

Islam

Origin

The Prophet Mohammed lived from ca. 570 CE to 632 CE in what is today Saudi Arabia. At the age of 40, Mohammed reported divine revelations from God. He began teaching belief in a single god, called Allah (in continuation of the Jewish god Yahweh ↗ and the Christian god ↗). These beliefs were later consolidated in a book called "the Quran". Mohammed attracted much opposition, but also many followers, and by the time of his death, he had founded the religion of Islam. Its main beliefs are the unity of God and the prophethood of Mohammed, as well as

a system of laws that regulate many aspects of daily life. Islam is an abrahamic religion ↗. Its adherents are called Muslims. Today, there are around 1.6 billion Muslims, mainly in Northern Africa, the Near East, and central Asia.

We discuss Islam in detail in the [Chapter on Islam](#). For security reasons, this chapter is not available here.

Beliefs

The beliefs of Islam include:

1. Allah is the only god, identical to the Abrahamic God of Christianity and Judaism. However, unlike in Christianity, the god is not triune.
2. Allah spoke to the Prophet Mohammed, and these words are recorded in the Quran.
3. The Quran is thus the word of God.

Variants

Islam is divided into the denominations of Sunnis (90% of Muslims) and Shia, as well as some minor denominations. The distinction is made on which Hadiths (s.b.) are considered authentic ↗. Each denomination is again divided into schools, of which there are 8 in total ↗.

Scriptures

Mohammed told his revelations to his followers. After his death, the verses were collected and written down in a book called the Quran ([Wikipedia/Quran](#)). The Quran can be found [online](#).

The Hadiths are stories about the life of the prophet, which serve as a guide to interpret the Quran. The Hadiths were first transmitted orally, and then written down in the centuries after Mohammed's death. Since the Hadiths were not standardized, they grew steadily and became contradictory. Today, there are several books of Hadiths, some of which are regarded as more authoritative than others, depending on the denomination of Islam ↗.

Bahai Faith

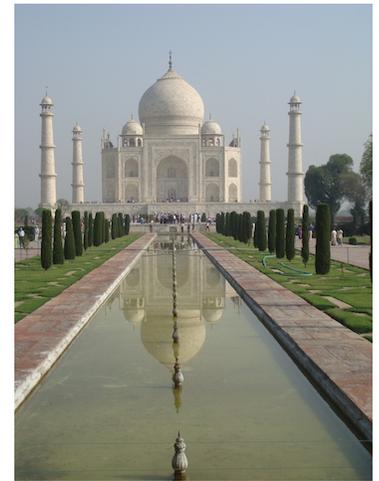
Origin

In the 19th century, Siyyid Alí-Mohammed was a preacher in Persia. He called himself "the Bab". The Bab taught belief in a single God, initially in continuation of Islam ↗. He was executed in 1850, but said to miraculously survive the firing squad. He was executed again, and killed. His teachings were continued by Mírzá Husayn Alí Núrí, called Bahá'u'lláh, and consolidated into the Bahai Faith. The religion is considered an abrahamic religion ↗. Today, it has around 5m adherents, spread all over the world.

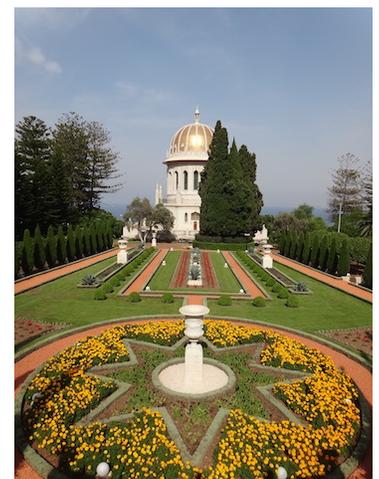
Beliefs

The beliefs of the Bahai Faith include [\[Wikipedia/Bahai\]](#):

1. the unity of God (that there is only one God who is the source of all creation).
2. the unity of religion (that all major religions have the same spiritual source and come from the same God).
3. the unity of humanity (that all humans have been created equal, and that diversity of race and culture are seen as worthy of appreciation and acceptance).



The Taj Mahal in Agra/India, a tomb built in 1632 and one of the masterpieces of Muslim art



The Bahai Gardens in Haifa/Israel, where the Bab is buried

Variants

Since the Bahai Faith is a rather young religion, there are no discernible variants of the religion.

Scriptures

The sacred texts of the Bahai Religion are the writings of their prophets and their institutions. The most important work is the "Book of Certitude", which was written by Baha'u'llah in 1861. The book can be found [online](#). For interpreting this book, the Bahai Religion has established the "Universal House of Justice" with elected members ([Wikipedia/Bahai](#)). Its decisions can be found [online](#).

Spiritualism

Origin

Spiritualism takes inspiration from the writings of Emanuel Swedenborg (1688-1772) and the teachings of Franz Mesmer (1734-1815), who developed methods to contact the spirits of the dead [↗](#). In 1848, Kate and Margaret Fox (aged 12 and 15 at that time) reported to have contacted the spirits. In the sequel, other people also reported such encounters, and the movement gained followers. Kate and Margaret Fox later admitted that their contacting the spirits was a hoax [↗](#), but the movement continued unabated ([Wikipedia/Fox sisters](#)). In addition to the spirits of the dead, Spiritualism believes in a single god (in most cases the Abrahamic one). This makes it an abrahamic religion [↗](#) for the purposes of this book. Today, the number of adherents of different variants of Spiritualism is estimated in the millions, with 20 million being a possible number ([Adherents.com](#)).

Beliefs

The beliefs of Spiritualism include:

1. The soul continues to exist after death as a spirit [↗](#).
2. It is possible to communicate with these spirits.
3. There is a god, often referred to as "infinite intelligence".

Since Spiritualism rose in the century after the Enlightenment, the prevalent variants of this religion defend the equality of genders, the abolition of slavery, the abolition of cruel punishments, freedom of thought, and the abolition of the death penalty.

Variants

Spiritualism is not globally organized. Adherents practice various blends of Spiritualism with other religions, most notably Christianity [↗](#). One of the more codified versions of Spiritualism is Spiritism. It was founded in 1857 by Hippolyte Léon Denizard Rivail, under the codename "Allan Kardec". It adds, to the beliefs above, the idea of reincarnation, the identification of the god with the Abrahamic God ([Allan Kardec: The Spirits' Book / § 625 & § 38](#)), and the existence of extraterrestrials ([ibid / § 55](#)).

Scriptures

There are a number of books written by different Spritualists, which adherents may take as guidance. For Spiritism, the quintessential books are the ones by Allan Kardec. They are available [online](#). Of these, the "Spirits' Book" is the most fundamental one. It is a collection of several hundred questions, which Kardec submitted to several people who could purportedly communicate with the spirits, and for which he collected, consolidated, and interpreted the answers ([Wikipedia/Allan Kardec](#)). Other works are those of Francisco Cândido "Chico" Xavier, who reportedly wrote over 400 books by help of the spirits ([Wikipedia/Chico Xavier](#)).



Spiritism is particularly prevalent in Brazil.

Indian Religions

Indian Religions

The Indus Valley in North-West India was the center of the civilization of the Harappan people, from 3300 to 1300 BCE. Excavations have given indications that these people may have worshipped a mother goddess ↗, and may have had nude male deities and sacrifice rituals. Some of the god figurines are sitting in Yoga posture. Cultural influences came from the Proto-Indo-Europeans ↗ and the Dravidians. The Dravidians worshipped village deities, anthills, snakes and other forms of guardian deities, and had female priestesses. This tradition of worship continues until today in some places in the South-East of India, Northern India, and Sri Lanka ([Wikipedia/Dravidian Religion](#)).

This background gave rise to three different religions: Hinduism ↗, Buddhism ↗, and Jainism ↗. Later, Sikhism ↗ would join them. These religions are grouped together ↗ as the Indian Religions. They share the belief in a supra-system ↗ that takes care of the following:

1. Samsara, the repeating cycle of birth, life and death ↗. The human soul is reborn (reincarnated) after death as a new being. Man's goal is to break this cycle of reincarnation and to achieve a state called Nirvana.
2. the principle of Karma, i.e., the idea that good deeds entail future happiness ↗, and bad deeds entail future suffering.

On the background of this supra-systems, gods may or may not be worshipped. Sikhism has one god. Hinduism encompasses a variety of beliefs that can include no god, one god, or several gods. Buddhism may or may not worship gods, depending on the denomination. Jainism does not have gods.

There is a timeless, non-located realm of pure Being containing no self and no others – only unconditional fulfillment, contentment, intimacy and peace. It is completely still there, unfathomably deep and silent, eternal, immaculate, undisturbed. Only love survives there – nothing else.

By an anonymous description of Brahman

Hinduism

Origin

The documented history of Hinduism begins with the writing of the Vedas, four canonical collections of hymns composed in archaic Sanskrit. These hymns were composed over hundreds of years between 1750 and 500 BCE (the Vedic Period) by rishis (inspired poets) and the Brahmin (priests). The central concepts of these scriptures are the Satya (which can be interpreted as the "absolute truth" or "reality") and the Rta (the principle of natural order ↗). From around 850 BCE, this religion evolved into the earliest variants of today's Hinduism. Many social groups brought their local beliefs in line with the Vedic beliefs by identifying their local gods with the Vedic gods – a process called Sanskritization. Today's Hinduism comes with a system of gods (or manifestations of gods or god), spiritual beliefs, laws and prescriptions of daily morality, societal norms, and rituals, but shows a large diversity in beliefs and practices. With 1 billion followers, Hinduism is the dominant Indian religion ↗, and the third largest religion in the world.



A Hindu ritual at the Ganges river in Varanasi/India

Beliefs

The beliefs of Hinduism include

1. the existence of Samsara, a supra-system ↗ of the repeating cycle of birth, life and death.
2. the principle of Karma, i.e., the idea that good deeds entail future happiness ↗.
3. the principle of dharma, which can be understood as the importance of righteousness.
4. the principle of maya, the insight that humans are often misled by illusions and misconceptions.

5. the concept of Brahman, the highest Universal, the Ultimate Reality in the universe [[Wikipedia/Brahman](#)].

Variants

There exists a plethora of different interpretations of Hinduism ([Wikipedia/Hinduism](#)). Some of these interpretations ↗revere several deities. These can act independently, have different genders, have different roles, have divine children, have different names, and are called on different occasions ([Wikipedia/Hindu deities](#)).

Some of Hinduism's interpretations assert that these deities are gods in their own right. Other interpretations assert that these deities are just different aspects of one Supreme Being, "like a single beam of light separated into colors by a prism" [[Wikipedia/Hindu views on monotheism](#)]. This supreme being is thus a godhead of the different deities ↗.

Again other interpretations of Hinduism do not worship different deities at all, but only one god. Again other interpretations assert that there is no god at all. They are sometimes called atheist. However, since these interpretations still believe in the supra-system ↗that ensures Samsara and Karma. Hence, these belief systems are not atheist in the sense of this book ↗.

Scripture

Hinduism uses several sacred texts, the oldest of which are the Veda scriptures ↗. These were probably compiled from oral traditions by priests and poets between 1750 and 500 BCE ([Wikipedia/Hindu scriptures](#)). They include the Vedas and the Upanishads, and, by some accounts, the Bhagavad Gita and Agamas (ibid). These texts can be found [online](#). The Bhagavad Gita are part of the Mahabharata, a larger work that is attributed to Vyasa, a mythical sage ([Wikipedia/Vyasa](#)). The Laws of Manu are said to come directly from the first human being, Manu. They can be found [online](#). It is disputed to what degree the Laws on Manu reflect the "true Hinduism" ↗. However, we find that de facto, these laws often correspond to popular opinion. We will thus refer to these laws in this book as part of Hinduism ↗.

We're Hindus. Your theological and philosophical distinctiveness will be added to our own. Your god will be added to our pantheon. Resistance is futile.

By Jayesh Lalwani on Quora.com

Buddhism

Origin

In around 500 BCE, Siddhartha Gautama (aka. the Buddha) began teaching his philosophy in India, on a generally Hindu background ↗. The Buddha is believed to have achieved enlightenment (i.e., liberation from the cycle of rebirth). His followers believe that they can achieve enlightenment, too. Buddhism is an Indian religion ↗. Today, it has around 500m adherents, mainly in Mongolia, China, and South-East Asia.

Beliefs

The beliefs of Buddhism include

1. the existence of Samsara, the supra-system ↗ of the repeating cycle of birth, life and death.
2. the principle of Karma, i.e., the idea that good deeds entail future happiness ↗.
3. the principle of dharma, which can be understood as the importance of righteousness.
4. the principle of maya, the insight that humans are often misled by illusions and misconceptions.



The tree under which the Buddha reportedly found enlightenment
[Picture taken in Bodhi Gaya/India]

5. the Four Noble Truths (a theory concerning the concept of rebirth).
6. the Eightfold Path (a moral framework for righteousness).
7. the belief that Buddha has achieved enlightenment (i.e., liberation from the cycle of rebirth).

Gods play a smaller role in Buddhism, since they are in any case subject to the above supra-system ↗. Some variants of Buddhism know no gods at all. Others do, for example the Four Heavenly Kings ([Wikipedia/Four Heavenly Kings](#)).

Variants

There are two main schools of thought in Buddhism: Theravada and Mahayana. Theravada is the oldest surviving Buddhist school, and relatively conservative ([Wikipedia/Buddhism](#)). The Mahayana school is more liberal. It uses an additional set of scripture, the Mahayana sutras, which stem from early Buddhism after Buddha's time.

Scriptures

Buddhism spans a wide variety of sacred texts, which were written in different languages at different points of time, and which have different importances for different denominations of Buddhism. The authoritative texts are generally assumed to be the teachings of Buddha. The teachings have been transmitted orally and in written form, and have been compiled to canons in the years after Buddha's death ([Wikipedia/Buddhism](#)). The oldest of these is the Pali Canon ([Wikipedia/Pali Canon](#)). Some of its books are available in English [online](#). For a newer reference, one can look to the Dalai Lama, the head of the Tibetan branch of Buddhism. His teachings are [online](#).

Discussion

Many flavors of Buddhism do not have gods. Therefore, many people think that Buddhism is not a religion. In the words of a Buddhist taxi driver I met in Perth,

Buddhism is not a religion. It is a system of ethics ↗. It forbids, for example, to kill, to steal, and to lie. It also comprises the idea of karma: if someone does something bad, then this will entail some dire consequences later. In other words: what goes round comes round.

The idea that what goes round comes round is not a supernatural claim: it is falsifiable ↗. It also happens to be false ↗, but this is irrelevant here.

Beyond that, Buddhists usually also incorporate the idea of samsara, the repeating cycle of birth, life and death (reincarnation), and/or Nirvana into their faith. This is mostly done so that the idea of Karma can be upheld even if it does not work in this life (it will work in the next). Samsara and Nirvana are supra-systems ↗, and thus supernatural elements ↗. Thus, as soon as these elements are added (as they usually are), Buddhism is a religion ↗. If they are not, Buddhism is just a moral framework ↗ combined with the theory that bad deeds make you pay.

Jainism

Origin

Jainism developed in India somewhere between 700 and 500 BCE, in rejection of the Vedic tradition of Hinduism ↗. It is a religion that emphasizes non-violence, self-control, multiplicity of viewpoints, and righteousness, and does not have gods in the Western sense. Vardhamana Mahavira was one of the earliest teachers of Jainism. Today, Jainism has around 6m adherents, of which 4m live in India ↗. It is an Indian religion ↗.

Beliefs

The beliefs of Jainism include

1. the existence of Samsara, the supra-system ↗ of the repeating cycle of birth, life and death.
2. the principle of Karma, i.e., the idea that good deeds entail future happiness ↗.
3. Tattva, a metaphysical belief system concerning the human soul.

4. the theory that the universe was never created, nor does it cease to exist. It was just always there, and will always be.
5. the instruction to control harmful states of mind such as desire, anger, pride, greed, etc.
6. non-violence, asceticism, and self-control, which lead to the liberation of the soul.
7. non-absolutism, i.e., the instruction to recognize and consider all possible points of view.
8. a moral framework that comprises non-violence, not lying, not stealing, chastity, and non-attachment.

Jainism has no creator god, but believes that the human souls can become spirits ↗.

Variants

Jainism is divided into two major denominations, Digambara and Svetambara. They differ in their monastery traditions, and in the beliefs about the mother of Mahavira.

Scripture

The teachings of Mahavira were originally passed on orally. Between the 6th and 3rd century BCE, the teachings were canonicalized as the Jain Agamas, which comprise 14 books.

Sikhism

Origin

Guru Nanak Dev lived 1469-1539 CE in India. He was born to a Hindu ↗ family, but knew about Islam ↗, which had arrived in India at the time. He concluded that "There is no Hindu, there is no Muslim", and started teaching his vision of God. These teachings gave rise to Sikhism, the latest of the large Indian religions ↗. Nanak Dev was followed by 10 other gurus. The central principle of their teaching is the oneness of God. Today, there are around 25m Sikhs, with most of them living in Punjab in Northern India.

Beliefs

The beliefs of Sikhism include

1. Samsara is the repeating cycle of birth, life and death ↗.
2. Good deeds entail future happiness (Karma ↗).
3. There is only one god, God.
4. God created the universe.
5. Maya, i.e., temporal illusion, is the main hindrance on the way to God.
6. Egoism is harmful, and can be overcome by serving humanity (e.g., through charity).
7. Cutting hair, intoxication, superstition, material obsession, sacrifice of creatures, non-family-oriented living, bragging, priests, and extramartial relations are all prohibited.

Despite Sikhism's objection to castes, the Sikh people are separated into castes.

Scripture

The main scripture of Sikhism is the Guru Granth Sahib. It is a book written by the Guru Arjan in 1604, and can be found [online](#). There are some other scriptures, but these are not universally acknowledged among Sikhs.

East Asian Religions

Chinese Religions

The earliest traces of religion in China go back to Fu Xi, a mythic Chinese hero. Together with his sister Nü Wa, he is credited with the creation of humanity and the invention of hunting, fishing, cooking, and writing. The earliest religious texts date from around 2700 BCE.

These beginnings evolved into a large variety of so-called Chinese folk religions. This is a group of religions ↗ that are characterized by the worship of "shen". The shen are spirits ↗ and sometimes deities ↗ in the sense of this book, and they can be nature deities, city deities or tutelary deities of other human agglomerations, national deities, cultural heroes and demigods, ancestors and progenitors, and deities of the kinship [Wikipedia/Chinese folk religion].

On this background, two more specific belief systems emerged between 700 BCE and 500 BCE: Taoism ↗ and Confucianism ↗. These often blend with Buddhism ↗, and the founders of these three religions are sometimes revered all together in the same temple (pictured on the right). Hence, it is difficult to establish how many adherents Confucianism or Taoism have, or whether they can be classified as separate religions at all. Since most adherents acknowledge the existence of deities, they are often grouped together with the general background of Chinese folk religion, with around 400m adherents in total.



This temple in Hangzhou/China reveres Laozi, Buddha, and Confucius together (figures left to right; click to enlarge)

Taoism

Origin

Taoism started with Laozi, a (possibly mythical ↗) Chinese philosopher and poet, who is dated to around 600 BCE. His writings, the Tao Te Ching, emphasize action through non-action, naturalness, simplicity, spontaneity, and the "Three Treasures" compassion, moderation, and humility. The central concept is Tao, which is often translated as "the way", and is understood as the underlying natural order of the universe – a supra-system in the terminology of this book ↗. Taoists aim to "become one with the Tao", and this path often leads through meditation. Taoism acknowledges the existence of deities, as well as of the spirits of the dead ↗. Maybe its most known symbol is the Ying and Yang. The religion is often practiced on top of the Chinese folk religions ↗.

Beliefs

The beliefs of Taoism include:

1. There are several deities.
2. After death, the human soul is reborn, either as a human or not ↗.
3. The universe is dominated by two opposing forces, the Ying and the Yang.
4. There is an underlying order of the universe ↗, called "Tao".
5. Adherents shall aim to become one with the Tao, which means liberating oneself from selfishness and desire.
6. Adherents shall strive towards the Three Treasures: compassion, moderation, humility.

Variants

Taoism blends with the background of Chinese religions ↗. It is also sometimes practiced together with Buddhism ↗ and/or Confucianism ↗.

Scriptures



The symbol of Taoism is the Ying and Yang.

[Picture taken in a Taoist temple in Hangzhou/China]

Taoism is based on the Tao Te Ching – a book that is dated to the late 4th century BCE, and that is traditionally attributed to Laozi ([Wikipedia/Taoism](#)). The [Tao Te Ching](#), as well as other holy writings, such as the [The Ultra Supreme Elder Lord's Scripture of Precepts](#), can be found [online](#).

Confucianism

Origin

Confucius was a Chinese philosopher who lived 551-479 BCE. He developed a new philosophy (later to be known as Confucianism), based on Buddhism ↗ and Taoism ↗. Confucianism teaches proper respect for the gods, continuous self-improvement, righteousness, humaneness, and the upholding of social norms. Confucianism was the state religion of China before the Communists took power. Confucianism is often practiced on top of the Chinese folk religions ↗.

Beliefs

The beliefs of Confucianism are:

1. There exist spirits ("shen"), which shall be worshipped by rituals.
2. After death, the human soul becomes a shen (a spirit of the dead ↗).
3. Heaven ("Tian") is a supra-system ↗ that represents the general order of the universe.
4. The goal of adherents is to become one with the Tian through the contemplation of its order.
5. The Five Constants, towards which adherents shall strive, are humanness, justice, proper rite, knowledge and integrity.
6. The four virtues that adherents shall achieve are loyalty, filial piety, contingency, and righteousness.



Confucius, in a temple in Shanghai/China

Variants

Confucianism is practiced often in conjunction with different Chinese religions ↗, Taoism ↗, or Buddhism ↗. The religions blend into each other, so that it is difficult to distinguish the belief systems, or to partition the adherents. Some people also practice just the moral framework ↗ of Confucianism, without its gods.

Scripture

Confucianism is based on the "Analects of Confucius", a collection of sayings and ideas that were supposedly written down by Confucius' followers. The Analects probably stem from around 475 BCE-221 BCE ([Wikipedia/Analects](#)). The text can be found [online](#). The Analects form part of the "Four Books and Five Classics", a larger collection of texts that were ascribed to Confucius ([Wikipedia/Four Books and Five Classics](#)). Contemporary edicts come, e.g., from the Supreme Council for the Confucian Religion in Indonesia, one of the two branches that formed after the dissolution of mainland China's Confucian Church ([Wikipedia/Supreme Council for the Confucian Religion in Indonesia](#)).

Discussion

Some people practice just the moral component of Confucianism. If someone understands Confucianism as a purely inter-human ethical framework, then their interpretation of Confucianism is a moral framework ↗ in the sense of this book, and not a religion.

This made Catholics wonder whether Confucianism (as a secular ethical system) was compatible with Christianity. Pope Benedict XIV said that no, but Pope Pius XII released, on December 8, 1939, a new decree, known as *Plane Compertum*, which declared Confucianism compatible with Catholicism ([Wikipedia/Chinese Rites Controversy](#)).

Usually, however, Confucianism is not combined with Christianity, but with Chinese folk religion ↗. As for Confucius himself, he encouraged people to worship the spirits (Confucius: Analects / 6:22, 3:12, 3:13) and the ancestors (ibid

/ 2:24), and talks of punishment from heaven (ibid / 6:28). These statements are supernatural, and this variant of Confucianism is thus a religion in the sense of this book ↗.

Shintoism

Origin

Shintoism emerged roughly 600 BCE from local mythical beliefs in Japan. Shintoism worships a variety of gods, the "kami", mostly in public shrines. The word "kami" can also refer to divinity in general, which manifests itself in rocks, trees, rivers, animals, places, or even people. The religion also incorporates a belief in the mythical creation of Japan, in which a male and a female goddess were asked by the other gods to create a new land, which would then become Japan. Shintoism is focused on rites, and imports values from Confucianism ↗ and Buddhism ↗ ([Religious Tolerance: Shinto](#)). Today, the religion has around 100m adherents, mainly in Japan.

Beliefs

The beliefs of Shintoism include:

1. There are several gods, the "kami".
2. The gods reside in all things, but humans can interface with them at special places. These are shrines, but also particular mountains, rivers, or other natural formations.
3. A male and a female goddess were asked by the other gods to create a new land, which would then become Japan.
4. After death, the human soul goes to a place called yomi ([Wikipedia/Shinto](#)).

Variants

Shintoism exists in several variants, of which Shrine Shinto is the most prevalent one. Folk Shinto is another variant, which knows gods and spirits, divination, and shamanic healing. Sect Shintos are variants of Shintoism that have their own founder and traditions within Shintoism. There is also a variant of Shintoism that is practiced exclusively by the imperial family of Japan.

Scripture

The rituals and beliefs of Shintoism were first codified in the 8th century CE in a collection called Kojiki. It is accompanied by a slightly newer work, the Nihon Shoki. These books describe the history of Japan, mixed with mythological content. They can be found [online](#).

Recent Religions

New Religious Movements

New Religious Movements are all those religious movements that are not yet old and large enough to be called a religion ↗. Contemporary new religious movements often re-use elements of existing religions, focus on the self, work towards converting others to their faith, and sometimes exist in a state of tension with the mainstream society. Currently, the main avenues of such movements are:

UFO religions

These believe in extraterrestrials ↗. Typically, adherents believe that the extraterrestrials are interested in the well-being of humanity. The most populous UFO religion is Scientology ↗, with around 1m adherents, followed by Raelism with 100,000 adherents.

Neopagan religions

These religions claim to derive from pre-Christian ("pagan") beliefs in Europe. Common features of such religions are polytheism (reverence for several gods), animism (belief in spirits ↗ in physical objects), and pantheism (the belief that the universe is identical with divinity). One of the largest such groups are the Wicca, with around 1m adherents ↗.

Syncretic religions

These are religions that blend one or several existing religions into a new religion ↗. In the context of the New Religious Movements, this concerns mostly combinations of Christianity with tribal religions, or Eastern Asian religions with Western interpretations.

Rejection of Religion

Quite a number of modern belief systems reject religion as dogmatic. Spirituality ↗ seeks a personal interaction with God without religion. Deism ↗ posits that God created the universe, but then retired. Metaphysical philosophies ↗ hold that "God" is just a different name for a metaphysical phenomenon, such as the first cause of the universe.

There are thousands of such belief systems worldwide, with a combined number of adherents in the millions.

Remark: Juche is the state ideology of North Korea ([Wikipedia/Juche](#)). It shares many aspects with religious organizations: glorification of a leader, rituals, suppression of dissent, and death of the leader. Thus, it is sometimes classified as a religion. However, I could not find supernatural elements ↗ in the ideology. Thus, the movement is not a religion in the sense of this book ↗. It is a political ideology.

Wicca

Origin

In the early 20th century, the so-called witch-cult hypothesis gained popularity in England. It says that the witches who were persecuted in Europe in medieval times ↗ were in fact women who practiced pre-Christian pagan traditions. In the 1920's, the English Egyptologist Margaret Murray was one of the most prominent advocates of that theory. The theory is nowadays considered wrong ([Wikipedia/Witch-cult hypothesis](#)), but it gave rise to a small movement of people who wanted to revive these pagan traditions. These people understood the word "witchcraft" not as the power to do miracles, let alone as something connected to the devil, but as ancient pagan wisdom about nature and man's connection to nature. In the 1940's, the English anthropologist Gerald Gardner claimed to have met practicing witches, and he began initiating others. In 1951, the Witchcraft act was repealed in England, and Gardner and others started publishing books on their ideas – the new religious movement ↗ of the Wicca was born. The movement generally emphasizes the link between nature and humans. Today, the Wicca have around 1m adherents, mainly in the UK, Australia, and the US.

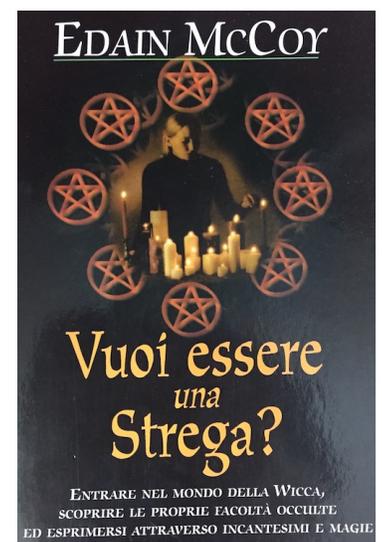
Beliefs

The beliefs of the Wicca Faith include:

1. There is a male god and a female goddess
2. After death, the human soul goes to a place called Summerland, before being reincarnated on Earth.
3. Ancient witchcraft was not something bad, but a sign of a closer relationship with nature.
4. Nature can be controlled through magic, i.e., through willpower.
5. The Wicca moral framework is liberal ↗, saying "Eight words the Wiccan Rede fulfill: an it harm none, do what ye will".

Variants

The Wicca Faith is a rather individualist religious movement, and hence it exists in many variants. Some variants acknowledge the existence of more deities than the two gods, others see the main gods as godheads of the other deities ↗, and



again others postulate the existence of one godhead that incorporates all other deities, including the two main ones.

"Do you want to be a witch?" – a popularized introduction to the Wicca faith.

Scripture

Wicca has no central scripture. It is based on the writings of Gerald Gardner and other 20th century writers, who sought to re-discover and re-establish the ancient European pagan rites. The most influential book was probably Gardner's 1954 book "Witchcraft Today", followed by his 1959 work "The Meaning of Witchcraft".

Discussion

The word "witchcraft" evokes very negative connotations, against which the Wicca community has to constantly defend itself. In the words of a Wiccan: "We don't do anything sinister like Devil worship and we don't make human or animal sacrifices. We honour, revere and give thanks to nature. We celebrate the seasons. It's not all blood and gore. In spring, we celebrate life and rebirth then in the winter, decay and death to make way for new life." [BBC: [Secret life of modern-day witches, 2012-08-20](#)]. Thus, the choice of the word "witchcraft" was quite possibly suboptimal. It could have been easier to choose some word with positive connotations, such as "nature lovers", or "nature seekers".

Scientology

Origin

In 1950, the American science fiction writer L. Ron Hubbard became interested in mental health. He wrote a book called "Dianetics: The Modern Science of Mental Health", and founded the Hubbard Dianetic Research Foundation. He was subsequently convicted of teaching medicine without a license, and the foundation went bankrupt. In 1952, Hubbard reframed his ideas as a religion, writing the book "Scientology, a religious philosophy". Today, Scientology is a new religious movement ↗ with around 1m adherents (mainly in the US).

Beliefs

The beliefs of Scientology include:

1. An intergalactic ruler called Xenu ↗ brought people to Earth around 75 million years ago.
2. Humans have souls that can be reincarnated.
3. The human mind stores subconscious harmful thoughts, the "engrams". Scientology aims to eliminate these.
4. Auditing is a practice that helps people become aware of their potential and libertate themselves from engrams.
5. The Thetan is the true identity of the person, intrinsically good and powerful.

There is no god in Scientology.

Variants

Since Scientology is controlled by a central organization, and since deviation is shunned, there are no variants of this new religious movement.

Scriptures

One of the main scriptures of Scientology is the book "Dianetics: The Modern Science of Mental Health", written in 1950 by L. Ron Hubbard. He followed up in 1952 with "Scientology, a religious philosophy", which formalized the teachings of Scientology ([Wikipedia/Scientology](#)). Other teachings and practices of Scientology are secret, and the



One of the first churches of Scientology, in New York/US

organization uses law suits against people who make them public ([Wikipedia/Fishman affidavit](#)). I could not find either of the books online.

Discussion

Scientology is a new religious movement [↗](#) on the verge of becoming a religion [↗](#). It does not have the legal status of a religion in many countries, because there is resentment against the movement. The following reasons are brought forward:

1. The system encourages adherents to break contact with their family and friends unless these are also members of the system.
2. The system aims to convert mankind to this belief system, and all means seem welcome to that end.
3. The Church of the system makes a huge amount of money from its adherents.
4. The system traps its adherents and punishes those who wish to escape it.

These tenets are incompatible with the Humanist value of Freedom of Religion [↗](#). As a Humanist, one can thus only warn against such a system [↗](#). There are other reasons to be careful with Scientology, which we discuss later in this book [↗↗](#).

That said, the above tenets are not only the beliefs of Scientology. They are also the tenets of historical and contemporary variants of Christianity or its scripture [↗](#).

1. The system encourages adherents to break contact with their family and friends unless these are also members of the system: Jesus tells us to follow him and to leave our family behind (Bible / Lukas 14:26). In Christianity, this tenet is less visible, because most Christians are born to Christian parents. But that does not change the tenet. Indeed, in some denominations, people leaving Christianity face severe social pressure [↗](#).
2. The system aims to convert mankind to this belief system, and all means seem welcome to that end: Jesus says: "All authority in heaven and on earth has been given to me. Therefore go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you." [Bible / Matthew 28:18-20]. Interestingly, the agreement of the recipient of this baptism is not mentioned. Throughout the centuries, and still today, this commandment has fueled Christian missionary activities, both peaceful and violent ([Wikipedia/Christian mission](#)).
3. The Church of the system makes a huge amount of money from its adherents: The Catholic Church is one of the richest non-governmental organizations on Earth, as we discuss in the [Chapter on the Founding of Religion](#). Protestant televangelists [↗](#) make millions of dollars from televised masses and supposed healings.
4. The system traps its adherents and punishes those who wish to escape it: Christianity historically punished apostasy by death, as requested in the Old Testament (Bible / Deuteronomy 13:6-10) and re-affirmed in the New Testament (Bible / Romans 1:25-32). Throughout the centuries, thousands of people have been executed for heresy. The Catholic Church abolished the penalty for heresy only in 1965 [↗](#).

Thus, the reproaches towards Scientology are no different from the reproaches that one can make towards historical and contemporary variants of Christianity. I have come to this conclusion after discussing with a Scientologist: The coercion in Scientology and Christianity is maybe different in degree, and Christianity has lost much of its coercive force through the secularisation, but the two are not different on principle in this respect. Other religions also use techniques of coercion: Islam also wants to convert mankind to their system [↗](#). The scriptures of Islam, Christianity, Hinduism, and Buddhism all discriminate against apostates and critics [↗](#). Some interpretations of Islam even put apostates to death [↗](#), and this is actually the law in a number of countries [↗](#). These variants of Islam are arguably more brutal than Scientology. Thus, while Scientology does have dangerous aspects, it is not the only religion that deserves criticism in Humanist eyes [↗](#).

Spirituality

Origin

There is no precise definition of the term "spirituality" ([Wikipedia/Spirituality](#)). In this book, we mean by "spiritual belief system" a belief system [↗](#) that emphasize personal and individual experiences with the supernatural [↗](#). This is not to be confused with Spiritualism [↗](#), which aims to contact the spirits of the dead. Spiritual belief systems became popular in the 20th century in the Western world, quite possibly as a consequence of the loss of authority of the Christian Churches.

Beliefs

Spiritual believers often assert that they have no specific beliefs. However, if one asks them what distinguishes them from atheists, then beliefs about the supernatural will come to light ↗. Typical beliefs are (from [Wikipedia/Spirituality](#) and linked articles):

- calling oneself a "spiritual seeker", meaning that the adherent is open to experiences with the supernatural
- the rejection of religious organizations or dogmata ([Wikipedia/Spiritual but not religious](#))
- the belief in the abrahamic god ↗
- reliance on intuition and feelings
- the belief in hidden meanings and symbolism in various philosophical, historical, and religious texts
- esotericism, i.e., the explicit distinction from the mainstream
- influence from Eastern religions ↗
- the idea of reaching "the true self" by self-disclosure, free expression and meditation

Scriptures

There is no official scripture of spirituality. Individual groups, or individual adherents, may or may not use scriptures. Some adherents may draw inspiration from spiritual life advice books. These typically date from the 20th or 21st century.

Discussion

There are different types of Spirituality. Some people use the term "spiritual" simply equivalently with "religious" ([Wikipedia/Spirituality](#)) – possibly because the term "religious" has negative connotations, while the term "spiritual" does not. Often, these people are Christians. In these cases, "spiritual" is just a synonym for "Christian".

Quite often, the people who say they are "spiritual" are in fact practitioners of what this book calls "Christianity light" ↗: they believe in the abrahamic god, are culturally influenced by Christianity, and appreciate (but do not necessarily venerate) Jesus. For example, such people will say they are not strictly Christian, but they still believe in the loving, omnipotent deity who kick-started the universe – possibly because they have been brought up in a Christian environment and thus cannot imagine any other god ↗. Thus, the boundary between this type of Spirituality and Christianity light is fuzzy.

Again other people are spiritual with only weak links to Christianity or none at all. They may take inspiration from the East Asian Religions ↗, from the Indian Religions ↗, or from meditation practices.

What is common to all flavors of Spirituality is the idea of personal and individual experiences with the supernatural. Furthermore, Spirituality distinguishes itself explicitly from religion. While religion is portrayed as dogmatic, organized, historically burdened, precisely defined, morally restrictive, and with a claim to universality, spirituality is portrayed as a purely personal relationship with God or the supernatural. For the purposes of this book, both religions and Spirituality are belief systems ↗.

Deism

Origin

Deism is a philosophy that originated in the 17th century in Europe. Deists rejected Christian dogmata, and kept only the idea of an impersonal god. Deism rejects revelation as a source of religious knowledge and asserts that reason and observation of the natural world are sufficient to determine the existence of a single creator of the universe ([Wikipedia/Deism](#)). Deism flourished during the Age of the Enlightenment. It also gave rise to atheism ↗. Today, many people believe in the existence of God ↗ without the attributes that the abrahamic religions ascribe to him ↗. These people are technically Deists according to the definition of the word.

Beliefs

Deism is a belief system ↗ that includes the following tenets ([Wikipedia/Deism](#)):

- The rejection of religions that are based on books that claim to contain the revealed word of God.
- The rejection of religious dogma and demagoguery.
- Skepticism of reports of miracles, prophecies and religious "mysteries".
- The belief that God exists.
- The belief that God created the universe.
- The belief that God gave humans the ability to reason.
- The belief that God does not interact with the world.



Thomas Paine was a Deist.
[Picture taken in the Montsouris Park/Paris]

Scriptures

There are no official scriptures of Deism. Deists may take inspiration from philosophers such as Thomas Paine or David Hume. One of the quintessential works in the history of modern Deism is "The Age of Reason" by Thomas Paine ([Wikipedia/The Age of Reason](#)). Some of the founding fathers of the United States were also close to Deism: Thomas Jefferson, Benjamin Franklin, and James Madison.

Discussion

Deism believes in a single god (as opposed to several gods ↗ or no god ↗). It sees God as the origin of the universe ↗. Thus, Deism posits a one-time interaction of the god with the physical universe ↗, and assumes that the world has a beginning ↗. This idea was inherited from the abrahamic religions, as the Indian religions make no such claim ↗ (and neither does science ↗).

Some modern variants of Deism hold that people can have a personal relationship with god ([Wikipedia/Deism / Contemporary Deism](#)). These viewpoints are different from classical Deism, where God does not interact with this world. For the purpose of this book, such viewpoints will be categorized as Spirituality ↗ and not as Deism. Other variants of Deism are very close to Christian ideas. They hold that God is a loving entity who takes interest in the well-being of humanity. These variants of Deism are closer to what this book calls "Christianity Light" ↗. Again other variants of Deism hold that God is not a conscious being, but a name for a metaphysical phenomenon. We categorize these beliefs not as Deism, but as metaphysical philosophies (see below ↗).

Historically, most deists saw religions as corruptions of an original, pure religion that was simple and rational. They believed that this original pure religion had become corrupted by "priests" who had manipulated it for personal gain and for the class interests of the priesthood in general [[Wikipedia/Deism / History of religion](#)]. Historically speaking, there is no evidence for this hypothesis. From what we can tell, religious rites have been popular in all major cultures throughout all of traceable history ↗. Even today's pre-scientific cultures, which have not yet been "spoiled" by the major religions, do not know the deist god. They rather believe in spirits of nature ↗. Australian Aborigines, too, have animist beliefs, not deist beliefs. They have most likely held these beliefs for tens of thousands of years ↗. Thus, all data points we have are about animist, ritual, spiritist, and religious traditions, not deist ones. The idea of a single god who created the universe and then retired became popular only in the 17th century in Europe. Based on the data points we have, Deism is a consequence of the abrahamic religions, not a precursor to them.

Deism explicitly rejects the concept of religion as dogmatic and preachy. In any case, Deism does not have enough adherents to qualify as a religion. Thus, for the purposes of this book, both religions and Deism are belief systems ↗. They are sets of tenets about the supernatural.

Metaphysical Philosophies

Origin

Some Greek philosophers had very abstract concepts of God, the universe, and metaphysics. Heraclitus, e.g., conceived of a "logos", a supreme rational principle ([Wikipedia/Deism](#)). In modern times, likewise, some people hold very abstract ideas of God. These ideas often evolved with inspiration from, but explicit rejection of, the abrahamic religions. In this book, we group these philosophies together as "Metaphysical Philosophies".

Beliefs

Metaphysical Philosophies (in the sense of this book) are belief systems ↗ that say that "God" is just a different name for a metaphysical phenomenon. This phenomenon can be one or several of the following:

- the abstract first cause of the universe ↗
- the universe at whole (Pantheism ↗)
- the sense of life ↗
- the "universal principle of existence" ↗
- the concept of "meaning" ↗
- the perceived one-ness of nature ↗
- the human soul ↗
- something undefined that makes the universe, humanity, or existence special
- other abstract universal hypotheses ↗

The god of metaphysical philosophies is thus an abstraction in the sense of this book ↗. Metaphysical philosophies do not believe in gods in the usual sense ↗.

Scriptures

Different metaphysical philosophies are inspired by different thinkers. The works of Deism may be relevant ↗.

Discussion

In this book, we use the term "metaphysical philosophies" to group together a set of world views that hold that "God" is a name for a metaphysical phenomenon. These philosophies do not believe in a personal god as a conscious entity. This distinguishes them from Deism ↗. They also do not believe in interactions with the supernatural. This distinguishes them from Spiritualism ↗.

Metaphysical philosophies do not have enough adherents to be called a religion. They are also quite diverse. The only thing they share is that they posit some unfalsifiable statement about the universe. This can be:

- The claim that the universe has a first cause, and that this first cause has no cause ↗ – instead of not making any statement about the beginning of the universe ↗ ↗
- The claim that the universe as a whole would be something more than the sum of its physical parts ↗
- The claim that life has a meaning that is deeper than the one that humans give to it ↗
- The claim that there exists a "universal principle of existence" ↗
- The claim that there is something more to the concept of meaning than its simple definition ↗
- The claim that nature exhibits a one-ness ↗
- The claim that the human has a soul ↗
- The claim that there is something undefined that makes the universe, humanity, or existence special.

These claims are non-falsifiable and escape science on principle. They are thus supernatural claims. This makes the metaphysical philosophies belief systems in the sense of this book – albeit very reduced belief systems ↗. The supernatural element of metaphysical philosophies entails that adherents of such philosophies will hesitate to call themselves atheists.

These supernatural elements distinguish metaphysical philosophies from mere re-definitions of words. For example, some people hold that the word "God" is just a different word for the concept of "love" ↗. Love is nothing supernatural ↗. The same goes for the identification of the word "God" with "the universe" – as in some interpretations of Pantheism ↗. The universe is nothing supernatural. Thus, the identification of "God" with "love" or "the universe" is just a play on words ↗. Metaphysical philosophies, in contrast, make an additional metaphysical claim. This makes them belief systems ↗ in the sense of this book.

We discuss an atheist view such philosophies in the [Chapter on the God of Gaps](#), the [Chapter on Proofs for Gods](#), and the [Chapter on Truth](#).

Tribal Religions

Tribal religions are religions ↗ that are usually bound to a particular ethnicity, not codified in scriptures, not institutionalized, and smaller in scale. Furthermore, such religions usually lack boundaries between the sacred and secular aspects of life [Adherents.com]. These religions include thousands of distinct religious traditions [ibid] of peoples who are pre-literate or less advanced technologically than Western cultures [ibid]. They are usually called "indigenous", "tribal", or "ethnic" religions – even if Hinduism ↗, Shintoism ↗, and Judaism ↗ are also mainly bound to a particular ethnicity.

Tribal religions can be found in all parts of the world, most notably in Africa, Asia, and the Arctic Circle. In some cases, the original beliefs have been submerged by the dominant organized religion. However, in many other cases, the traditional beliefs continue in defiance of (or in combination with) the organized religions. Together, the adherents of the tribal religions number in the millions.

Some beliefs of such religions are:

Ancestor veneration

a belief in the continued existence of the dead. People ask the dead to intercede on behalf of the living, or perform rituals to care for their continued well-being in the afterlife. (Wikipedia/Veneration of the dead)

Magic

non-scientific procedures to ward off evil. Some cultures practice rituals or dances that are believed to have a magic effect, or use traditional medicine.

Shamanism

A shaman is a person regarded as having access to, and influence in, the world of benevolent and malevolent spirits ↗, who typically enters into a trance state during a ritual, and practices divination and healing. [Wikipedia/Shamanism]

Animism

the belief that there is no separation between the spiritual and physical (or material) world, and souls or spirits ↗ exist not only in humans, but also in some other animals, plants, rocks, geographic features such as mountains or rivers, or other entities of the natural environment, including thunder, wind, and shadows ↗. [Wikipedia/Animism]



The Inuksuk is a symbol from the indigenous Canadian Inuit population with possibly spiritual meaning
[Picture taken in Canada]

Questions

Where is God?

In this chapter, we have discussed the history of religions from the early hours of mankind on. In this discussion, we have never made reference to the intervention of God ↗. Where is the abrahamic god?

Humanity came into existence roughly 200,000 years ago ↗. During most of this time, we see no traces of religion. The first traces of religion appear roughly 30,000 years ago ↗. Still then, there are no traces of the abrahamic god. There were no churches, and no crosses. In the writings of the time, we find no references to God ↗. The Bible did not yet exist, and neither did the Talmud or the Quran. People mostly worshipped a female deity ↗. Most societies were polytheistic ↗ ↗ ↗ ↗. People simply did not know about the abrahamic god.

The first appearance of God is around 3000 years ago in the Middle East. At that time, the god that would become the abrahamic god was known as Yahweh. He was worshipped along with the gods El, Asherah, and Baal. Yahweh and Asherah were a couple. Later, the belief in the other gods was abandoned, and what remained was belief in Yahweh: Judaism was born ↗. 1000 years later, Christianity came into existence, and the New Testament was written. 600 years later, Islam arrived, and the Quran was written ↗. At that time, all of today's major abrahamic traditions were in place.

Thus, God appeared around 3000 years ago – in other words, in the last 0,00002% of the time of the existence of the universe, in the last 0,000007% of the time of the existence of Earth, in the last 1,5% of the existence of humanity, and in the last 10% of human religious activity. He is a rather young god.

Not all religions are the same!

This book presents several dozen religions. All of them are presented in the same fashion – mainly from a historical point of view. This may seem unjust to a believer, for whom one particular religion stands out – their own.

The problem is that this applies to every religion. Every adherent believes that their own religion stands out. The other religions are usually either unknown ↗, or assumed to be somehow equivalent to one's own religion ↗. Therefore, this book cannot favor one religion over the others.

The same is true for the atheist point of view in general. For the atheist, all beliefs are equally mythological. They are all just stories that people made up over time ↗.

Chapter on the Founding of Religions

Introduction

In this chapter, we look more closely into the processes that give birth to religions, that make religions spread, and that make religions convenient for rulers and ruling classes. The chapter consists of the following sections:

- **Birth of Religions:** Discusses factors that contribute to the creation of a religion.
- **Proliferation of Religions:** Enumerates factors that help a religion spread to other people.
- **Imposition of Religions:** Reasons why rulers or ruling classes may choose to impose a religion.

Birth of Religions

How are religions born?

A religion cannot come into existence from observation of nature alone. By definition, no scientific principle allows deducing the existence of gods, of certain moral values, or of a supernatural creation myth [↗](#). This why no two peoples on Earth came up with the same religion by observing the same nature. Also, the overwhelming majority of religions (all except one from a believer's point of view; all without exception from an atheist's point of view) are not actually founded by a god. Religions are founded by people.

In the following, we investigate some psychological and natural factors that may lead to the foundation of a religion.

Personifying nature

One of the earliest reasons for religiousness might have been the human desire to understand nature. Early humanity found itself in a hostile and unexplainable environment: rain, storm, and drought swiped over the land; summer and winter brought heat and cold; the sun would disappear and drown the world in darkness every night. In ancient times, these elements had much more power over humans than they have today.

When we speak about the entities of nature, the borderline between the inanimate and animate is actually porous. Watch the following sequence of sentences:

1. The sun rises everyday.
2. The sun has the habit of rising every day.
3. The sun wants to go to the highest point at noon, and hence it rises continuously during the first half of the day.

In this sequence, we have gone from a purely physical description ("the sun rises every day") to a description that involves intention ("the sun *wants* something"). The sun has thus received human-like attributes. We have actually personified the sun. From here, it is only a small step to further human attributes:

1. The sun rises, because it wants to give us light and warmth, and this can be achieved best by rising as high as possible.
2. The sun gives us light, and hence it is our friend.



When this meteorite hit Russia in 2014, even an atheist could consider something supernatural behind it.
[\[Aleksandr Ivanov @ Youtube\]](#)

In the same way, early peoples personified the moon, the Earth, the stars, and the forces of nature ([Wikipedia/Solar deity](#)). These entities were attributed human traits. Such attributes are unfalsifiable, in the sense that we cannot prove wrong that the sun has wishes ↗. Such proof is beyond our means of validation. This makes the statements supernatural ↗. Thus, the entities became gods in the literal definition of the word ↗. Becoming a god is not a physical process. It just means that people ascribe supernatural attributes to an entity. Then, the entity fits the definition of a god.

At first, the gods were most likely local to one particular mountain, one particular river, or one particular tree ↗. Over time, the gods became more abstract. They were no longer personified visible entities of nature, but personified concepts. People knew the god of love, the goddess of beauty, and the god of war ↗. Later, the gods became even more abstract. Today's religions know the god of the Universe, or the gods of beginning, maintenance, and end ↗.

Personifying natural entities is a very common phenomenon. We still do it today, read on.

All major religions and mythologies stem from early humanity's attempt to understand what we now call astronomy, geology, and the atmosphere.

By Bill Lauritzen in "The Invention of God"



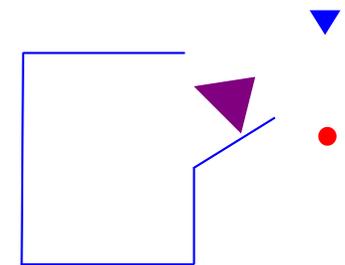
Once it fell down, the meteorite does not look so scary after all.
[Picture taken in the Museum of Chelyabinsk/Russia]

Anthropomorphic fallacy

Early humans personified the entities of nature, thus possibly giving rise to the first supernatural beliefs ↗.

This way of thinking is not restricted to the early humans – even we do it all the time. The tendency to assume a human is called an anthropomorphic fallacy ([Wikipedia/Anthropomorphic fallacy](#)). Once people see patterns, they tend to infuse them with meaning, intention, and agency – a trait that Michael Shermer calls "agenticity". People always try to ascribe human attributes to things. Children, for example, often give human traits to cuddly toys and to physical objects. Even adults tend to talk about a computer like they talk about a friend. They will say things like "It did not want to read the CD" or "It tried to find the file" – even though a computer has neither desires nor intentions. In general, people tend to suspect that a computer has feelings and intentions – even though it is just a machine that executes an algorithm. This is known as the Eliza effect ([Wikipedia/ELIZA effect](#)).

Maybe the clearest example comes from a psychological study by Fritz Heider and Mary-Ann Simmel in the 1940s: People were shown an animation on the computer screen where a small triangle moves around a box, and repeatedly bumps into a larger triangle (see figure). When participants were asked to describe what they saw, nearly all resorted to human descriptions: "The big triangle wants to protect the box, and fends off the small triangle", "The small triangle is angry at the big one and tries to get into the box", or "The triangles fight over the box" – even though there was no intentional being involved ([All about Psychology / Heider-Simmel Experiment](#)).



The two triangles, the box, and the circle in the Heider-Simmel experiment

This shows that people are quick to ascribe human attributes to inanimate things. Quite possibly, this is just the most convenient way to describe the world. It is easier to say "The triangle wants to protect the box" than to explain the pattern of movements of the triangle in terms of their coordinates. Once we use such descriptions for natural entities, it is only a small step to the belief in the supernatural ↗.

Influencing nature

Some religious beliefs stem from a personification of the sun, the moon, and other natural entities ↗.

Once we see the sun as a human-like entity, it is only natural to start talking to it: "Please, sun, come back and give us spring again!" This is, in every sense of the word, a prayer: a monologue with a supernatural (or supernaturally

personified) entity ↗. These monologues are not so different from modern prayers: A human talks to a supernatural entity and thinks that the entity listens or responds. Today, we know that the pleas to the sun had no effect. We also know that pleas to the modern gods have no effect ↗. Still, people pray.

People do not just talk to the gods, they also perform rituals to appease them. Ancient people danced rain dances to convince the rain to come, made sacrifices to please the god of war, and asked shamans to talk to the gods to heal an illness. These rituals did little to appease the respective gods, of course. In the very same way, humans today sing to their god, sprinkle water on their babies to connect the babies to their god, light candles, use joss sticks, or circumcise their children. All of these are attempts to please the gods. Today, as in the past, these rituals have no effect on reality. They just give people the illusion that they can influence this world. We discuss later why people continue doing this ↗ ↗ ↗.

What is the difference between worshipping the sun and worshipping God?

The sun actually exists.

By anonymous

Suspecting a mover

One of the roots of religions may be the desire to influence nature ↗. Another one may be our tendency to suspect a human mover behind the actions of nature.

Early humans thought, for example, that the sun was drawn across the sky by a chariot. This is only a natural assumption, because people could not understand how the sun would move otherwise. They could have said to each other: "The sun moves across the sky every day. How else could it move, if it were not drawn by a chariot?" – and the idea of the sun god was born. The sun god draws the sun across the sky every day.

In the very same way, people today turn to each other and say "The Earth and the Universe exist. How else could it have come into existence of not by an intelligent being?". This reasoning is then used to prove the existence of a god ↗.

Both reasonings are, of course, faulty: From the fact that we do not know how a certain thing in nature works, it does not follow that it would work the way that we imagine it. This holds even if we cannot imagine it any other way. Nature is not bound by what we can imagine ↗.

This reasoning is one particular instance of an argument from ignorance ↗. The less ignorance we have, the less likely we are to follow such an argument. Nowadays, we understand that the sun moves across the sky because the Earth turns around the sun ↗. Therefore, there is less room in our thinking for the sun god. In general, the more a person knows about the universe, the less this person is inclined to suspect divine intervention.

God is an ever-receding pocket of scientific ignorance.

By Neil deGrasse Tyson



In the European religions of the Bronze Age, a divine horse pulled the sun across the sky.
[Picture taken in the Historical Museum of Copenhagen/Denmark]

Storifying

People have invented human-like supernatural "movers" to explain the events of nature ↗. But some events were still unexplained. For these, people have created stories. Examples from the Abrahamic religions ↗ are:

- Why do we see rainbows? They are beautiful. Maybe they are a sign from God (Bible / Genesis 9).
- Why is giving birth so painful? Maybe it is a punishment for something we or our ancestors did wrong (Bible / Genesis 3:16).

- Why do people speak so many languages? It is a curse! It would be plausible if this, too, were a punishment from God (Bible / Genesis 11:4–9)

In this way, people could explain different things in life coherently. The problem is, of course, that these explanations are not really explanations, in the sense that they do not compress information ↗. If you learn such a story, you know nothing more about the real world than before ↗.

Still today, humans have a tendency to "storify" events, i.e., to connect them into a coherent story with causality, as we have discussed before ↗.

Argument from ignorance

Early humans assumed that the sun was moved across the sky by a god ↗. This is because they could not imagine how the sun would move otherwise. This way of thinking is known as an argument from ignorance: from the fact that we do not know how something works, we conclude that it must work the way we imagine it.

This argument is still applied in newer times to prove the existence of gods. Whenever we do not know how something works, we are ready to see it as a proof for the god that we have learned about from our parents ↗. In these cases, the god literally falls from the sky. Here are examples:

Immanuel Kant

The philosopher proves the existence of God in his argument from morality as follows: "It is our duty to promote the highest good; and it is not merely our privilege but a necessity connected with the duty as requisite to presuppose the possibility of this highest good. [The surprise comes here:] This presupposition is made only under the condition of the existence of God, and this condition of the existence of God, and this condition inseparably connects this supposition with duty." [quoted in [Rejection of Pascal / Kant](#)].

William Lane Craig

Craig writes on his Web site on "reasonable faith": "The inference to a Designer is not an inference to any particular deity. This is not to say that we can infer nothing about the Designer of the universe on the basis of the specified complexity of the cosmos. [The surprise comes here:] Principally, what we can infer is that there exists a personal, and, hence, self-conscious, volitional being of inconceivably great intelligence who designed the universe." [[Reasonable Faith / God and the Flying Spaghetti Monster](#)]

Hans Küng

The theologian writes in his book "The beginning of all things": "What is the purpose of it all? Where does it come from? From nothing? Does nothingness explain anything? Can that satisfy our reason? [The surprise comes here:] The only serious alternative, which reason cannot prove (like so many things), but for which there are solid reasons, [is] an answer that is quite reasonable: The whole does not stem from a big bang, but from an origin: from this creative reason of reasons, which we call God, the creator." [translated from Hans Küng: *Der Anfang aller Dinge* / p.142]

The God of the Gaps

...is an entire category of arguments that use our ignorance to prove the existence of the supernatural. We discuss them in the [Chapter on the God of the Gaps](#).

Such arguments are called "arguments from ignorance": From the fact that we do not know something, we infer that it must be what we believe it is ([Wikipedia/Argument from ignorance](#)). This way of thinking is invalid – most notably because different people can believe different things ↗. This is indeed what we observe concerning theological opinions: Everybody is convinced of his view, but nobody has more solid reasons than the other ↗.

*"I don't know, therefore God"
is not a valid argument.*

Suspecting intention

We have seen several psychological phenomena that may make people open to religious belief. Yet another one may be our tendency to seek for an intention, or "sense" in our environment. Douglas Adams describes this tendency as follows:

So this man starts to ask himself questions. "This world," he says, "so who made it?" Now, of course he thinks that, because he makes things himself. So he's looking for someone who would have made this world. He says, "Well, so who would have made this world? Well, it must be something a little like me. Obviously much much bigger. And necessarily invisible. But he would have made it. Now why did he make it?" Now we always ask ourselves "why?" because we look for intention around us; because we always intend— we do something with intention. We boil an egg in order to eat it. So we look at the rocks, and we look at the trees, and we wonder what intention is here even though it doesn't have intention. [Douglas Adams: Parrots, the Universe and Everything]

This tendency to seek for an intention entices us to believe in some intentional being. We just refuse to believe that the things around us are random ↗ ↗ ↗ ↗.

Veneration for the dead

The previous articles have argued that people started imagining supernatural entities in order to explain the forces of nature. There is another factor that may have led to the imagination of supernatural entities. Starting from around 27,000 BCE, we find that humans buried some of their dead with grave goods ↗. We may interpret this as a sign for the belief that the dead would live on after their burial. Our earliest explicit mention of this belief dates to 2400 BCE, when the Pyramid Texts described the pharaoh's ascent to heaven ↗. Today, the large monotheistic religions ↗ believe the same: the dead would rise back to life in Heaven. The East Asian religions ↗ tend to believe that the dead become spirits ↗, while the Indian religions ↗ assume a rebirth in this universe ↗.

In all of these systems, we find a recurring belief in some form of life after death. This belief might first have stemmed from the continued love for the deceased. When a person dies, it is very hard to accept that that person no longer exists. Many people continue talking in their mind to their deceased family members. This can be a way to cope with the grief. It is also a consequence of our feelings for that person, which do not die when the person dies. Our feelings continue well beyond death. Thus, is it not reasonable to assume that this person continues, too — just in a different way? This is what most religions assume. We have thus invented a continuation of life after death. Once that idea is around, it is obviously attractive: Nobody wants to die ↗. Thus, the belief that there is something after death is comforting. Once a belief is comforting, people are more open to accept it ↗ ↗.

Spiritual experiences

We have seen several psychological factors that may entice us to believe in the supernatural. These factors apply more or less to everyone: all people wonder about the nature of the universe, and all people wonder about life after death. Now, we come to a factor that applies to a much smaller group of people: those who report personal experiences with the supernatural ↗. Such experiences can take several forms: some people believe that a god speaks to them. Other people report a sudden feeling of light and warmth. Again others (whom I have met) report a spiritual experience, but prefer not to talk about it. In their most prominent form, spiritual experiences inspire prophets to found a religion ↗.

Such experiences can have several (natural) reasons:

Dehydration

Many of these spiritual experiences have taken place in the desert. The prophets of the abrahamic religions, e.g., all had their revelations in the desert ↗. Under extreme heat, exhaustion, and dehydration, people can experience hallucinations. Dehydration, in particular, leads to a delirium ([Wikipedia/Dehydration](#)). Such experiences can then be interpreted as spiritual experiences. This continues until today: "I've lived in Israel. It is my experience that anyone who talked to God and got some answers back spent some time living in the desert. Sun-stroke plus a diet of weird plants and scorpions apparently makes God answer the proverbial phone like nothing else." [Assaph Mehr on Quora.com]

Mental issues

Different psychological, mental, or physical issues can lead to a psychosis. This is an abnormal condition of the mind that usually involves a loss of contact with reality [\[Wikipedia/Psychosis\]](#). A psychosis can result in hallucinations (sensory perceptions in the absence of external stimuli), delusions (false beliefs that a person holds on to, without adequate evidence), or megalomania (person believing that he or she has special powers or skills) [ibid]. The causes can be psychiatric disorders (such as schizophrenia or personality disorders), or medical conditions (epilepsy, nutritional deficiency). Temporal lobe seizures, in particular, can produce complex visual hallucinations of people, scenes, and animals [\[Wikipedia/Hallucination\]](#). They are associated with hyperreligiosity. This phenomenon is called the Geschwind syndrome [\(Wikipedia/Geschwind syndrome\)](#). It is not without reason that the ancient Greeks believed that epilepsy brought people in contact with the gods. Such troubles have been proposed as natural reasons for the religious experiences of Abraham, Moses, Jesus, Mohammed, and Saint Paul [\(Wikipedia/Temporal lobe epilepsy\)](#).

Jerusalem Syndrome

People can also develop fantasies when they are overwhelmed by something. For example, every year, a dozen or so people who visit Jerusalem are so overwhelmed by the historical, cultural, and religious significance of the city that they start believing that God talks to them. This phenomenon is known as the Jerusalem Syndrome [\(Wikipedia/Jerusalem Syndrome\)](#).

Feelings

Feelings of deep happiness, sadness, thankfulness, relief, or other unctuousness can also make people believe that what they experience must be supernatural. Typically, people attribute their experience to the gods of their cultural environment (it is rare, e.g., that a Christian has a religious experience with any of the Hindu gods; or that a Buddhist has an experience with a Wicca god).

Idealization

People sometimes idealize their past. For example, in SAT tests, students can score between 200 and 800 points. When asked their results a year later, they tend to boost their scores by around 50 points. Interestingly, they are neither lying nor exaggerating. They are simply "enhancing" the result a little – until they start to believe the new score themselves. [Rolf Dobelli: "The Art of Thinking Clearly", chapter 45, translated by Nicky Griffin] In the same way, the prophets may have enhanced their experiences in retrospect – until they really started believing that they had a supernatural encounter.

When a person starts having religious experiences today, we usually do not take them seriously. New prophets rarely find acceptance. When someone says that God talks to them, we usually subject them to psychological treatment. Likewise, people with the Jerusalem syndrome are not usually seen as prophets. Rather, they are hospitalized ↗. At the time of the prophets, however, such an experience could lead to the foundation of a religion – for reasons that we discuss in the [Chapter on Following Religion](#).

*People who talk to God are OK.
If they say that God talks back to them, watch out.
By anonymous*

Fraud

Some people report spiritual experiences where a god talked to them ↗. Many of these people certainly acted in good faith – they seriously believed that they interacted with a god. Some people, however, might have reported the spiritual experiences just to assume the role of a prophet for their own benefit.

Adherents usually object to the idea that their own prophet could have been malicious. However, they are usually open to the idea that the prophets of other religions have been malicious. Therefore, we list several prophets here, so that everybody can find one that might have been malicious:

- Prophet N° 1 says that an angel gave him a book written by God on golden plates. Unfortunately, the angel did not allow the prophet to show the book to others. So he dictated the book to a scribe, sitting behind a curtain. When the wife of the scribe challenged the prophet by destroying the first 100 pages of the dictation, and asking him to reproduce them, he could not, but produced a different version. The prophet says that the book told him about the original American Indian religion. For example, the book told him about the horses that the

Indians had. Unfortunately, there were no horses in America prior to the arrival of the Europeans. Later, the prophet said he received a revelation that he had been ordained to higher priesthood. When his friends also started receiving such revelations, he received one that said that only his revelations are the right ones. He also received revelations that declared him the boss of a city, and that his followers would have to invest in his own bank (which later went bankrupt). Another revelation allowed polygamy, and the prophet used it to propose to the wives of his friends. He died falling out of a window from prison. Was this prophet honest?

This prophet is Joseph Smith, the founder of Mormonism [↗](#). The episode of the scribe's wife is taken from Christopher Hitchens "God is not great", p. 193.

- Prophet N° 2 says that he received revelations from God. These revelations said that he would be the last legitimate prophet. One revelation allowed him (and only him) to have as many wives as he wants. He used this to marry the wife of his adopted son. Some of the revelations told him to lead his followers to war, that all adherents have to obey him, and that anyone who wages war against him should be crucified. Subsequently, he and his adherents conquered large parts of land. He oversaw the killing of hundreds of enemies who had already surrendered, and the enslavement of women and children. He declared that God told him that 20% of the looting bounty of war was for charity and himself. God also told him that he was an exalted standard of characters and morals. Was this prophet honest?

This prophet is Mohammed, the founder of Islam [↗](#).

- Prophet N° 3 was a originally a writer of fiction. He wrote a book about how to achieve spiritual health. The proposed procedure could be bought from the prophet, who made a million dollars per month from it in today's terms. The prophet said he could give people perfect memory. In a demonstration of this power, the subject failed unfortunately to remember the color of the prophet's clothing when she had her eyes closed. The prophet separated from his wife, later abducted her with the goal to declare her insane, and kept their common daughter. He declared that anyone who was an "enemy" of his religion could be "deprived of property or injured by any means, [...] tricked, sued or lied to or destroyed". The prophet ended up presiding over a religion that was a multi-million dollar business. Was this prophet honest?

This prophet is L. Ron Hubbard, the founder of Scientology [↗](#).

- Prophet N° 4 was a 12-year old girl. Together with her sister, she reported mysterious rappings. These rappings were identified as signals from a spirit, and they could be used to communicate with the spirit. The girls became famous and gave séances all over their country, with hundreds of attendees. Other people would also start communicating with the spirits, and an entire religion rose on these phenomena. Later, the sisters admitted that they produced the mysterious rappings themselves, by swishing their fingers or toes. The girls died in poverty and alcoholism. Were these prophets honest?

These girls were the Fox sisters. Their ideas gave rise to the religion of Spiritualism [↗](#).

It is likely that the reader will have identified at least one of these prophets as fraudulent (usually of a religion other than their own). This shows that there are cases where a religion may have been founded by fraud. This is one more possibility for the creation of a religion.



[Scott Adams]

Mythologization

One more way in which religious stories can evolve is through mythologization, i.e., by converting a real story into a supernatural one.

The first example is taken from Andrew Dickson White's book "A History of the Warfare of Science with Christendom" (1876). It involves a famous sixteenth century missionary, St. Francis Xavier (1506-1552), who spent many years preaching in India, China, and Japan.

After the missionary's death, stories of his power to perform miracles began to circulate. He was supposed to be able to cure the sick, raise the dead, turn sea water into fresh, and call fire down from heaven. There was

even the fantastic story of how after having lost his crucifix at sea, it was miraculously returned to him by a crab.

Perhaps the most remarkable, and certainly the most useful, miracle ascribed to Francis Xavier was the gift of tongues. It was claimed that he spoke to various tribes with ease in their own languages. The legend was further developed to the point where it was claimed that when he addresses various native tribes at the same time, each heard the same sermon in their own native language! When this proselytizer was canonized (i.e. made a saint) seventy years after his death, the bull of canonization laid great stress on the new saint's gift of tongues.

The problem with all these stories about Xavier's gift of tongues is that we know that they are untrue. Throughout his missionary journeys, he and his fellow missionaries wrote many letters to friends and associates. Many of these are still extant today. In none of his letters do we find any reference to the numerous miracles attributed to him. In fact, throughout his letters he constantly referred to the difficulties he faces in the communication of his faith to the different tribes. He tells how he surmounted these difficulties: sometimes by learning just enough of a language to translate the main formulas of the church; by soliciting help from others to patch together some teachings for natives to learn by rote; by a mixture of various dialects; by using sign language; and by using interpreters. Xavier actually relates how, on one occasion, his voyage to China was delayed because his interpreter he had hired for the mission had failed to meet him. It is therefore clear that the miracles attributed to this missionary never happened. But references by Francis Xavier in his letters to the actual situation was quickly forgotten and popular memory had placed the mythological and legendary elements on center stage. [\[Pascal's wager / The Oral Tradition\]](#)

We may think that such strange mystifications happened only hundreds of years ago. Yet, that is not true. Here is a second, nearly contemporary example:

Mircea Eliade, in his book "Cosmos and History" (New York 1959) relates the story behind a legend from a small village in Maramureș, Romania. The legend tells the tale of a young suitor who was bewitched by a fairy, who threw him off a cliff a few days before he was to be married. His body was discovered by some shepherds, who took it back to the village. Upon arrival his fiance spontaneously broke into a beautiful funeral lament.

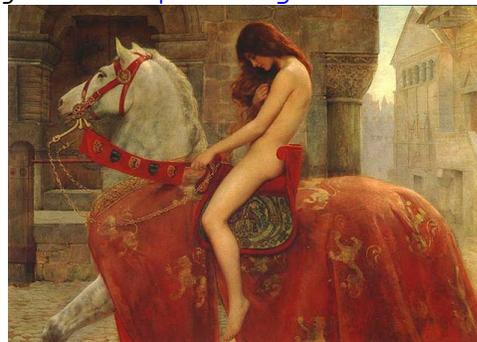
When a folklorist discovered that the story had only taken place about forty years ago, and that the heroine was still alive, he inquired from her regarding the legend. Her description differs substantially from the popular legend. She described a commonplace tragedy. There was no fairy and no spontaneous funeral lament. Her lover slipped off a cliff but did not die immediately. He was taken back to the village where he soon died. She participated in the funeral rites which included the customary ritual lamentations.

The collective memory of the village has stripped the story of all historical details and has embellished it with mythical elements. Amazingly, when the folklorist reminded the villagers of the authentic version, they repudiated it and insisted that the old woman's mind and was destroyed by her grief. [\[Pascal's wager / The Oral Tradition\]](#)

In this example, a legend with a fairy and a miracle sprung up in a few years after the event – even while the protagonist was still alive. People had more trust in the legend than the protagonist herself. This shows how easily a supernatural legend can be created in spite of evidence to the contrary. Remarkably, these legends appeared not in prehistoric times, but at a time when writing and science were already known. We may assume that such myths evolved much easier when this was not the case.

Indeed, human history abounds of such myths. Some of the better known myths are [\[Wikipedia/Legend\]](#):

- Lady Godiva
- Atlantis
- The founding of Tenochtitlan, the Aztec capital
- Cenodoxus, or the Damnation of the Good Doctor of Paris, told as an event justifying the sanctification of St Bruno
- Celtic Legends
- Don Juan
- El Dorado
- Fountain of Youth
- Holy Grail
- Helen of Troy and the Trojan War
- King Arthur and the Knights of the Round Table



Lady Godiva riding naked through the streets of Coventry to make a point against high taxes. Sadly, this event never happened.

- Legends of Africa
- Crimean legends
- Loch Ness Monster
- Odysseus
- Philosopher's stone
- Robin Hood
- Romulus and Remus and the founding of Rome
- Shangri-La
- Táin Bó Flidhais
- Vlad the Impaler; stories of his cruelty have attained legendary status, most likely spread after his death by his enemies.

In all of these cases, someone in the chain of hear-say started adding supernatural, magic, or simply false elements to a story ↗. These elements were picked up and proliferated, giving rise to a conviction that something supernatural happened. We can easily illustrate this process in games of Chinese whispers ([Wikipedia/Chinese Whispers](#)): information gets quickly changed as it passes through different people. Now imagine this process taking place not between 5 friends, but between hundreds of people, over several centuries, and over different languages. This is one more way in which religious beliefs can be born. Some of these legends are shared by several different peoples across the globe – indicating that they stem from a time when these peoples still inhabited the same spot ([Scientific American: Scientists Trace Society's Myths to Primordial Origins](#)).

Perhaps surprisingly, humanity has still not overcome this tendency to mystify ↗.

Mythologization today

One might think that the creation of myths belongs to the past ↗. And yet, even today people are good at creating myths. Here is an example of a myth that I followed in the news:

Rottweil is a small city in the South West of Germany. In 2014, a strange creature started appearing in the parks: A man clothed like a monk (pictured). Wherever he appeared, people got scared and ran away. Pupils had nightmares. One girl had to be hospitalized. Some people said the creature had a knife. Finally, even traces of blood were seen. Soon, the creature was dubbed "the war monk". More and more sightings were reported. The police investigated. ([Die Welt: Unbekannter Kampfmönch jagt Schülern Angst ein, 2014-07-04](#))



The mysterious monk
[[Die Welt: Unbekannter Kampfmönch jagt Kindern Angst ein, 2014-07-04](#)]

As it turns out, there was no war monk. There was simply a guy who dressed up as a figure from the video game "Assassin's creed". He turned himself in to the police the very same day. There was no knife and no blood. Contrary to reports, he just walked through the park once. Since dressing up as a monk and going through a park is not a crime, no charges were brought against him. ([Die Welt: Kampfmönch stellt sich, 2014-07-04](#))

Other examples abound: Reality and fiction get mixed up in urban legends, and still scare people. Popular (but wrong) stories are ([Wikipedia/Urban legend](#)):

- A woman was killed by spiders nesting in her elaborate hairdo.
- A person wakes up and realizes he is missing one kidney.
- Street gang members drive without headlights, only to murder the first person who warned them by flashing the headlights. This myth made it into the Minister of Defense in Canada, who issued a warning to the Ontario Members of Parliament.
- A serial killer hides in the back seat of a car.
- UFOs are sighted.
- Chain emails promise ill fate to the receiver if he does not pass them on.

A study on Facebook comes to the conclusion that even if they are baseless, conspiracy theories spread rapidly within communities. [...] Facebook users tend to choose and share stories containing messages they accept, and to neglect those they reject. [Furthermore] on Facebook, efforts to debunk false beliefs are typically ignored – and when people pay attention to them, they often strengthen their commitment to the debunked beliefs [[Bloomberg View: How Facebook makes us dumber, 2016-01-08](#)]. One example is the beatification of Mother Teresa, an

Albanian nun who worked for charity in India. For beatification, the Catholic Church requires a miracle. An Indian woman was found who was healed from cancer by praying to Mother Teresa. Even though the treating doctor insisted that the woman did not have cancer, and even though her husband explained that she was healed by conventional means, the Vatican still declared it a miracle, and went on with the beatification ([Wikipedia/Mother Teresa / Sainthood](#)).

Thus, even today, legends can grow and spread. Imagine how much simpler this was in a society where people could not read and relied mainly on oral tradition ↗. Stories about the supernatural could emerge very easily ↗.

Proliferation of Religions

How do religions spread?

We have seen that religious beliefs can be born from several phenomena – including spiritual experiences, a personification of nature, the desire to influence nature, or veneration for the dead ↗. Now the question is how these beliefs spread from the people who first had them to other people.

A scientific idea can be developed independently by two different peoples. For example, different human societies figured out how to make iron, even though they did not know of each other. Several people have invented the telephone independently of each other. This is possible because a scientific theory is a description of nature ↗. Since nature is the same everywhere, science is the same everywhere. Religion works differently. By definition, a supernatural belief has no reference in nature ↗. Therefore, the same religious belief is rarely developed independently by several people. It is unlikely that two people come up with the same concept and name for the Sun god, for example. Likewise, people in India do not by themselves start to revere Jesus. They do so only if missionaries go there. Religious beliefs spread exclusively by human communication. They spread from one geographical region to another by people who travel there, and who share the new religion ↗. We will now discuss different ways in which this can happen.

By far the most important variable determining your religion is the accident of birth. The convictions that you so passionately believe would have been a completely different, and largely contradictory, set of convictions, if only you had happened to be born in a different place.

By Richard Dawkins

Hear-Say

We have seen that the same religious concept cannot spontaneously arise in different places of the world. It has to be propagated by people ↗. One of the simplest ways in which this can happen is through hear-say: People hear about stories and propagate them. Sometimes the stories change on the way.

We have seen several examples for hear-say propagation in the discussion about myths ↗.

Proselytism

We have seen several ways in which a person can be convinced of the supernatural ↗. Once someone is convinced that the supernatural exists, it is only natural that he wants to share this discovery with his peers. And so he goes and preaches his beliefs to others.

The person may believe that his religion leads him to paradise (or a comparable postmortal state), and that not believing leads to hell (or any analogon thereof). Then, this person has a true desire to "save" his friends and family from hell, and help them reach paradise. Sometimes, the duty to preach the faith is also part of the religion itself ↗. Jehova's witnesses, for example, are known for their extensive proselytizing efforts.

If someone honestly believes that his friends go to hell unless they become believers, then it is only natural that this person will proselytize them ↗. However, there may also be more selfish cases of proselytism. These are cases where the believer has a material or social advantage from converting others to the faith.

Examples are:

Televangelists

Televangelists are people who preach the (Christian) faith via television, mainly in the US ↗. Some of these preachers are accused of accumulating tax-free donations from believers to finance their own lavish lifestyle. They make millions of dollars every year, and spend it on Rolls Royce cars, houses, or private jets ([Wikipedia / Televangelism / Criticism](#); [New York Times: Family Battle Offers Look Inside Lavish TV Ministry, 2012-05-05](#); [CBSNews: Senate Panel Probes 6 Top Televangelists, 2007-11-07](#); [Naked Law: 6 Outrageously Wealthy Preachers Under Federal Investigation](#)). In Africa, followers of so-called super-pastors make tithes and other offerings in hope of winning blessings from on high [[The Economist: Of prophets and profits, 2014-10-04](#)]. Some pastors have accumulated a wealth in the order of 150 million USD. Ayo Oritsejafor, who leads the Christian Association of Nigeria, was embroiled in a recent scandal when a private jet he had leased out was found to be carrying \$9.3m in cash into South Africa, supposedly a payment for an arms deal on behalf of the Nigerian government [ibid]. Other pastors get rich on the tithes: "You tithe, he blesses. You keep the tithe, the curse is initiated" [[The Economist: Religion in Zimbabwe, 2016-08-27](#)]. Some of the more enterprising priests sell miracles. Blessed ballpoint pens help you pass exams. Miracle bricks will help you acquire your own home. [ibid] These people have a financial interest in people following them. Hence, they have one more reason to spread the word of their religion.



[Found in: Google]

Pilgrim sites

Pilgrims visit places that have a special sacred status in the hope of forgiveness for their sins, enlightenment, or spiritual purification. This generates a considerable income for the places that are visited. Here are examples: Africans who visited Temitope Balogun Joshua's Christian services in Nigeria each spent 1700 USD upwards during their visit ([The Economist: Of prophets and profits, 2014-10-04](#)). Muslims who visit Mecca for the pilgrimage of Hajj easily pay around 5000 USD for the trip ([Google Search](#)). In the early 2000s, pilgrimage to San Giovanni Rotondo in Italy (the mystic saint Padre Pio's pilgrimage site) brought the town in 57 million USD in revenue ([NBC news: How religious pilgrimages support a multi billion dollar industry, 2012-09-24](#)). Some 90 percent of Lourdes' \$23 million budget is derived from visitor donations [ibid]. In total, pilgrimage tourism is worth up to 8 billion USD a year globally [ibid]. This money comes from donations, but it is also spent in hotels, restaurants, transportation, services, entrance fees, and tourism shops. In these cases, the shrines, churches, towns, and cities have a financial interest in promoting the legends and religion that lend their support to these pilgrimage sites. They will try to keep up the myth that people were purified, or that actual healings took place.

Scientology recruiters

Scientology is a new religious movement ↗, which lets new adherents pay a fee to receive the necessary preaching, training, or material. This fee is usually in the thousands of dollars. People who recruit new members get a commission of this fee. The organization advertises that recruiters can make a living just from these commissions: "You send your preclear into a nearby org, and she buys an Academy Training package for \$8,000. You receive a 15% commission on those services, which is payable when she arrives at the Org to do them (\$1,200). If you were to send 20 preclears a year into the org for similar packages, you would have \$24,000 in income just from selecting your public to train". [[Wikipedia/Scientology as a business](#)] This way, recruiters also have a financial interest in spreading the religion. Scientology's founder, L. Ron Hubbard, is suspected of having founded the religion for his own financial benefit. In a 1953 letter, shortly before founding the religion, he wrote "On a longer look, however, something more equitable will have to be organized. [...] And we could [...] make enough money to shine up my operating scope. [...] It is a problem of practical business. I await your reaction on the religion angle.". Indeed, the tax-exempt status of Scientology was revoked in 1958 on the grounds that "the founder of the organisation L. Ron Hubbard remains in complete control and receives substantial remuneration and perquisites both from the taxpayer and a network of affiliates". [[Wikipedia/Scientology as a business](#)] In this case, the founder also had a direct financial interest in spreading his religion.

The Catholic Church

The Catholic Church is one particular denomination of Christianity ↗. In the past, the church owned huge portions of land, and acted de facto as a feudal lord (see my trip to [Arequipa](#)). This land got confiscated in secular revolutions between 1789 and 1850. However, still today, the church is a multi billion dollar organization. The American Catholic Church alone spent 170 billion USD in 2010 on healthcare, schools and parishes. The Vatican Bank manages 700 million Euros of equity which it owns. It keeps gold reserves worth over 20 million USD with the US Federal Reserve. Money flows in from individual donations from Catholics, government grants, the church's own investments and corporate donors. According to Georgetown University, the average weekly donation of an American Catholic to the church is \$10. There are 85 million in North America, meaning each week the Catholic Church pulls in \$850m through donations from individual Catholics. [[International Business Times: How rich is the Vatican?, 2014-12-05](#)]([The Economist: Earthly concerns, 2012-08-12](#)). The American branch of the Catholic Church spends several millions of dollars to victims of sex scandals ([Time: Can a Church Go Broke?, 2002-05-26](#)), and several millions of dollars just disappear ([Der Spiegel: The Hidden Wealth of the Catholic Church, 2010-06-14](#)). Both Catholic and Protestant churches together own around 500 billion euros – just in Germany ([Die Zeit: Konzern Kirche, 2011](#)). If people stop believing in the message of the Church, this system will no longer work. Now this system pays the salaries for priests, bishops, and staff, as well as housing and the daily operations of the state of the Vatican. Hence, these people have a material interest that their adherents continue to pray and pay.

Ancient preachers

In many ancient religions, preachers took care of the believers. These were priests in the early Abrahamic cults, Shahmans in central Asia and America, and the Brahmins in India. In most cases, these preachers lived on the goods that the believers sacrificed. The Bible exemplifies this, saying "You are to give the right thigh of your fellowship offerings to the priest as a contribution" [Bible / Leviticus 7]. Obviously, these priests had an interest that the people continued doing this. In fact, they were probably the ones who wrote this passage in the first place ([WhyWontGodHealAmputees.com / 14](#)). Thus, preachers had an interest that people continued believing. The same is true for the priests of ancient Egypt, who asked people to give sacrifices so that the River Nile would flood. Of course, the River Nile floods annually anyway.

Current preachers

Still today, preachers take care of the believers in many religions. In Christianity ↗, these are priests. In Islam, these are Imams ↗. In Hinduism ↗, these are preachers. Tribal religions usually have shamans ↗. In many other religions, there exist analogous roles. In some cases, the preachers are sent deliberately to spread the faith (they are called missionaries). All of these people have a position of power over the believers: Depending on the denomination, they can have access to the confessions of adherents, forgive sins, celebrate weddings, declare fatwas, advise adherents, interpret the holy sources, tell them when or whom to marry, and hold sermons. Most importantly, they hold the authority to decide what is good and what is bad according to divine will ↗ ↗ ↗ ↗. In most cases, the job also comes with a position of respect in the society of believers. In some variants of Judaism, rabbis are chauffeured in black Cadillacs and have private ritual baths built into their opulent homes [Deborah Feldman: Unorthodox]. Therefore, the preacher has a personal interest in maintaining and increasing the number of believers. If people stop believing, the preacher loses his societal position. Going further, the preacher often has no regular income outside his religious role. Christian priests, for example, are often paid exclusively through the church. Preachers of many other religions live on donations from the adherents. If the number of adherents decreases, the livelihood of these preachers is endangered. Thus, every preacher also has a financial interest in maintaining and increasing the flock of believers.

In all of these cases, the people who spread the religion have a personal benefit from increasing the number of adherents. Therefore, they have one more reason to spread the faith. This is not to say that this would be the only reason. The people might as well have altruistic motives ↗. However, the material advantage could be one of the motivations.

This form of proselytism is one more way in which a religion can be spread.

It is easier to fool people than to convince them that they have been fooled.

By Mark Twain

We have seen that a religion can spread only by transmission from one person to another one (or by books or movies or any other type of human communication) ↗. One way in which this happens is through the education of children. Children learn from their parents. If the parents are religious, the children will learn religion from them. This is one of the most prevalent ways in which religion spreads ↗. As Richard Dawkins observed, the vast majority of people follow the religion of their parents – instead of any of the other available religions.

The mechanism behind this phenomenon is simple: As a child, it is usually a good idea to follow what your parents tell you. For example, if your parents tell you “Crocodiles are dangerous, because they can eat people!”, then your best bet is to avoid crocodiles. You would not go and verify that theory by experiment – you just trust your parents. And this is a good thing from an evolutionary perspective: Children don’t have to redo by themselves all the experiences that humanity has made through its existence; the children just learn them from their parents. Now imagine that the parents tell the child “There is an invisible being in the sky who wants you to avoid pork meat”. Then, in the very same way, a child will believe this theory. You never verify whether crocodiles really eat humans, and you never verify whether there is really a god – you just believe (Richard Dawkins: *The God Delusion*). In this way, religious thought becomes part of our mindset. Supernatural theories are mingled with natural theories and sometimes it is hard to spot the difference ↗. In particular, religious theories can never be proven wrong by experience, because they are not falsifiable. Nobody can ever find out if they are wrong ↗. Therefore, they continue unchallenged through the generations ↗.

In many countries, the transmission of the religion is part of the state-sponsored educational system. In Japan, there are many Christian schools and universities with mandatory religious education. In Finland religious education is mandatory subject both in comprehensive schools (7-16 years) and in senior/upper secondary schools (16-18/19 years). In Germany, most states teach Christianity in public schools. In Greece, students at Greek Orthodox schools typically learn the basics of the Greek Orthodox faith. In Poland, children typically learn about Catholicism in school. In Romania, a majority of religious classes focus on the Romanian Orthodox faith. In Turkey, the state ensures that children are first exposed to accepted interpretations of Islam before exposing them to other religious teachings. In the United States, religious education is often provided through supplementary “Sunday school”, “Hebrew school”, catechism classes, etc. [[Wikipedia/Religious education](#)]. In the UK, the law requires that “each pupil in attendance at a community, foundation or voluntary school shall on each school day take part in an act of collective worship” of a “wholly or mainly of a broadly Christian character” for community schools [[Wikipedia/School Standards and Framework Act 1998](#)]. In all of these countries, children are taught religious concepts at young age. Since the religious classes usually stand side by side with the secular classes, children cannot see the difference between the two. They are thus led to accept religious concepts as part of their world view.

In most religions, the transmission to the children is part of the religious system itself ↗, and it ensures the proliferation of the religion ↗.

*It takes 20 years to grow a Baptist
and 20 minutes to lose one.*

By [Daniel Dennett](#)



[Found in: [Progressive Secular Humanist](#)]

Domination

We have seen different ways in which a religion can proliferate ↗. One more way in which a religion can spread is societal domination. This happens whenever a group of adherents of one religion becomes dominant in a society – for example if that group invades the society in a war, becomes the elite of that society, or becomes the role model for that society. Whenever this happens, the society becomes more open to the religion, and will eventually adhere to it. Different from imposition ↗, this transition happens through soft factors – even though the difference between the two forms is arguably gradual.

Particular instances of this phenomenon are:

The Muslim Expansion

Between 622 and 1800, Muslims conquered the land between Spain and India ([Wikipedia/Muslim Conquests](#)). Christians and Jews under Muslim rule had to pay a special tax ([Wikipedia/Jizya](#)). While these people could still theoretically stay with their previous religion, the tax increased the incentive to convert to Islam ↗.

Christian domination

Christianity has a long history of violent expansion in the Americas, Europe, and Asia ([Wikipedia/Inquisition](#)). Still today, the Christian nations have a dominating role in the world. They no longer force people to convert to Christianity, but they have a disproportional presence in television, politics, economy, music, art, and culture all over the world. Western telenovelas, for example, are popular in many parts of the world. Western pop music is known around the world. This does not directly spread Christianity, but it makes its concepts and philosophy known to a large audience. For example, we can assume that a random middle class person in India is more likely to know who Jesus is than a random middle class person in the US to know who Shiva is.

Dominating religion

In general, the dominating religion of a country has some advantages over the other ones ↗. Implicitly, the dominating religion is understood as the norm, which defines the morality, the world view, and the social codes of the society. Anyone who differs from that norm has to explain themselves. They may encounter suspicion or discrimination ↗. For Christianity, this phenomenon is known as the "Christian Privilege" ([Wikipedia/Christian privilege](#)). Such a dominance does not directly convert others to the prevalent religion, but gives that religion an advantage if ever someone considers changing their religion.

Restrictive laws

Still today, some countries recognize only a handful of religions. Indonesia demands that people declare themselves as one out of six religions; Egypt's draft constitution makes room for only three faiths; in Israel, marriage is celebrated by state-approved religious institutions. In countries with religious education in schools, only a handful of denominations are usually allowed to teach ([Wikipedia/Religious Education](#)). Technically, this forces nobody to adhere to any of these religions. However, if you don't, you risk having trouble when you ask for your passport, want to marry, have your religion on equal footing in schools, or receive other services from the state ↗. Thus, these systems have the effect of mainstreaming citizens into the accepted religions.

State atheism

Although not a religion, atheism was also sometimes spread by domination. State Atheism, e.g., installed atheism by force in some communist countries ↗. In some cases, people were physically forced to abandon their religion. In other cases, people could still theoretically believe what they wanted, but religious symbols, authorities, and teachings were removed from society. This gives an advantage to atheism. Still today, fundamentalist interpretations of religions are usually frowned upon in Western Europe ↗. The general culture edges people away from literal interpretations of their faith.

Imposition of Religions

Imposition

There are several ways in which people can come to hold religious beliefs ↗. One of them is imposition from above: people are just forced to adhere to a specific religion by the authorities or higher classes of the country. This was maybe most obvious in medieval Europe, when basically everybody had to be Christian ↗. Abandoning Christianity was persecuted as heresy. The Catholic Inquisition tortured and killed thousands of people in an effort to convert them to Christianity – in the Americas, Europe, and Asia ([Wikipedia/Inquisition](#)). Little changed after the wars between Protestantism and Catholicism in the 16th century: It was agreed that every region would follow the religion of its leader ([Wikipedia/Cuius regio, eius religio](#)). This de facto imposed a religious denomination on the citizen. Still today, religion is sometimes imposed from above, most notably in some Muslim countries ↗. In such places, people who wish to leave the religion risk death ↗. Such a system makes all underlings adherents of the religion and thus spreads the religious thought to these people.

There are several reasons why the ruling classes of a country may find it convenient to make their subordinates follow a particular religion, and we discuss them in the following.

Religion is regarded by the common people as true, by the wise as false, and by rulers as useful.

By Lucius Annaeus Seneca

Grace of God

The leaders of countries can have several motivations for imposing a religion ↗. One motivation is to justify their own rule through the divine ↗. Here are examples:

Chinese Mandate of Heaven

In China, the emperors had a "Mandate of Heaven", which gave them divine right to rule. According to this belief, heaven bestows its mandate to a just ruler, the Son of Heaven [Wikipedia/Mandate of Heaven]. Thus, the emperor had an interest in his subjects' religiosity.

Japanese Emperor

Shinto belief ↗ held that the Japanese Imperial Family was the offspring of the sun goddess Amaterasu (Wikipedia/Hirohito). The Japanese Constitution of 1860 declared the Japanese Emperor sacred. When Japan was defeated by the allies in the Second World War, the emperor was forced to give up his divine status. He is still a descendant of the gods, though (The Economist: How monarchies survive modernity, 2019-04-27).



The genealogical tree of the Inka rulers clearly identifies the sun and the moon as the parents of the first king.
[Picture taken in the de Osma Museum in Lima/Peru]

Inka Kingdoms

In the Inka empire, the king was assumed to be the son of the Sun god (see picture). In order for the population to accept this reasoning, the population has to believe in these gods.

Afghanistan

In order to overcome the profound sense of tribal identity among Afghan people, the first Afghan king (1880) took the title of "Protector of the nation and of the religion". Ruling by "grace and will of Allah", he fulfilled the dual role of leader and interpreter of Islam and Islamic law. He also decided that he was the only person habilitated to declare the jihad, because he wanted to guard against the possibility of fatwas for jihad being issued by religious figures close to his enemies. [Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development]

Medieval Kingdoms

In medieval Europe, the kings usually declared that they were installed by God. This was based on the Bible, which declares that any government was installed by God (Bible / Romans 13:1-7). The divine will was invoked as legitimation for the absolutist authority the monarch wielded. This is also known as the "divine right of kings", that is, the endorsement of God for the monarch's reign. [Wikipedia/Grace of God]

Today's Monarchies

Today, the kings and queens of the following countries say they rule "by the grace of God": Denmark, Liechtenstein, the Netherlands, Spain, the United Kingdom and hence all Commonwealth countries (Wikipedia/By the grace of God). The British Queen is not just the head of state of the Commonwealth countries, but also the head of the Anglican Church, the official Church of England ↗.

The Pope

The pope, likewise, derives his power directly from Jesus (who is, in the Christian faith, divine) (Catholic Encyclopedia / Vicar of Christ). He has the "supreme and universal primacy, both of honour and of jurisdiction, over the Church of Christ" as the "guardian of [Jesus'] entire flock in His own place", and the "Vicar of Christ [, a title] which he bears in virtue of the commission of Christ and with vicarial power derived from Him" [Catholic Encyclopedia: Vicar of Christ, 1913]. He "hold[s] upon this earth the place of God Almighty" [Pope Leo XIII: Praeclara Gratulationis Publicae, 1894].

Such identification of the ruler with the divine makes the people believe that their ruler is not a normal human, but in a different category altogether. If they ever come to see that their leader is a normal human, they will ask why the leader is not a different human – or why they themselves could not rule just as well. This happened in the early republics (Switzerland among them), where people ruled themselves. To avoid this, the kings in the other places had an interest that his underlings believed his story of his divine provenance. Hence, he had an interest that his subjects follow the religion. Hence, he took care that people were religious.

Reportedly, Christian missionaries had a hard time preaching their faith to refugees from North Korea. The whole idea of an infallible and all-powerful redeemer, they said, struck them as a bit too familiar.

By Christopher Hitchens in "God is not great" / p. 299

Unholy alliances

Political leaders may find it convenient to impose religion for a number of reasons [↗](#). In some cases, the worldly leader makes a deal with the religious leader in order to cement each other's authority.

Examples are:

Render unto Cesar

Jesus said "Render to Caesar the things that are Caesar's, and to God the things that are God's" [Bible / Mark 12:17]. This verse has been used to justify the rule of the state authorities, and to tell people to pay their taxes ([Wikipedia/Render unto Caesar](#)). A church that tells people to pay their taxes is very useful to the government. Furthermore, the Bible tells Christians to obey the government (Bible / Romans 13:1-7). Consequently, the government will be very happy to promote this religion. Thus, this rule is a win-win deal for the church and the government. The analogon in Hinduism is the idea that kings are sanctified, and that they get a 6th of every income ([Laws of Manu / 2 / 302 - 308](#)). Again, a king who supports this religion is in a win-win situation.

Constantine's conversion to Christianity

Constantine the Great was a Roman emperor who converted to Christianity around 313 CE. He set out to decriminalize Christianity, to establish Christianity as the official religion in the Roman Empire, and to persecute variants of Christianity other than his own (most notably the Gnostic Christians). His motives are not entirely clear. He might have used Christianity to consolidate his power, he might have sought the help of the Christian God as the most powerful among many gods, or he might have genuinely believed in Christianity ([Wikipedia / Constantine and Christianity](#); [National Geographic / Constantine](#); [BBC / Christianity and the Roman Empire](#)). No matter which motives played a role, Christianity did help Constantine consolidate his power, because he assumed a divine mandate for his reign ([Wikipedia/Constantinianism](#)). For his Christian subjects, Constantine becomes the embodiment of the righteous king David. And once he consolidates his power by conquering [...] also the Greek East where there are many more Christians [...], he is in this amazing position of having a theology of government that he can use to consolidate his own secular power. And it works both ways. The bishops now have basically federal funding to have sponsored committee meetings so they can try to iron out creeds and get everybody to sign up. [[Shaye I.D. Cohen: Legitimization Under Constantine](#)]

Confucianism

Confucianism was the state religion of China until Communism arrived [↗](#). This was convenient for both sides, because Confucianism teaches loyalty to the authorities (Confucius: Analects / 17:8) – a principle known as Zhong ([Wikipedia/Confucianism](#)).

Reichskonkordat

The Reichskonkordat is a treaty between the Holy See and Germany negotiated during its transition into Nazi Germany. The treaty guarantees the rights of the Roman Catholic Church in Germany. At the same time, it requires bishops to take an oath of loyalty to the Governor or President of the German Reich. The treaty was ratified in 1933 and remains in force to this day [[Wikipedia/Reichskonkordat](#)]. It is clear that this treaty works both ways: On the one hand, it consolidates the power of a religious organization in a country (guaranteeing, e.g., religious teaching in state-funded schools). On the other, it makes sure that religious leaders will not openly oppose the government. Reportedly, the only high-rank Nazi official that was ever excommunicated by the Catholic Church was Joseph Goebbels – for marrying a Protestant woman (Christopher Hitchens: God is not great / p. 288).

Ottoman Empire

Religious classes were a core member of the Ottoman nobility and a key element of the central and provincial administration. They were submitted to the power of the sultan, but obtained [in return] ample economic privileges in the form of lucrative functions, tax exemption, and religious endowments that controlled vast tracts of land. The Ottoman Empire is thus a good example of a kind of religious/political equilibrium. [[Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development](#)]

In all of these cases, the worldly leaders had an interest in spreading and imposing the religion, because it consolidated their power.

Oppressing lower classes

The rulers of a country or region can have several motivations to impose a religion ↗. One of them is that the religion can consolidate and justify the dominance of a particular social class and the oppression of another class. Disadvantaged people (such as the poor, the slaves, or women) can be made to believe that their role is foreseen by the gods ↗. People who suffer can be made to believe that they will be rewarded in the hereafter ↗. In this way, people will not ask questions. They are also discouraged to revolt, because a revolt against the societal order would be a revolt against the divine order. In this way, the religion provides a way to cement the social status quo.

Here are examples:

Christian Slavery

From 1619 until the end of the Civil War in 1865, hundreds of thousands of Africans were brought to North America into slavery ([Wikipedia/Slavery in the US](#)). Over time, the slaves were introduced to the Christian faith. Many believed Christianity was a good form of social control over slaves [[Thoughts of a Living Christian: Christianization of African Slaves, 2012-05-20](#)], because it justified slavery ↗. For the slave-holding class, the Bible was very important for them as a warrant for what they understood to be their right to own slaves, to own people. And they preached it that way, that the Bible says that they were to be slaves, they were to be obedient slaves, that that was God's will. [[National Public Radio: Why Did African Slaves Adopt the Bible?, 2007-01-24](#)] Preachers told their slave converts that they owed absolute obedience to their owners, just as they did to God. This worked to the slaves' disadvantage, on the whole, as religion offered support for punishment of slaves' misdeeds. The cruelty of slave owners was much less likely to be punished, nor did the missionaries question the justice of the slaveholding system. Anglican missionaries worked especially hard to ensure that their religion supported the orderly, hierarchical world of slave labor, meeting the needs of their white planter supporters. [[Encyclopedia.com / Slavery and African American Religion](#)] However, Biblical stories of Moses freeing the Jews also inspired the slaves in their quest for freedom. Several preachers, most notably the Quakers, held that slavery was inhumane and against the will of God. In 1965, only 100 years after the American Civil War ended slavery in the US, the Second Vatican Council also condemned slavery ↗. Islam, too, was (and sometimes is) used to justify slavery ↗.

The Hindu Caste System

In India, the society was (and, to some degree, is) stratified into "castes", i.e., social classes that each come with certain privileges and duties. This system is based on a Hindu legend, which says that "the social classes of people emerge from a primordial being. From the mouth come the Brahmins – the priests and teachers. From the arms come the Kshatriyas – the rulers and soldiers. From the thighs come the Vaisyas – merchants and traders. From the feet come the Sudras – laborers. A fifth group describes the people who are "untouchable". These untouchables are outcasts – people considered too impure, too polluted, to rank as worthy beings" [[National Geographic: Discrimination against India's lowest Hindu castes, 2003](#)] ([Laws of Manu / 1 / 87-91](#)). They are not allowed to eat or sit with other people, they have no access to the public properties and resources of villages (wells, ponds, temples, etc.), and they are often kept in bonded labor ([Wikipedia/Untouchability](#)). The Laws of Manu specify that hurting a person from the higher caste carries a penalty of 100 years in hell ([Laws of Manu / 11 / 207](#)). Furthermore, the lower castes can be punished by amputation or execution, while the highest caste is immune to this ↗. It is clear that this stratification benefits the higher caste. Thus, the higher castes had an interest in imposing this variant of Hinduism. Today, discrimination based on caste is illegal in India, and it is disputed to what degree the caste system can be justified on religious grounds ↗ ([Wikipedia/Caste System in India](#)).

Women's rights in Islam

In all mainstream interpretations of Islam, women had and have less rights than men. Women cannot marry non-Muslims, while men can (Quran 5:5); men can have several wives while women cannot have several husbands (Quran 4:3); men are ordained as the "keepers" of women, and women are required to be obedient (Quran 4:34); men can beat their wives if they are not obedient (Quran 4:34); men can use women as sexual slaves (Quran 23:1-11; 70:29-30); men can have sex with their wives whenever they want (Quran 2:223); and a woman's word weights half of that of a man in court (Quran 2:282). It is clear that these rulings benefit men. Thus, men had an interest in keeping up this belief system. Today, these interpretations are disputed ↗.

In all of these cases, religion was or is used to justify the oppression of certain social classes. Today, it is disputed whether this oppression is really the true interpretation ↗ of the respective religion or not. Many people will argue that it is not. This does not change the fact that the ruling classes found it useful to spread their particular interpretation of the religion in order to subdue the other social classes.

Unification

Leaders can have several motivations to impose a religion ↗. One more reason is that a religion can implant common values and beliefs in a society. This way, the religion can unify a people culturally and intellectually. It is thus not without reason that, in his book "Il Principe", Niccolò Machiavelli recommends the king to foster religious faith in his country.

Kings strove for religious unity in their lands, regarding it as the foundation of political unity. They thus came to equate orthodoxy with obedience and religious dissent with rebellion.[...] Those inhabitants who did not subscribe to the official creed and church of their polity could not claim all the privileges of full citizenship and against them the harshest regimes could bring the charge of treason when they felt threatened. [Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development].

Examples are:

Poland

In Poland, identification of the nation with Catholicism came only after the invasion of the Swedes around the middle of the 18th century. The conflict between the two countries did not begin as a religious war, yet it became one in due course. Resenting the Swedish occupation, the Poles began to recast the war in religious terms, viewing the struggle against the Protestant invaders as a war against heretics in defense of Catholicism. [Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development]

Other European countries

Modern European nations were [...] were built upon the principle that a crucial cement holding states together consisted of a shared religion, and that religious division undermined social and political unity, if only because religious dissenters were perceived as potential traitors. [K]ings strove for religious unity in their lands, regarding it as the foundation of political unity. [...] The varieties of confessional Christianity had thus succeeded in supplying governments with official ideologies, and in providing large, geographically dispersed communities with common symbols and values that became a defining aspect of political identity. [Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development]

Saudi Arabia

The puritanical Islamist movement created by Ibn al-Wahhab (1703-1792) was not important in his own time. Yet, because he was linked to the Seoud tribe that was striving to take hold of power by conquering the Arabian deserts, his doctrine was to gain wide significance much later and exert considerable effects on the Islamic world during the second half of the twentieth century. The Seouds, indeed, succeeded in uniting diverse tribal groups into a movement that eventually conquered most of Arabia and established the kingdom of Saudi Arabia in 1932. The Saudi royal family, which is essentially a secular polity, then co-opted a religious elite and used Islam in order to consolidate a Saudi national identity, and thereby reinforce its own legitimacy. [Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development]

Iran

Shi'ism in its present form (Twelver Shi'ism, in particular) was largely conceived by the Safavid rulers of Iran as a convenient ideology of nation-building vis-à-vis the rival Ottoman Empire. [It gave Iran] a specific ideological distinction and national identity [...]. As part of the official ideology, the Safavids cursed the first three caliphs

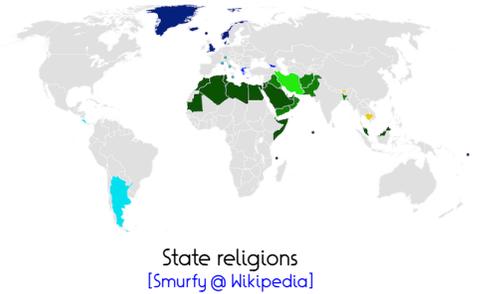
considered holy by the Sunnis and they claimed descent from the Seventh imam, which gave them impeccable religious credentials. [...] The consequences of this split between two main strands of Islam, now viewed by each other as heretics and enemies ↗, have been carried over into the present time. [Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development]

The United States

The US is officially a secular country ↗. Its constitution says the state may not interfere with religion. However, in the wake of the cold war, the phrase "In God we trust" became an official motto of the US (Wikipedia/In God we trust), in an effort to distinguish the country as a Christian nation from the atheist socialist world ↗.

Muslim Countries

Recent history offers us examples (Egypt, Sudan, Algeria, Pakistan, Indonesia, and Iraq) showing that political rulers use Islam as a readily available ideology and instrument of legitimacy to deflect criticisms, entrench their power and privileges, or bolster their nationalist credentials. At the same time, the decision to oppose the state on the grounds that it is insufficiently Islamic belongs to anyone who wishes to exercise it. Thus, while the ruler increasingly presents himself as the true guardian of the faith with accounts to give only to God, the radical opposition portrays him as a decadent, impious, and sinful monarch who has strayed away from the true path of Islam. [Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development]



Other countries

Religion (or a denomination thereof) currently largely defines the identities of Iran, Israel, the US, and many other countries. In around 30 countries, one religion is the state religion (see figure).

War Morale

Kings and rulers have several reasons to support religion ↗. One reason is that religion can be used to uphold the morale in a war. Several factors can work in this direction:

Identification

A religion can be used to create a common identity of the people, and to create an us-versus-them feeling ↗ ↗. Identification with one's country is the crucial ingredient for a war, because otherwise people would not know how to distinguish friends and foes. Still today, a large part of wars is fought along religious lines ↗.

Ethical justification

Religion holds the claim to the highest ethical authority. This means that if a religious leader justifies a war, then his adherents will have no moral scruples fighting in it. This mechanism was at work during the crusades with Christianity, during the conquest of the Maghreb with Islam, and during the conquests by the Islamic State. Maybe less known is that it was also at work during the Second World War with Buddhism: When Japan conquered China, Buddhist priests encouraged the soldiers to go to war (Wikipedia/Buddhism and Violence).

Moral support

Religious ceremonies and personnel can be used to encourage and appease soldiers (Wikipedia/Military Chaplain). In the Second World War, both sides used Christian priests to fulfill the spiritual needs of the soldiers. The German soldiers had "Gott mit uns" ("God with us") written on their belts. If this were true, it would be rather macabre in retrospective.

Promise of heaven

The most basic (and maybe most effective) strategy to use religion for wars is to promise heaven to those fighters who die ↗. This strategy has been used extensively in the Crusades, where victims were celebrated as martyrs. The strategy was and is also used in Islam. The Quran grants people who die for the cause of Islam a place in heaven (Wikipedia/Shahid). Male martyrs get large-breasted virgins (Wikipedia/Houri), according to



Priests in World War 1 in the Italian army.
[Picture taken in the Blue Palace in Pisa/Italy]

Quran 78:33 and 56:22 ↗. No wonder this is perceived as an encouragement. As Richard Dawkins has argued, "the promise of heaven immunized people against fear, since many of them honestly believe that a martyr's death will send them straight to heaven. What a weapon!".

Justifying Laws

Rulers have several reasons to love religion ↗. One reason is that the religion can be used to justify the moral code of the society. In ancient societies, the legal code was often ascribed to the gods ↗. In this way, the arbitrariness of the law ↗ is hidden, and questions are avoided. The fact that the laws are arbitrary was maybe one of the best kept secrets of the rulers.

In a similar vein, a religion can help establish rules of conduct, such as food rules, hygiene rules, or societal rules. Whenever it was too complicated to explain or justify a rule, an appeal to religion could be made. Once a god wants something, no questions are asked. This has been used to establish numerous rules, both reasonable ones ("do not kill") and idiotic ones ↗.

Chapter on Following Religion

Introduction

This chapter discusses factors that may make people adhere to a religion. The chapter consists of the following sections:

- **Education**: Discusses educational factors that make people more open to religion.
- **Pressure from Society**: Argues that some people are pressured into their religion.
- **The Desire to influence**: Hypothesizes that some people adhere to a religion because they want to influence their fate.
- **Wishful Thinking**: Lists cases where people adhere to a religion because they wish it to be true.
- **Pragmatism**: Discusses pragmatic arguments for adhering to a religion.

Education

No education in physics

We are now discussing why people believe in religious stories ↗. One reason why the early people believed reports of miracles, visions, and divine apparitions may have been that they had much less of an idea of the laws of nature.

Before the Middle Ages, people did not necessarily know why certain things float on water and others don't, which herbs cure which illnesses and which have no effect, which rituals actually deliver results (such as washing your hands) and which don't (such as praying), which nutrient deficits cause which problem, how an earthquake comes about, or that a halo is a completely natural phenomenon. To them, life must have been a sequence of events that were more or less random ↗. Funny things could happen and scary things could happen, with little chance to predict either. In such a continuum of events, a miracle is just one more strange event. If a halo can light up the sky, why should a man not walk on water? Today we know that one is in accordance with the laws of nature, while the other one is not. At the time, however, people did not know. For them, both were equally bizarre. This might have increased their readiness to believe in religious stories.

Today, too, some people argue with unexplained physical events in order to prove the supernatural. We discuss these arguments in the [Chapter on the God of Gaps](#).



Real or divine?
[Found in: [Daily Mail: Rare ice halo seen in the sky, 2015-01-10](#)]

Ignorance is the mother of Devotion.

By David Hume

No strict concept of truth

One reason why people believed religious stories ↗ might have been that they had a less strict concept of truth ↗.

Today, scientists accept a statement only if it has been predicted by a theory that has been validated extensively in the past ↗. In particular, a theory cannot be true if it cannot be falsified ↗. Earlier in human history, however,

people did not know that truth has necessarily to be grounded in reality ↗. They had no idea of the concept of experimental validation ↗. Truth was something vague that was determined mainly by the people whom you trusted, or by seeing whether something made sense to you. People would come up with the concept of a soul without ever worrying how it could be falsified ↗. The Greek philosophers developed theories such as the "heaven of ideal objects" without any basis in reality. If people could claim the existence of the heaven of ideal objects, they could equally well claim the existence of gods.

The idea that theories should be experimentally verified was developed only much later, after the Middle Ages. The idea that a theory should be falsifiable dates to the 20th century only. Until then, "truth" was a very flexible concept that could make room for many things, if they only appeared plausible.

How does God work? God is a grand illusion powered by faulty thinking patterns, superstition, and suggestion. This illusion is easy to foist upon people who are unable to think critically, because they don't have the mental tools or the desire to understand the illusion.

By Marshall Brain in "How God works" / p. 246

No strict concept of truth today

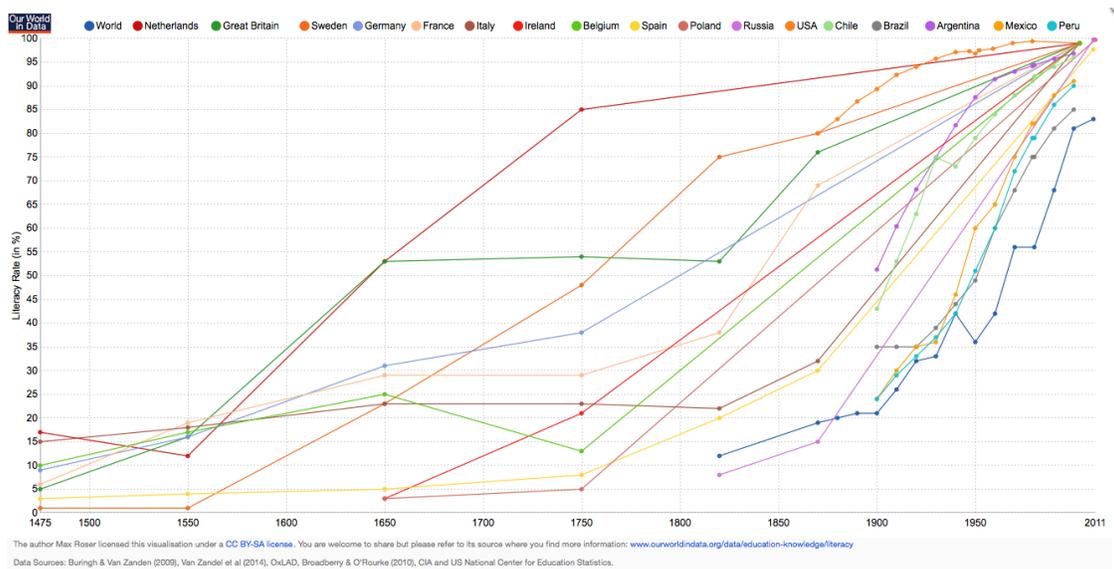
In the previous article, we have hypothesized that people were more open to religious theories because they were more ready to accept something as true than we are today ↗. However, even today, people have a less clear concept of truth than we might wish – even if we leave religion aside.

- We all fall prey to all kinds of common fallacies, such as wishful thinking ↗, the "no-true-Scotsman" fallacy ↗, abductive reasoning ↗, the JFK fallacy ↗, or counting the hits ↗.
- Some people believe in homeopathy, magic, energy bracelets, or superstitions ↗. They will knock wood to avoid that something bad happens, pay money for alternative medicine, or consult a fortune teller ↗.
- Few people know of falsifiability ↗. Therefore, abstract universal theories enjoy quite some popularity ↗. Philosophers spend much of their time debating unfalsifiable concepts (see, e.g., the theories in [Wikipedia / Philosophy of mind](#)).
- You can hear people seriously claim that there are several truths ↗.

In these cases, modern human thinking does not draw the line between scientific truth and the rest either.

Illiteracy

In the past, literacy was much less common than it is today. At the end of the Middle Ages, the ability to write was restricted to less than 10% of men and hardly any women possessed it [[Robert A. Houston: Literacy, 2011-11-28](#)]. As late as 1841, 33% of all Englishmen and 44% of Englishwomen signed marriage certificates with their mark as they were unable to write [[Wikipedia/Literacy](#)]. Around that time, 90% of Russians were unable to read. In the US, 80% of blacks were illiterate at that time. In Haiti, 90% of people could not read. ([Our World in Data / Max Roser: Literacy](#))



Literacy in Europe from 1500 until now
 [Our World in Data / Max Roser: Literacy]

An illiterate person has to rely on the literate people to learn something new. Thus, the illiterate people were used to accepting view points from others – mostly from the more educated people. If the more educated person tells you what punishment the law prescribes for murder, you had to believe it. If the educated person tells you how many gods there are, then you would believe it in the very same way. We have already seen that the elite had an interest in establishing a religion ↗. This goal is easier to achieve with uneducated people.

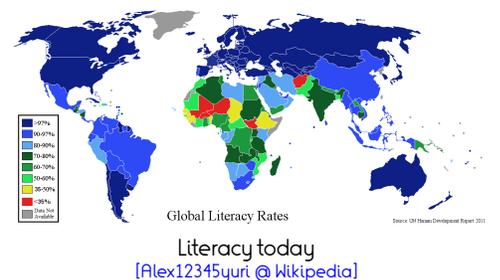
Once the religion is established, it is very hard to challenge it if you are illiterate. If you cannot read, you basically have access only to the information of the people around you. You cannot criticize the ideas of your society by comparing it with other societies, because you have no means to learn what other societies do. This makes you more obedient and less skeptical. Many radical ideas (such as Communism, the ideas of the enlightenment, or indeed religions themselves) spread through the written word. If people cannot read, they are more immune to such ideas. Once a religion was established, the common man was in no position to challenge it. Unfortunately, this is still the case today in many countries ↗.

*Wer nichts weiß muss alles glauben
 (If you don't know anything, you have to believe everything)
 By anonymous*

Remark: Thus, religion benefits from uneducated masses. Hence, many religions actively discouraged education ↗. Others, however, such as Protestantism, encouraged education – leading to their eventual decline.

Illiteracy today

We have hypothesized that low literacy rates induce gullibility, and that gullibility makes the acceptance of a religion more likely ↗. Unfortunately, this argument applies not only to the past. Still today, only half of the people can read in many countries in the world. In 10 African countries, you are more likely to meet someone who cannot read than someone who is literate. In Afghanistan, one of the obstacles to the election in 2004 was that people could not read the names of the candidates on the voting sheet. Therefore, the names were accompanied by pictures. However, people still had difficulties filling out the voting sheets, because they did not know how to turn pages. Even in some more developed countries such as Morocco, Egypt, or Pakistan, the literacy rate is below 75%. In Pakistan, it is 55%. The country has an atomic bomb, but half of its people cannot read.



This means that people in these countries are less in a position to challenge the ideas of the educated. Indeed, we find that these countries are also among the most religious countries in the world. People are less well-positioned to question what they are told, or to challenge ideas that are prevalent in their society. This may be one reason why religion goes largely unchallenged in these countries.

The flesh is willing if the spirit is weak.

Remark: Here is an anecdote. When [I was in Senegal](#), I met a person who asked me to read a phone number from a sheet of paper. I first thought that this was because the hand-written number was not easy to read. Only when the person then asked me to read out another number that was written in clear and large digits, I realized that this person was not able to read. I felt as if someone had brought me to the abyss where the world ends, while I always thought the world was a sphere.

No alternatives

One of the things that make people religious ↗ may be the invisibility of alternative belief systems. If you hear only about religion X, and neither about the problems of X, nor about any other religion, then you are more susceptible to accept X. This is because X is the only thing you hear about. Choosing X is known as the availability bias ([Wikipedia/Availability bias](#)). This is the way many societies work nowadays: a person just never has a chance to learn about any religion other than the majority religion ↗ ↗.

In some cases, this bias is strengthened by adverse circumstances. The first is illiteracy ↗. If people are illiterate, they cannot read books about other religions or about atheism. In other cases, alternative belief systems are systematically eradicated from society ↗. Once all people who think differently have disappeared, those who are left are way more likely to pick up the dominant religion.

*Oh my heart is beating wildly
and it's all because you're here.
When I'm not near the girl I love,
I love the girl I'm near.*

By Frank Sinatra in his song "When I'm Not Near The Girl I Love"

Gullibility

Several factors can contribute to the prevalence of a religion ↗. One more factor is gullibility: the readiness to believe anything that sounds plausible. Gullibility may be due to illiteracy: the uneducated had to believe pretty much what the educated told them ↗. Gullibility may also come from a lack of education ↗.

And yet, even in educated places, people frequently believe what they are told. One example are urban legends. They hold the ring easily in modern societies ↗. In other cases, too, people often just believe what they read. In particular, people readily believe what they read on the internet or in a magazine. Here are examples:

- People readily adhere to all types of diets in order to lose weight (fruit-and-water diet, no-meat diet, only-meat diet, etc.). Only very few of these diets are supported by long-term studies that prove their effectiveness.
- People are quick to believe all types of advice. They will say things such as "I heard that you should not use dish soap to clean the bath", or "I have read that one should throw the rice into boiling water to clean it, then throw away the water, and boil it again" – no matter whether there is evidence for this advice or not.
- A large minority of people in the US believe that vaccination is harmful. This leads to several avoidable deaths per year ([Wikipedia/Vaccine controversies](#)).
- Hoax mails ↗ tell people to warn others of viruses, to help search for a missing child, or to redeem a voucher – but they are fake. And yet, people believe and distribute them in the millions ([Wikipedia/Hoax](#)). By forwarding these mails, people cause real damage ([Symantec: Virus hoaxes and the real dangers they pose](#)).

In all of these cases, people readily believe arbitrary things – even in developed societies. Hence, people are also ready to believe in religious theories.

Remark: There are even religious hoaxes ([Wikipedia/List of religious hoaxes](#)). Admittedly, the boundary between a hoax religion and an actual religion is not very clear to atheists ↗.

Conformism

Many people do something mainly because other people do it. A social or historical standard is considered sufficient to justify a behavior or a belief. Common reasoning goes: "Well, everybody else does it as well" or "This is how it has always been done". As Rolf Dobelli points out in his book "The Art of Thinking Clearly", there might be an evolutionary reason to that: When, in prehistoric times, a hunter went with his group, and all of a sudden his fellow hunters screamed in fear and ran away, then his best bet was to run with them. Most likely they saw a dangerous animal that he did not see. The hunter who tried to figure out the reason for his fellow hunters' behavior, and decided to study the evidence before following the masses, "exited the gene pool", as Dobelli puts it. We are the descendants of those humans who followed ↗([Wikipedia/Herd Mentality](#)).

In the context of a religion, the effect is that people follow a religion if everybody else does it. This is sometimes brought forward explicitly as a reason to adhere to a religion ↗. The popularity of a belief is seen as a proof for its correctness – a phenomenon called social proof ([Wikipedia/Social proof](#)).

Social proofs work for long-term members of a society, but also for newbies. As Marshall Brain explains: Imagine that you are in a new group of people, and you are not sure what to say or how to act. You may look around you, see what other people are doing, and then do the same kinds of things in order to fit in. The idea is that they, being members of the group already, must know what is going on. [This is] the human desire to fit in [Marshall Brain: "How God works" / p. 80]. Such behavior encourages people to follow whatever religion is prevalent in their society.

Whenever you find yourself on the side of the majority, it is time to pause and to reflect.

By Mark Twain

Childhood education

There are several ways to make people religious ↗. Maybe the most important way is education: As children, we believe more easily.

To exemplify this, we list here some things that people were told as children and that they believed [[Quora / What are some of the funniest lies that parents have told their children](#)]:

When I was little, I used to suck my thumb. As I got older, my parents must have wanted this to stop, because this conversation happened while driving with my Dad (I was probably 3): Dad: Still sucking that thumb? Me: Yep! Dad: Aren't you worried about ending up like those flamingos at the zoo? Me: Huh? Dad: Haven't you ever noticed how they always stand on one leg? You see, they sucked their toes for so long, that they dissolved! The more they sucked, the more disappeared. Eventually they sucked their whole leg right off! Didn't suck my thumb ever again. [Julia Heil]

I have told my 4 year old boy that the Internet (wifi network) is given by a "Fairy" and we cannot get it daily as per our wish. (It was too necessary to keep him away from internet games and videos all the time.) So everyday when he is back from school, he will sweetly ask if the fairy has given us internet today or not and what should he do to please her so that she can give us more Internet ;) [Deepthi Shivaramu]

I had a friend whose mom told her that when the ice cream truck was out of ice cream it would play music! Can you imagine thinking that someone drive around your neighborhood regularly announcing they were out of ice cream? [Marcia Peterson Buckie]

My dad was almost completely bald and had been for as long as I was able to remember. When I was about 6 or 7 I asked him what happened to all his hair. He told me that one day he went for a ride in a convertible and was driving so fast that all his hair blew off. I believed him for way too many years after. [Jo Anne Lillis]

As an example, consider Christianity. Children learn that it is normal to stare at the body of a tortured naked person in the process of dying (Jesus on the cross). Without intensive familiarization from an early age on, such an image would be considered disgusting, sadistic, and offensive. But since Christians have been trained to see this picture from kindergarten on, they find it normal ↗.

The lesson here is that children will believe anything if we tell them so. In most cases, the children will later find out that the stories are not true. However, if the stories are not falsifiable ↗, then they will never find out. As it so happens, religious stories are usually not falsifiable ↗. Thus, the children can never find out whether the religious stories are false ↗. Hence, they will continue to believe them when they are adults – and then teach the stories to their own children. This is one more way in which a religion can be made to stick ↗ ↗.

Men were to told to believe, whether they believed or not.

By Thomas Paine in "The Age of Reason"

Proofs

People may also believe in the supernatural because they were convinced by the proofs for the supernatural. Such proofs include, e.g.,

- explanations for the universe through the supernatural ↗
- Pascal's Wager ↗
- abstract universal hypotheses such as Dualism ↗
- miracles, including the effects of prayer ↗
- dozens of other proofs, which we treat in the [Chapter on Proofs](#) and the [Chapter on the God of Gaps](#)

Pressure

Fear of Hell

There are several factors that can make people religious ↗. One of them is fear. Some people are afraid of the hell that preachers threaten them with ↗ ↗. So they follow what the preacher tells them to avoid that hell.

This may seem irrational, because hell is fictional place. The threat of hell can work only if you believe in it in the first place. If you do not believe in it, then the threat of hell is void ↗. However, when you are confronted with the tales of the brutalities of hell, you can easily forget that you do not believe in them. Some preachers can talk so convincingly, that they can trick people into the fear. They will tell you about the bad things you did in your life to push you into the guilt trap ↗. Then they tell you about all the tortures that await you in the afterlife – with no way of escape. Even I hesitated for a second when a Muslim preacher in the street explained the damnation to me. Once you swallow the theory of hell, all the other dogmas can be force-fed easily.

This is true in particular if the receiver of these threats does not have the tools at hand to rebut them ↗ ↗ ↗. The threat of hell is a very popular technique ↗ – most prominently in the Abrahamic Religions ↗.

Remark: As the thoughtful reader will have noticed, the Muslim teacher did not succeed in threatening me with hell. On the contrary, the discussion with the preacher gave rise to several articles in this book.

Guilt

One more factor that can make people religious ↗ is guilt ↗. Guilt can be instilled in several ways. In the vanilla case, you are told that you owe something to a supernatural being – for example your existence, your health, or the joys of life. All Abrahamic Religions go that way. Guilt can also be instilled by telling you that you are a sinful being. Christianity has perfected that argument ↗. Islam, in contrast, has developed the idea that criticising (or

even just doubting the divine revelation of) the Prophet Mohammed is a sin ↗. You are told that if you doubt his excellence, you bring shame on yourself.

All of these arguments aim at making you feel guilty towards God (or his messenger). This can only work, of course, if you believe in God in the first place. If you don't, then you cannot feel shame towards him. And yet, shame is a very powerful concept ↗. People become very vulnerable when we point them to a crime or sin they committed. This works even if the sin is imaginary. The inflicted guilt disrupts rational thinking for a moment. In many cases, this short disruption of rational thinking is enough to make people susceptible to the argument. Once the guilt is established, all the other religious dogmata can follow.

God's voice

Some people say that they are religious because they heard God talking to them ↗ ↗. I met a person who said that, after talking with a group of Christians, he sat down to contemplate his life. Suddenly, he heard God telling him to go and become a Christian. The voice was loud and clear in his head. Awakened by this call, he rushed back to the group of Christians, and became a believer. Such events are one more factor that can make people religious. We discuss them in the [Chapter on Proofs](#).

Coercion

One of the most effective factors that make people religious ↗ is coercion. We simply tell a person that, if he or she does not believe, we will eject them from society, make their family hate them, deny them basic rights, persecute them, or even kill them. Under such a threat, the person is much more likely to become and remain a believer – and be it only pro forma ↗.

This is indeed the way that many religions work. Christianity has long persecuted apostates as heretics ↗. Still today, atheists are routinely discriminated in society and in the law in the US ↗. In Islam, several interpretations call for the death penalty for apostates ↗. This punishment enjoys widespread support in the society of many Muslim countries, and it is the law in some of them. In Hinduism, any deviation from religion (such as, e.g., marrying a non-Hindu) is traditionally frowned upon. If you deviate, you bring shame onto yourself and onto your family. In all of these cases, the principle is the same: pressure makes people follow a religion. This is a common strategy of survival for many religions ↗.

Peer pressure

We have seen that coercion is one of the most effective means for making a person believe ↗. In cases where coercion is no longer an option due to secular legal systems, peer pressure can take its role. Peer pressure makes anybody who deviates from the religion look like an outsider. This person has to constantly justify their world view, is trusted less, is excluded from meetings, is regarded as less attractive for marriage, and becomes the subject of gossip. This threat (implicit or explicit) pushes people to align themselves with the majority religion ↗. This phenomenon is particularly prevalent in Islam ↗. Some people believe that they will go to hell if any of their family members deviates from the faith. These people will put pressure on all family members not to deviate. If someone leaves the faith, then the village community may put pressure on the entire family of the apostate – even if the apostate lives in another country. This possibility makes people think twice before leaving Islam.

The Emperor's new cloths

"The Emperor's new cloths" is a story that goes as follows:

In ancient times there was an emperor who ruled over a large country. Two tailors approached the emperor, and said that they wanted to make him a special garment. That garment would be very expensive, because could be seen only by intelligent people. Curious, the emperor gave his permission. During several weeks, the two tailors took measures, cut tissue, and designed the garment. It's just that, no matter how hard he tried, the emperor could not see the tissue. The tailors seemed to be perfectly comfortable cutting the tissue, but it was

invisible to the emperor. Since the tissue was visible only to intelligent people, the emperor concluded that it would be best to keep quiet about the issue. He played the game, and dressed with the invisible new garment. He payed the sum that the tailors asked for. Then came the day to present his garment to his people. The crowd gathered under the balcony where the emperor was to present his new cloths. When the emperor stepped on the balcony, the crowd was stunned. People knew that only the smart ones could see the garment, and so everyone tried hard to see it. Those who did not see it decided that it was best to keep quiet about it, and go along with the majority. So the crowd remained in awe. Finally, a child raised her voice and said: "But the emperor is naked!".

By that time, the two tailors were nowhere to be found.

There is an analogy here between the Emperor's clothes and the spiritual feeling that religion promises. Religion tells us that if we really believe, we will feel the closeness to God, the unity with Heaven, or the deeper meaning of the Universe. In reality, there is no supernatural spiritual feeling. What adherents feel is a mixture of conviction, hope, and admiration – but nothing supernatural. However, since everybody thinks that everybody else has that "special feeling", it appears safest to go along with the masses and to say that one has that special feeling, too. This is one more way in which religious thinking gets proliferated ↗.

Desire to influence

The desire to influence nature

The world is often cruel to us. An accident can change our life forever, an unfortunate coincidence can cost us our job, and an illness can carry away a loved one. We are thus, to some degree, victims of the randomness around us ↗.

When we are exposed to these forces, we have the desire to control them ↗. For this, we resort to all types of strategies. These are first rational strategies such as wearing a seatbelt, getting vaccins, or buying insurances ↗. However, the range of these strategies is limited. We still cannot control the elements of nature, illnesses, and bad luck.

Therefore, we look for strategies that go further. Any procedure that could potentially protect us from evil is welcome. People avoid putting important meetings on Fridays; they remember to look into the mirror if they had to come back to the house because they forgot something; and they avoid hotel rooms that end in "13". Atheists are generally no exception to this rule ↗. People believe that voodoo works, that they can cure cancer by magnets, or that the position of the stars determines our fate ([Wikipedia/Superstitions](#)). Since cancer is one of the main reasons of death in developed countries, and since there is no known cure, it attracts a particularly large number of appeals to the supernatural or the unproven. People try herbs, biblical diets, electro-homeopathy, or electromagnetic waves ([Wikipedia/List of ineffective cancer treatments](#)). Out of the very same motivation (the protection against the forces of nature), people ask priests to bless their marriages or houses, they consult the constellation of the stars to find the best day for a wedding, they resort to faith healing, and they pray to the gods or saints to prevent evil. There is no difference between the religious strategies and the superstitious ones: They are all attempts to influence nature in areas where scientific help is not available or judged to be too weak.

We know today that none of these strategies works ↗ ↗ ↗. And still, anything that can give people hope, or anything that can just give them the illusion of control, is welcome. This contributes to the popularity of religions.

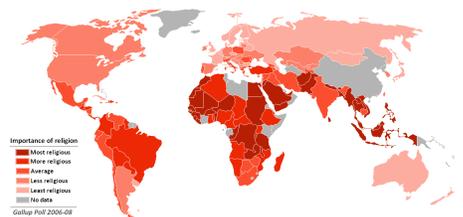


If a rain torrent can destroy your day from one minute to the other, you are more likely to appeal to the supernatural.
[Picture taken in Rio de Janeiro/Brazil]

The desire to influence in context

People have a desire to protect themselves against the caprices of nature. For this purpose, they often resort to the supernatural ↗ ↗.

This desire for supernatural protection should be stronger in cases where the person lacks the factual control over their environment. That is: a person who can be fired from one day to the next from their job has a greater need to apply for supernatural help than someone who has a permanent job. A person who lives in a country where one rainy summer can destroy their crop and livelihood has a greater desire to control the forces of nature than someone with an office job. A person for whom an illness is a random strike of nature has more incentive to converse with the gods than a person who has access to modern health care, vaccination, and insurance. A person whose family can be killed from one day to the other in a civil war needs more supernatural protection than a person who knows war only from TV. A person who has a chance of 2% of getting murdered in the street, or a chance of 20% of being raped in their life time, has a greater urge to appeal to the gods than a person whose risks of victimization are practically zero. Therefore, people in less privileged countries tend to be more religious.



Religiosity in the world according to a 2009 Gallup poll
[Sbw01f @ Wikipedia]

The same goes for times of crises. Studies suggest that, in Muslim countries, Islamic school attendance increases in times of economic crisis (Aldashev & Platteau: *Religion, Culture, and Development* / p. 595). Insecurity makes people more open to religion.

What counts is not just the objective lack of control over one's life, it is also the subjective impression of being helpless. People in poor countries are more likely to believe that their life is determined by fate instead of their own actions. In poor countries, 43% of people think that fate plays a larger role in their life than their decisions – as opposed to 26% in rich countries and 37% in transition countries (World Values Survey/5th Wave; *Why are poor countries poor? / Activism*). When people believe that fate plays a large role in their lives, they feel more need to appeal to the supernatural. Thus, they are more religious.

This theory does not predict the religiosity of every single person. However, it correctly predicts the average religiosity in a society. More precisely, the theory goes: The safer an environment is (in terms of social security, health care, job security, insurances, and rule of law), the less religious the environment is. This theory is generally true: poor countries are generally more religious. Rich countries are typically less religious (Wikipedia/Religiosity). Countries with a stable social system, universal healthcare, mandatory insurance, and job security are typically atheist (see my essay on *Why are poor countries poor? / Religion*). This leads to an interesting interplay between poverty and religiousness, which we discuss in various places in this book ↗ ↗ ↗ ↗ ↗.

In the turmoil of Napoleon's invasion of Europe, the sciences and the spread of knowledge was neglected – and the church rose her head and faith experienced a revival. In the 30 years of peace that followed, science flourished and prosperity spread – which has led to a decay of religion.

By Philaletes in Arthur Schopenhauer's "Dialog about Religion", written in 1851 (!)

Religiosity in the United States

This book hypothesizes that safe environments generally make people less religious ↗ ↗ ↗. The US seem to be an exception to this rule, because the country is very developed, but very religious at the same time. However, despite its wealth, it does not provide the "safe environment" that our theory requires:

Health insurance

The US do not have universal health insurance. As of 2010, more than 49 million people in the US (more than 16% of the population) were without health insurance [Wikipedia/Health insurance in the US]. If such a person suffers from an illness, and if that illness requires expensive treatment, the person may have to pay thousands of dollars from one day to the other from their own pocket. This can lead to bankruptcy and life in the streets. This possibility looms over every uninsured citizen. The uninsured are mainly the poor. More than half of the uninsured live below the 200% poverty line (Kaiser Family Foundation). Due to the lack of health insurance, individuals often cannot pay for their treatment and go untreated. Almost a third of uninsured adults in 2013 (30%) went without needed medical care due to cost [ibid]. Nearly 40% of uninsured adults said they had outstanding medical bills,

and a fifth said they had medical bills that caused serious financial strain [ibid]. Thus, people enjoy less health security in the US than in other developed countries.

Debt

Household debt is a problem in the US. The country ranks 15th among the most indebted nations ([OECD: Household debt](#)). This by itself does not sound particularly alarming. However, the indebtedness still has an impact on the average household. The average American household is indebted with 130,000 USD [[NerdWallet: 2015 American household credit card debt study](#)]. The average household with debt pays 6658 USD in interest per year [ibid] – of which 2600 USD go to credit card companies (ibid). I myself know people who pay thousands of dollars in interest each year – not to pay back the loan, but just to avoid credit default. In a poll, 70% of respondents said that there is a social stigma associated to credit card debt (ibid). Possibly because of these reasons, consumers underestimate their debt by around 155% (ibid). The majority of students borrow money each year ([Wikipedia/Student loans in the US](#)). The total amount of student loans exceeds the amount of credit card debt held by Americans (ibid). This indebtedness has led to the rise of the debt buyer industry, which sometimes pursues controversial strategies such as threatening the debtor, pursuing debts that are not actually due, impersonating law enforcement, or calling the debtors at their work place ([Wikipedia/Debt buyer](#)). This poses a considerable level of stress on the debtor (see [John Oliver: Last Week Tonight / Debt](#) for an illustration). Thus, a large proportion of Americans live with a considerable psychological and material burden.

Rule of Law

The rule of law is less developed in the US than in other rich countries. Black people are routinely discriminated, as the Ferguson debate shows ([The Guardian: Discrimination in Ferguson – full extent of police bias laid bare in damning report, 2015-03-04](#)). The National Security Agency (NSA) surveils millions of citizens without warrant and without their approval ([Wikipedia/Global Surveillance Disclosures](#)). The Central Intelligence Agency (CIA) tortures, extradites, and assassinates outside the law ([Wikipedia/CIA](#)). Police brutality is a prevalent problem. An extensive report prepared for the United Nations Human Rights Committee, tabled in 2006, states that in the U.S., the “War on Terror” has “created a generalized climate of impunity for law enforcement officers, and contributed to the erosion of what few accountability mechanisms exist for civilian control over law enforcement agencies. As a result, police brutality and abuse persist unabated and undeterred across the country.” [[Wikipedia/Police brutality in the US](#)]. Police officers are rarely prosecuted for overstepping their powers. The US also has the highest incarceration rate in the world, with 716 per 100,000 of its people in prison ([Wikipedia/US incarceration rate](#)). While the US has only 5% of the world’s population, it has 25% of the world’s prison inmates ([The Economist: Jailhouse nation, 2015-06-20](#)). For the individual, this means that he or she has a higher chance of being subjected to law enforcement or cruel police treatment in the US than in other developed countries. The United States is also the only developed country (along with Japan) that still uses the death penalty. The US comes 5th world wide in the number of people executed.

Crime

Crime is more prevalent in the US than in other developed countries. With a rate of 4.7 per 100,000 people per year, the US has the highest murder rate among the developed countries ([Wikipedia/Homicide rate](#)). The next developed country in the list (Israel) comes 50 countries later, and has a rate of just 1.8. Part of the reason may be the fact that the US has less strict gun laws than other countries. People can own guns that are so strong that they can pierce the body armor used by police. 20 children were murdered with a gun in Newtown, Connecticut in 2012. The murderer stole the gun from his mother, who was a legal owner. In the following two years, 95 more shootings occurred at schools and colleges. 45 people were killed ([The Economist: Why the gun lobby is winning, 2015-04-01](#)). Rape, likewise, is 3 times more frequent in the US than in Germany, for example. Robbery is twice as frequent, and aggravated assault 3 times as frequent ([Wikipedia/Crime in the US](#)). Thus, personal security is less guaranteed in the US than in other developed countries.



[Picture taken in Chicago/US]

Job security

It is easier in the US than in other developed countries to fire an employee. In some cases, employees are fired from one day to the other. The Microsoft research lab where I was employed, for example, was closed within a week, putting around 50 people on the street ([ZDnet.com: Microsoft to close MSR Silicon Valley, 2014-09-18](#)). The possibility (however distant) that you may lose your income from one day to the other can be a significant factor of insecurity in your daily life ([Wikipedia/Job Security](#)).

Undesired Pregnancies

With 42 teenage births per 1000 births, the US has the highest teenage pregnancy rate in the developed world. Germany, for example, is at a rate of 12 per 1000 births ([Wikipedia/Prevalence of Teenage pregnancy](#)). With this, teenage pregnancy is four times as prevalent in the United States as in the European Union [[Wikipedia/Adolescent sexuality in the US](#)]. Most of these children are unplanned. An unplanned baby can destroy career plans, shatter families, prevent higher education, and push people into poverty. This is particularly tough on people who are poor anyway, as a poor woman is 4 times as likely as a rich woman to have unplanned pregnancies [[The Economist: Taking the bother out of birth control, 2015-04-18](#)]. Thus, a teenage pregnancy is an example where people in the US have less control over their lives than in other developed countries. The impression that life has more control over you than vice versa is further underlined by the fact that 44% of young American women agreed in a survey that "It doesn't matter whether you use birth control or not; when it is your time to get pregnant it will happen." [ibid]. Teen pregnancies are generally more prevalent in the more believing parts of the US ([Folsom: Mississippi Abortion Clinic](#)).

All of these factors make life in the US less secure for the individual than in other developed countries. This explains ↗, according to our theory ↗, why the US is more religious than other developed countries.

Spurious correlation

One of the reasons for religiosity may be the desire to appease the elements of nature ↗. The elements are appeased through prayers, rituals, dances, songs, or superstitious behavior ↗. We know that none of these has any effect on the elements of nature ↗. Praying that a child gets healed from cancer does not increase the chances of healing by the slightest bit. On the contrary, it actually decreases the chances ↗. Still, people do it. Why is that?

A first reason may be that we tend to accept a technique (such as prayer or a lucky charm) already if it works in very few cases. More precisely, we often require only 1 case where the technique works in order to accept it as effective. Take the following example:

Assume that you are playing in a school basketball team. Tonight, there is the grand final game with the competing team from the other school. The coach has explained to you that it is of utmost importance that your team wins this game. Your team has been preparing for this day for the past 2 months. You are in the changing room with your team mates, and the atmosphere is kind of loaded. You anxiously try to avoid anything that could lead to a failure of your team. You remember what you did last time when you had such an important game. You remember that, last time, you actually spit into the dust bin just before you got out of the changing room for the game. And last time, your team won. Maybe this was a good thing to do. It's silly, of course, but, well, who knows? You better take no chances. And, when the team walks out of the changing room, you quickly do that spit into the dust bin. Just in case.

And voilà, a superstition is born. In a similar way, people tend to accept prayer, lucky charms, and other superstitions if they have been shown to work once. People are ready to give such techniques the benefit of the doubt ↗. This readiness is higher if the stake is larger, and if the individual control is smaller (as in the basketball example, and as with religion in general ↗). Atheists are generally no exception to this rule ↗.

Technically speaking, a superstition is a rule of the form "If I do this, then this event will have a positive outcome" ↗. To validate such a rule, we would need an ample corpus of positive instances ↗. However, we are ready to accept the rule already with a single instance. This may have an evolutionary reason, as Michael Shermer has argued: Imagine an early human hearing a rustle in the grass. Is it a hungry predator or is it the wind? If the person assumes it's a hungry predator but it's actually the wind, he or she will come to no harm. But if the person believes it's the wind when it's actually a hungry predator, it could mean death. So, the tendency to be overly cautious and falsely believe leads to being able to pass on those cautious, believing genes. Or, as Shermer puts it, "we are the descendants of those who were most successful at finding patterns". He calls the tendency to find patterns in both meaningful and meaningless noise "patternicity". [[Salon: Why doesn't everyone believe in God?, 2015-07-05](#)]

This phenomenon is not restricted to humans. In a sociological experiment, scientists gave food to pigeons in a cage at random intervals. After some time, the scientists noted that the pigeons showed some very strange behavior: They would shake their heads in rhythm, or walk around in circles. The scientists discovered that the pigeons repeated the behavior that they were following the last time that they got food. If a pigeon was shaking

its head just before the feeding time, then the pigeon would continue shaking the head when it got hungry again. Thus, the pigeon "assumes" that the head shaking leads to food. ([Wikipedia/Superstition](#))

Of course, there exists no causal relation in these cases ↗. Rather, it is a rule that got generalized from a single example. In other words, it is a superstition ↗.

Confirmation bias

We have seen that humans (and animals) readily generalize rules and superstitions from a very few examples ↗. However, superstitions do not work. Then why do we not abandon them?

One answer is that we have a tendency to remember positive cases, and to forget or excuse the negative cases ↗. For example, if we pray for sunny weather, and the weather is indeed sunny, then we tend to see this as a confirmation for the theory that prayer works ↗. If, in contrast, the weather is rainy, then we tend to see it as an exception from the rule, rather than as a counter-example. This way, the theory accumulates positive examples, but it is never associated with failure. This way of thinking is fallacious, of course: As soon as a theory produces as many counter-examples as it produces positive examples, the theory is to be rejected ↗. The failure to realize this is known as the confirmation bias ([Wikipedia/Confirmation bias](#)). It is, as Rolf Dobelli argues, the mother of all misconceptions. It is also one of the foundations of magical thinking ([Wikipedia/Magical thinking](#)). This type of thinking makes people more open to religious procedures such as prayers.

The confirmation bias is closely coupled to the fallacy of the illusion of control: We readily assume that we have control over a situation, even if we do not. This illusion was first studied by Jenkins and Ward in 1965. Their experiment was simple, consisting of just two switches and a light. The men were able to adjust when the switches connected to the light and when not. Even when the light flashed on and off at random, subjects were still convinced that they could influence it by flicking the switches. [Rolf Dobelli: "The Art of Thinking Clearly", chapter 17, translated by Nicky Griffin] Such switches also exist in our everyday life: elevator buttons that do not actually do anything but just satisfy children and adults who press them; dummy office thermostats that just let people believe that they can control the temperature while they actually have no effect; and crosswalk signals that do nothing, but just give the pedestrian a feeling of control ([New York Times: Pushing That Crosswalk Button May Make You Feel Better, but..., 2016-10-27](#))

In a similar vein, people who pray are convinced that they can actually influence something ↗. This is not necessarily a bad thing ↗. But it is false. This illusion contributes to the prevalence of religious thinking.

Facts do not cease to exist because they are ignored.

By Alduous Huxley

Powerlessness

Many things in life happen that we cannot control: we can lose our job, we can have an accident, or we can become ill. The desire to control these events may make people more open to religion ↗. However, the events do not necessarily have to be negative: We may also unexpectedly win a scholarship for a top university, get healed from a disease that was thought to be fatal, or receive unexpected help from a friend or stranger.

Such events (positive or negative) show people that many things are outside their control. This convinces some of them that there must be "something more" than what we think there is ↗. They conclude that this "something more" is the supernatural ↗. Then, religion helps them to get in touch with these powers: to ask for help, but also to express gratitude, to ask for the continuation of the protection from evil, or simply to acknowledge to these powers that we cannot control everything.



Magical belief is popular in South America. This magician promises to cure all your evils.

[Picture taken in Arequipa/Peru]

This perceived connection to the supernatural should be stronger in people who have a more turbulent life history, where events outside their control had a large impact on their life – be it positive or negative. This is one more factor that can make people religious.

If people were rewarded strictly according to their abilities, things would be unfair – we do not choose our abilities. The randomness in life has the beneficial effect of reshuffling society's cards. In that sense, luck is far more egalitarian than intelligence.

By Nassim Taleb in "The Black Swan", paraphrased

Wishful Thinking

Justification of suffering

There is a lot of suffering and injustice in this world: Children die of hunger every day, people succumb to illnesses, bad things happen to good people, and earthquakes and tsunamis devastate villages and livelihoods. This is highly disturbing. In theory, we would have to rush from disaster to disaster to help people, rescue the trapped, and feed the hungry. How can we justify that we keep reading a book about atheism when, in the same minute, dozens of people in this world die of hunger? We live in a cruel world, and our role in it is not clear.

The situation is even worse if we suffer ourselves. If we live in hunger, poverty, or illness, then we want to understand why life is so unjust to us. We long to know what pushed us into misery.

Now what if all this injustice were there for a reason? What if there were someone who had it all under control? Someone who can explain why your life must be so miserable? Or someone who can justify why millions of people in this world suffer while you sit in your armchair reading a book about atheism? What if it all had a sense? That would lift this emotional discomfort from us. It would tell us that, even though life is tough, everything is okay on the long run, because it serves a higher purpose ↗.

This higher purpose is exactly what a religion can deliver. Indeed, many religions can explain to us why all this suffering is happening ↗. Quite possibly, people are open to these theories because the theories eliminate an important emotional discomfort. The theories assure us that everything is OK.

It is clear that, if a theory sounds good, it does not have to be true ↗. On the contrary, we will later argue that justifying the evil on Earth is a horrible thing to do ↗.

Hope for justice

A thief stole your wallet and then he disappeared in the crowd? Forget your wallet, the guy will never be caught. How relieving it would be to know that he will nevertheless be brought to justice. Vice versa, think about yourself: you are a decent person, you do your work, and you are good to other people – and yet your life is not extremely rewarding. You have an average pay. How wonderful it would be if even an average life would be rewarded.

These two desires, the one for punishment and the one for reward, are something that religions can respond to ↗. The abrahamic religions offer punishment in hell and reward in heaven. The Indian religions propose that villains are reborn in more dire conditions in their next life, and that the good people improve their position. The East Asian religions assure us that Heaven will take care of justice for both villains and good people ↗ ↗.

This makes these religions attractive: they cater to a basic human desire for justice. This may be one more reason for the popularity of religions.

Hope

We have only limited control over our lives. Many things happen that we cannot influence. Some of these, such as illness, emotional suffering, hunger, poverty, or abuse, harm us. In such cases, we long for anything that can give us hope. Hope that the illness gets cured, that the suffering stops, that we find a job, or that the abuse finds an end.

Religion can give us such hope. It can tell us that there is someone who cares, and who will make everything work out for the best – either in this life or in the next ↗. Thus, religion caters to the basic human need for hope.

This hope can be very helpful: It can appease people and make them bear their fate with optimism ↗. At the same time, it can also be used to give people who suffer the runaround ↗. Be that as it may, the promise of hope is one more factor that makes religions attractive.

Hope for the afterlife

Almost all religions promise some continuation of life after death ↗. In the optimal case, this continuation takes the form of paradise.

As humans, we are all hard-wired to fear death ↗. Hence, the promise of an eternal life is a very powerful argument to make people religious ↗ ↗. What is more, the eternal life is also available for your loved ones. This thought can help people cope with the death of a family member ↗. This is one more factor that makes a religion attractive to its adherents.

At the same time, few people in the West really believe the promise of the afterlife ↗.

Religion is possible only because we can talk about fictional things. You could never convince a monkey to give you a banana by promising him limitless bananas after death in monkey heaven.

By Y. N. Harari in "Sapiens"

Care

Religions typically give us supernatural entities that care for us. In the abrahamic religions, this is a loving god. In the other religions, these can be the spirits, benevolent deities, or the souls of the deceased. Having such entities around is very comforting: We all long for someone who cares for us and who listens to us. We are all afraid of being alone. "The idea that God is listening to and responding to you individually can be tremendously satisfying [...]. It means that you are special in God's eyes." [GodIsImaginary.com]

Thus, religions cater once more to a very basic human need ↗. People can talk to the god, and imagine that someone really listens. They can talk about their sorrows if no one else would listen. They can talk to order their thoughts. They can talk to not feel alone. In some religions this is known as prayer, in others, it takes the form of meditation ↗. But the concept is always the same: a connection with the supernatural. This connection makes a religion attractive – in particular to people who suffer ↗.

Pragmatism

Absolution

Religions can also offer pragmatic advantages to the believer. Consider the problem of guilt: When we do something bad, we usually have a bad conscience ↗. This bad conscience can be very disturbing, even devastating.

Enter religion. Religions typically offer us a way to remove that guilt. In many flavors of Christianity ↗, this works through confession: We talk to a priest, and under certain conditions, he forgives us our sin in the name of God (Wikipedia/Absolution). As The Economist explains, the Catholic sacrament of penance and reconciliation,

commonly called confession, is a perfect response [to the burden of secrecy]. It offers a procedure to lift that burden in a procedure that, though not cost free to the confessor, is, itself, completely secret [The Economist: Weighing heavy on the soul, 2017-04-22]. Absolution from sins may also work through animal sacrifices (Bible / Leviticus 4:27-35). For graver sins, a pilgrimage might do the job (see picture). In Islam, we can ask for forgiveness directly from God (Quran / 2:160, 39:54, 3:135, 25:71, 6:54; [Wikipedia/Confession](#)). Otherwise, the pilgrimage to Mecca is considered a safe way to get rid of bad conscience ([al-Bukhaari, 1449; Muslim, 1350](#)). Hindus can clean themselves from sin by bathing in the holy Ganges river ↗. Other religions offer other ways to repent for our wrong-doing: by making sacrifices, by fasting, or by following the laws of the religion to the T. All of these techniques give us a means to clear (or at least weaken) our bad conscience. This is a very attractive feature of a religion, and a very popular one, too. In many cases, the religion first instills the guilt, in order to then offer remedies against it ↗ ↗.



Christian pilgrims hiking to Mont Saint Michel/France through the mud of the low sea.

Personal advantages

People can have several reasons to follow religions ↗. One more reason can be that the religion grants permissions for practices that are otherwise not socially accepted.

Examples are:

Raëlism

Raëlism is a New Religious Movement ↗. It is known for its very liberal attitude towards sex. Any sexual activity is permitted and encouraged, as long as it is legal, safe, and consensual. Sensual massages are part of the religious rites, and homosexuality, bisexuality, pansexuality, and naturism are OK ([Wikipedia/Raëlism](#)). Thus, adherents of Raëlism enjoy permissions that adherents of many other religions do not enjoy. This makes the religion attractive.

Islam

When the Prophet Mohammed founded Islam in the 7th century CE, he set out to conquer the Arabian Peninsula ↗. Tribes who joined him were allowed to share the bounties of the war: money, slaves, and sex slaves. This looting was divinely sanctioned. The Quran explicitly talks of the war bounty (Quran / 8:41, 8:69) and of the sex slaves (Quran / 33:50, 23:5-6, 4:24) ↗. This made the religion attractive to the tribes. (Ibn Warraq: Why I am not a Muslim, 1995 / Chapter 9)

Christianity

Christianity, in particular Catholicism and European Protestantism, has an extensive system of priests, bishops, and other staff ↗. Thus, the religious system acts as an employer for these people. Hence, these people have a material interest in being faithful. In Germany (and certainly in some other countries), some schools are administered by a Christian denomination. Anybody who wishes to be hired there has to adhere to this denomination ↗. This makes the denomination attractive.

In all of these cases, the religion gives physical and material advantages to its adherents. Therefore, people have an incentive to follow it.

Atheism.

America's only belief about God that is taxed.

By Betty Bower

Won battles

In some cases, leaders won battles in the name of a religion. This convinced the leaders (and their peoples) that their religion must be the right one. Examples are:

Constantine the Great

According to legend, Constantine saw a cross and the words "in this sign, you will conquer" in the sky. He then adorned his military shields with Christian crosses and won the battle ([Wikipedia/Constantine the Great](#)). In other words, Constantine asked himself whether the Christian God would help him in battle. When he won the battle, he concluded that Christianity was the right religion. He then contributed to the conversion of the entire Roman Empire to Christianity. Had he lost the battle, Europe might still worship Roman gods today.

Prophet Mohammed

The Prophet Mohammed fought numerous wars against his opponents ([Wikipedia/Military career of Muhammad](#)). Since he won the wars, people started believing that he must be sent by God. He gathered more adherents, and won more wars, thus gathering more adherents. Had he lost the wars, he and his religion would have perished, and nobody would talk about it today. When the Muslim world later lost battles, and fell behind the unbelieving world in general, this caused a crisis of identity that is still ongoing ↗.

From an atheist point of view, these won battles had nothing to do with the particular religion. In a war, there is always one party that wins, and whatever religion that party has is then considered a winner religion ↗. When other wars are later lost in the name of that religion, people do not ditch it as a consequence ↗. Hence, they are stuck with whatever their leader chose when he won the war.

Community

One of the main features of a religion is that it establishes a community ↗. This works through several factors:

- Common values ↗, such as the 10 Commandments, the duty to give charity, or the call to non-violence ↗ ↗ ↗.
- Common beliefs, such as a world model, a set of mythological stories, and shared beliefs about history ↗ ↗ ↗.
- Common rituals, such as fasting, joint prayer, church attendance, life event celebrations, annual celebrations, or sacrifices ↗ ↗ ↗.
- A label, such as "Jew" or "Catholic".
- Initiation rites, such as circumcision ↗, baptism, or assisted writing ([Wikipedia/Aksharaabhyasam](#)).
- Shared experiences, such as fares, excursions, or concerts.
- Social services, such as hospitals, kindergartens, schools, or senior citizen homes ↗.
- The prohibition to venture out of the community, e.g., by prohibiting inter-faith marriage ↗ ↗, by branding outsiders as errants ↗ ↗ ↗, or by inviting believers to make friends primarily inside the community ↗ ↗.
- A sense of pride in the religion and the community ↗ ↗.
- Mutual assistance, such as help for the poor, the ill, and the desperate ↗ ↗.

Such a community can have several advantages for the individual: believers can count on friendly neighbors, happy get-togethers, and help in distress from their fellows. The help in distress has a doubly positive effect: someone who receives aid is happy, and someone who gives it is happy, too ↗. Through all of this, the religious community can give peace of mind, the feeling of safety, a sense of belonging, the assurance of having a purpose, and, ultimately, happiness ↗.

Networking

Religion can provide a community for the believers ↗. This typically works best in the home country of the religion. However, even outside the home country, believers can benefit from that community. If two people find that they both belong to a minority religion, they will feel a bond between them. All other factors being equal, they will be more likely to help each other, to trust each other, and to promote each other. "The convert enjoys the advantage of secure access to an effective contract enforcement mechanism. As a matter of fact, sharing the same faith ensures that people abide by the same codes of behavior, adopt the same rituals, and use the same language, resulting in a common identity grounded in the same symbolic universe." [[Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development](#)]

The idea of religious networking is most commonly associated with Judaism ↗, because more than half of the world's Jews live in countries where Judaism is not the majority religion. A search for "[Jewish network](#)" returns more Google hits (70m) than "[Muslim network](#)" (65m), even though there are 100 times more Muslims than Jews on Earth. (Just to satisfy our curiosity: "[Atheist network](#)" has 1m hits.)

But also Islam ↗ has worked as a catalyst for networks. "The "trading diasporas" of West Africa, which date back to the thirteenth and fourteenth centuries, are cases in point. An important feature of these networks was their openness to new entrants on the (obviously restrictive) condition that they shared or accepted the essential cultural requirements for participation in the moral community which distinguished the members from the host society: Islam and the appropriate trading language. The adoption of Islam thus spurred the economic integration of West African regions and their integration into trans-Saharan trade, partly as a result of increasing safety of the caravans and smaller contract enforcement costs." [Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development]

Absolute conviction

Most things that we know may turn out to be wrong: We thought our wife loved us, but then she cheats on us. We trust a politician, but then he does not do what he promised. We cannot even trust science: We thought that time ticks continuously, but then we find out that it comes to a standstill in fields of large gravity ↗. We are but observers of our environment, and we can be surprised every day by things that turn out differently from what we thought. We are to a large degree victims of what happens around us ↗ ↗ ↗ ↗ ↗ ↗, and we long for security and trust.

Now suppose that we meet a person who tells us about a world view that can never turn out to be wrong. In fact, it is guaranteed that this world view can never be proven wrong. Wouldn't that be wonderful? Finally something stable to cling to, finally a piece of absolute security. We listen to this person, and indeed we can find no fault with the world view. We start adhering to this world view, and tell other people about it. No matter what these people say, they cannot show we're wrong. Isn't that fantastic? And no matter what happens, it never contradicts our beliefs. Nothing that ever happens and nothing that is ever said can prove us wrong. We will become so convinced of this world view that we will never let it go again.

This is the advantage that religions have over any other theory: They can provide absolute conviction ↗. Nobody can ever prove that God does not exist ↗. Thus, religion delivers absolute certainty. Science, in contrast, cannot deliver absolute certainty, because it has to change in face of evidence ↗. Thereby, religion gives believers a refuge from doubting, which atheists can never have. What is more, this absolute conviction is socially accepted. It is fully OK to confess one's infinite faith in one's religion (as long as it is the religion of the majority in that society). Statements that would be perceived as arrogant on any other topic are fully OK if they are on religion. We can hear people say "I will never lose my trust in God" (while "I will never lose my trust in Barack Obama" sounds weird), or "My life belongs to God" (while "my life belongs to my husband" is weird).

If a statement can never be proven false, it is (by definition) is unfalsifiable ↗. This means that it is meaningless – in the sense that it never makes a concrete prediction ↗. It also means that we can come up with plenty of other theories, which all contradict the first theory, but can also never be proven wrong. This is basically what theology does ↗ ↗ ↗.

A Moral Frame

We have seen before that humans are completely free to design any moral framework that they wish ↗. This gives us a lot of liberty on one hand, but also a lot of responsibility on the other. Is abortion murder? Should we allow stem cell research? Are nuclear power plants ethical? Shall cousins be allowed to marry? Is gay marriage a good thing? These are tricky questions. Even if we find answers, we will likely run into arguments with people who have found different answers. Worse, if they convince us, we might be forced to change our point of view, which is always an unpleasant thing to do.

Religions can provide a way out of these problems. They usually come with a given moral framework that a believer can follow ↗. This framework can be a type of written law (such as the 10 Commandments), but it can also be the law administered by a preacher. These frameworks answer most everyday questions. This saves us time and effort. What is more, the framework has divine authority. This means that, in our religious community, we are much less likely to run into disputes. There is simply no discussion needed, because the gods (or their representatives) have decided ↗.

To illustrate this, a friend of mine tells the following story about the Jewish community in New York:

A Jewish couple fell out with the parents of the man. The couple does not want to see the parents any more. In particular, the couple does not allow the parents to see their grand-children. The grand-parents complain that they have a certain right to see the grand-children. But the couple maintains that the children are theirs, and that it is their choice who can see them. How would you decide?

In this particular case, the couple and the grand-parents brought the case before the local Rabbi. The Rabbi listened to both parties, and then said: The couple has the right to decide who sees their children. At the same time, the grand-parents share a blood-link with the grand-children, and thus also have the right to see them. Therefore, the grand-parents shall be allowed to see the grand-children once every fortnight. The couple and the grand-parents had no choice but to accept this ruling.

In this example, we see how a religious moral decision can simplify our lives: The Rabbi has spoken and the case is decided. There is no discussion about whether this is right or wrong, or whether a fortnight is the right measure – simply because the Rabbi has the authority to decide these matters. There is also no shame for the couple or the grand-parents in having ceded to the other party, because nobody can challenge the ruling of the Rabbi.

The same goes for other moral questions, such as the morality of gay marriage or stem cell research: the holy book, the gods, or their representatives decide on the matter, and there is no need (or space) for discussion. This gives a great deal of juridical security [↗](#). It also avoids the need for disputes. This mechanism is at work not just for the mainstream religions, but also for sects. The legal security is one of the main reasons for the attractiveness of religious terror networks such as the Islamic State. Many of the Islamic State recruits are attracted to the strict system of rules imposed by fundamentalists [[The Economist: The Yorkshire bomber, 2015-06-20](#)]. Thus, in one way or the other, the religion caters for the human desire for safety, and boundaries. It shields us from uncertainty, from the weight of assuming responsibility over our own moral codes, and from the need to reevaluate our convictions. This is an advantage of a religion [↗](#).

Moral Frames Today

A religion typically offers a moral framework, which defines what is good and what is wrong. Such a framework caters to the human desire for rules and boundaries [↗](#). Such an argument may seem outdated today: in the Western world, we do not want others to decide for us, let alone an ancient book. We are used to question and to challenge.

And yet, the very same search for absolute ancient values happens also in the West. Here are examples:

Germany's military intervention in Afghanistan in 2002

The German constitution declares that the main purpose of the German army is to protect the security of the country ([Grundgesetz für die Bundesrepublik Deutschland / § 87a](#)). This has long been interpreted to mean that any military missions abroad with no link to Germany are prohibited. Now, in 2002, the NATO asked Germany to participate in the missions in Afghanistan. To do this properly, the German constitution would have been changed to permit such missions. However, since people hesitate to change the constitution, the defense minister Peter Struck just redefined the mission to Afghanistan and declared that the "German security is also being defended in the Hindu Kush" ([Wikipedia/Peter Struck](#)). This is an attempt to justify current actions with previous values. It would have been more honest to ask for a change of the constitution.

The role of Japan's armed forces

The Japanese postwar constitution states that Japan renounces war and shall never have an army ([Wikipedia/Article 9 of the Japanese Constitution](#)). In the sequel, this has been re-interpreted so as to allow an army for self-defense. In 2014, the rule was again re-interpreted to allow defending allied countries (ibid). All of this was done without making use of the article that allows an amendment of the constitution. Again, we can see a fear of breaking with previous authority, and an attempt to justify current policies based on a re-interpretation of the previous values

The gun owner debate in the US in the 2000's

In the US, there is an ongoing debate as to whether people have the right to bear fire arms or not. In order to justify the right to bear arms, the US Supreme Court used the English Bill of Rights from 1689 – a document that predates the foundation of the United States by nearly a century. One of the main arguments in favor of the right to bear arms is the second amendment of the US constitution – a document that dates back to 1791. The amendment grants the right to bear arms to "the people". The current debate is whether the founding fathers

intended this to be "the people" as in "the community of citizens" or "the people" as in "every individual". Proponents of each camp accuse the other camp of misinterpreting the will of the founding fathers. In reality, it does not matter what the founding fathers wanted. What counts is what the people want. However, people hesitate to assume this responsibility. They prefer to justify their viewpoint with ancient documents ([Wikipedia/Gun politics in the US](#)).

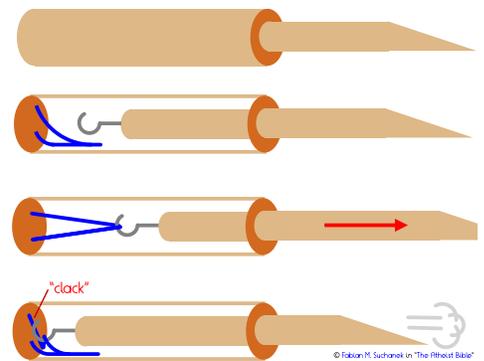
In all of these cases, people resort to re-interpreting ancient documents rather than to making a decision by themselves. Thus, they shy away from the responsibility of defining their own moral frameworks ↗. This very same tendency makes religious frameworks so attractive ↗. In this process, religious frameworks are often re-interpreted beyond recognition to justify whatever people want to justify ↗ ↗ ↗ ↗.

For psychological comfort, some people would rather use a map of the Pyrénées while lost in the Alps than use nothing at all.

By Nassim Taleb in "The Black Swan"

The clack game

At a student party, I learned about the clack game. This game uses a little wooden tube with a piston (pictured right). The piston sticks into the tube, and has a little hook at its end. Inside the tube, on the end opposite to where the piston enters, there is a rubber band that forms a loop (pictured in blue). The goal is to manoeuvre the hook into the rubber band loop. Then you can pull out the piston, and let it clack back into the tube. This is a very difficult endeavor, because the tube is completely covered so that one cannot see the rubber band. It requires a lot of dexterity. Some people never get it done, even if they practice for hours.



The clack game.
Any resemblance with human body parts is unintended.

Some people, however, get it done after a few trials. They can do it even if the tube is held vertical (so that the rubber band lies on the ground of the tube), or when they are drunk. How do they manage?

The trick is that there is no rubber band. Those who can do it simply put a lot of fake effort into turning the hook artfully into the rubber band. Then they pull out the piston slowly, as if there was the opposing force of the rubber band. Then they squeeze the beak of the piston between their thumb and index finger. This pushes the piston back into the tube – clack!

The message is that the desired effect can be achieved without the proposed procedure. In fact, the proposed procedure does not work at all. And it is the same with religion: All social advantages of a religion ↗ ↗ ↗ can be achieved by simply confessing that one believes in its dogmata, and by following all of its rules. Much like the clack game player can skillfully simulate the search for and the effect of the "inner connection" with the rubber band, a believer can skillfully simulate his search for and the effect of his "inner connection" with the gods. It is not necessary to really believe that God is triune, that Mohammed was a perfect human being, or that Brahma emerged from a lotus. One can achieve the same effect by claiming that one seriously believes it. Nobody knows what you believe and what you do not believe. Nobody knows that the "inner connection" may be missing. In the same line, in some recent literature, both economic and sociological, we find the idea that people may rationally choose to display religious symbols pertaining to a given religion regardless of the true nature of their deep beliefs [[Gani Aldashev & Jean-Philippe Platteau: Religion, Culture, and Development](#)].

This disconnection between the true belief in the dogmata and the social role is maybe best described in this comment by the Episcopal Bishop of Newark, John Shelby Spong, in his book, "Resurrection: Myth or Reality (1994)":

As I first studied the birth narratives, it was clear that no major scholar of any persuasion took them literally...how long could the educated folk of the twentieth century continue to be literal about such things as the conception that occurred for a couple when both were well beyond menopause, the visit of the angel Gabriel, a pregnancy without a male agent, an angelic choir that sang in the sky, a star that roamed through the heavens, shepherds that have no trouble finding a baby in a city crowded with people called for a special

census, and a king named Herod who would rely on three men he never met before to bring him an intelligence report about a pretender to his throne who was said to have been born just six miles away?

This means that the Anglican scholars had long given up on a literal interpretation of the Bible. At the same time, they maintained the entire social frame around it, including masses, churches, weddings, ceremonies, etc. Some clergyman view their service as putting on a show, saying "I give them what they need, and they give me what I need." ([Sam Austin on Quora.com](#)). The social component of a religion works just as well without believing.

Sunk cost

Some people are religious because they have invested so much effort into being religious that they would feel that this effort would be wasted if they abandoned the religion.

Investments that people make into a religion are:

- the initiation rite (such as circumcision)
- a series of life choices (such as choosing a life partner not primarily out of love, but in order to have one with the "correct" religion)
- a life-long adherence to the religion, including following all rules and rites (such as fastening, prayer, ceremonies, etc.)
- a life-long defense of the religion in discussions with friends
- a life-long commitment to the religion vis-a-vis society

If you stop adhering to the religion, then all this effort looks wasted. You would have to admit that you were wrong. Crucially, you would start regretting the decisions you made. Furthermore, you would be perceived as incoherent and thus untrustworthy. Therefore, it appears much safer to continue believing.

This way of reasoning is known as the "sunk cost fallacy" ([Lifhack / Sunk cost fallacy](#)). It is a fallacy, because sticking to the past behavior will not recover the costs that were already invested. On the contrary, sticking to the behavior that caused irrational costs in the past is likely to produce more irrational costs in the future ↗.

Adhere to a principle not because you decided for it, but because it is good.

By François de la Rochefoucauld

Positive effects of religion

There is an entire range of positive effects of religion that go beyond the egoistic and immediate advantages that we just discussed. They concern more long-term effects such as social stability, peace of mind, better life expectancy, and the like. We discuss these factors in the [Chapter on the Benefits of Religion](#). Some adherents will follow a religion also because of these factors.

Chapter on Memes

Introduction

This chapter analyses strategies that religions have developed in order to survive. The chapter consists of the following sections:

- **Memes**: Introduces the concept of memes, i.e., of beliefs that survive throughout the generations.
- **Population control**: Discusses strategies to increase the number of adherents of a religion.
- **Conscience**: Lists strategies that target the conscience.
- **Recruitment**: Discusses strategies to recruit new members for a religion.
- **Intellectual Strategies**: Explains strategies that are used to sell a religion.

Memes

Hoax Mails

A hoax mail is an email that warns of a non-existent threat. The following email, e.g., was sent out in 2006 [[Wikipedia/Olympic Torch](#)]:

You should be alert during the next days: Do not open any message with an attached file called "Invitation", regardless of who sent it.

It is a virus that opens an Olympic Torch which "burns" the whole hard disc C of your computer. This virus will be received from someone who has your e-mail address in his/her contact list, that is why you should send this e-mail to all your contacts. It is better to receive this message 25 times than to receive the virus and open it.

This is the worst virus announced by CNN, it has been classified by Microsoft as the most destructive virus ever. This virus was discovered by McAfee yesterday, and there is no repair yet for this kind of virus.

This virus simply destroys the Zero Sector of the Hard Disc, where the vital information is kept.

This mail warns of a virus, but this virus does not actually exist. Still, fearful and well-meaning users sent the mail around in the millions. Why is this?

The mail has several elements that make it so successful:

- It warns of a danger
- It claims support from authoritative sources
- It uses technical terms to suggest expertise
- It calls for the user to spread it

Anybody who wishes to create such a Hoax email has to take care that it contains these successful elements. If an email instills fear in a credible manner, it is more likely to appeal to the more gullible people. These people will then propagate the email to other gullible people, who will again forward it, and so on – and within days the Internet is afloat with copies of the mail.

This section will argue that religions work in much the same way: They warn of an inexistent danger (hell or its variants ↗) and ask people to propagate the message. In the same way that we have just analyzed what makes a hoax mail successful, we will now analyze what makes a religion successful.

Memes

A meme is a statement ↗ or set of statements that spreads from person to person. One type of memes is a hoax email, of which we have just seen an example ↗. But a meme can also be a belief (such as "There exist a male and a female god"), a moral value (such as "Two women should not marry"), or a rite (such as "Every Sunday I go to church"). Under more general interpretations, it can also be a symbol (such as a swastika), a gesture, or any other imitable phenomenon ([Wikipedia/Meme](#)). In particular, a religion in the sense of this book ↗ is a meme.

The name "meme" was invented to resemble the word "gene". The reason is that memes and genes undergo very similar procedures:

Passing on

They can be passed on. For genes, this happens between one generation and the next. For memes this happens between one person and another person who adopts the meme. A hoax email, for example, is passed on by forwarding it to other people. A religious meme can be passed on by education ↗ or proselytism ↗.

Mutation

They can be modified. For genes, this happens through mutation. For memes, this happens by slightly changing the meme or by merging memes. A hoax email, for example, can be updated by a malicious receiver before forwarding it, or it can exist in multiple versions. Internet advertisers, e.g., use hundreds of different variants of a Facebook post in order to determine which one survives best ([The Economist: Once considered a boon to democracy, social media have started to look like its nemesis, 2017-11-04](#)). In the same way, religious memes exist in multiple variations. Once a variation becomes too different from the mother meme, it becomes a new denomination or a new religion. This has happened several times in history ↗ (see, e.g., the succession of the abrahamic religions ↗).

Extinction

They can die out. For genes, this happens if the host does not reproduce. For memes, this happens if the host does not succeed in transmitting the meme to another person. Most hoax emails, e.g., die out after a few months, when all receivers have either been warned or already fell victim to it. For religious memes, we observe that hundreds of religions have died out this way ↗. They have been overridden by more modern religions.

This makes it possible to study the life of memes much like we study the life of genes. Just like a gene, a meme can become extinct, be inherited, have reproductive success, mutate, and propagate. It is important to note that both genes and memes are abstract entities, not individual animals or persons. So when we say that a meme survives, we do not mean that some person survives, but that a particular thought, email, rite, or belief survives through the generations. The meme has its own existence. Much like an animal is only the host of a gene, a person is only the host of a meme.

Meme Selection

A meme is a set of statements that gets passed on from person to person ↗. In this process, a meme undergoes natural selection: one meme can give rise to several slight modifications of itself. For example, the meme "Be fruitful and multiply" can give rise to

1. "You shall have as many children as possible"
2. "You shall have 1 child"
3. "You shall have no children"

...as well as many other variations.

Some of these variations will be passed on successfully to many other people, while others will die in their tracks. In the example, the meme Number 1 will produce many children, and most likely these children will again follow the meme ↗. Thus, the next generation will see many followers, and the next-next generation even more followers. This is the strategy of the abrahamic religions ↗. They encourage adherents to produce many children and thus they secure their own survival ↗. The meme Number 3, in contrast, will not produce any children. Thus, the next generation will see 0 adherents of the meme. The only way to find adherents for the meme is through proselytism ↗. There was indeed a religion that prohibited having children – the Shakers ([Wikipedia/Shakers](#)). If the abrahamic system and the Shaker system are run side by side, it is clear that after a few generations, there will be more adherents of the abrahamic system than of the Shaker system. This is indeed what happened: The Shaker system has only 3 adherents as of 2009 ([Wikipedia/Sabbathday](#)).

Meme Design

One way to think about religious memes ↗ is to imagine that they have been deliberately designed to survive. For example, it is widely believed that the founder of Scientology ↗ deliberately constructed this religion so that it would expand quickly ↗. In particular, the religion pays members to attract more members, which makes the religion grow. In this case, it is likely that the memes of Scientology were designed with a purpose.

In other cases, the memes may have evolved through natural selection ↗: several memes were proposed, and the more successful ones survived. For example, 1500 years ago, there were several pagan religions on the Arab peninsula. Islam entered the stage as a proselytizing religion: Its aim is to convert people to this religion ↗. If a proselytizing religion is run side by side with a non-proselytizing one, it is clear which side wins over time. However, it is not clear whether the proselytism meme was deliberately designed, or whether it was just taken over from Christianity. Thus, this particular meme may be an example for a strategy that came to dominate naturally.

In many other cases, the survival of a religion was not due to its evolutionary superiority, but due to political, military, or economical successes. For example, the spread of Christianity in Africa and the Americas is largely due to colonialism.

Some religions are also mixture models: Catholicism, for example, has the dogma that priests, monks, and nuns may not marry. This is a clear disadvantage from a meme-survival point of view, because the most pious cannot reproduce ↗. So whoever came up with this dogma clearly did not aim at a maximum expansion of the religion. Then again, Catholicism also prohibits contraception and encourages reproduction among its adherents ↗. This has the effect that Catholics traditionally have more children than, say, Protestants. Jesus did not talk of contraception. Thus, the prohibition of contraception might have been added later on, possibly also deliberately to aid the propagation of the religion. This makes it possible that Catholicism is a mixture model, where some memes were deliberately designed, and others were not.

If someone designs a meme deliberately, then this meme cannot be god-given ↗. Hence, someone who designs a meme and then claims it to be divine is malicious. Since the following descriptions of memes may sound as if they were designed deliberately, it may look as if we are reproaching maliciousness to the prophets and believers. This is, however, not the case. During our analysis, we will not care whether a particular meme evolved naturally, or whether it was designed deliberately. We will just note where a meme exists, and analyze its effect on the survival of a religion.

Meme Theories

We will now look into religious memes ↗ that are particularly successful. Not all religions have all of these memes. So, the theory is not that every religion has all of these memes. Rather, the theory is that these memes can help explain the success of certain religions. More precisely, the theory ↗ for each of these memes is:

If we take a religion with this particular meme, and a religion that does not have this meme, but is otherwise identical, then the former will prevail over the latter over the coming generations.

We will note with each meme the religions use it, and those that do not. We will treat nearly all religions that currently have more than 10 million adherents ↗: Hinduism ↗, Spiritualism ↗, Buddhism ↗, Judaism ↗, Confucianism ↗, Islam ↗, Taoism ↗, and Christianity ↗. We also include the Bahai Faith ↗, but we do not treat Sikhism ↗ and Shintoism ↗. For Spiritualism, we will take its most visible denomination, Spiritism ↗. For Christianity, we will occasionally distinguish the denominations of Orthodoxy, Protestantism, and Catholicism ↗. We will also occasionally group the abrahamic religions together ↗ or the Chinese religions ↗.

Technically, a religion is a set of statements ↗. We would like to say whether the set includes the particular meme or not. However, it is difficult to say whether a religion includes a particular belief or not. Therefore, we will rarely talk about the religion itself. Rather, we will talk about their holy books or official lists of beliefs ↗. We will also talk about particular interpretations of the religion ↗. We will say that a particular interpretation of the religion includes a particular belief ↗. As always, we will never single out the "true interpretation" of a religion ↗.

The story of Hank

James Huger tells a story that exemplifies some of the memes that religions have developed. The story is called "Kissing Hank's Ass". The story is hilarious, and I can only recommend reading it. Here, we just give a summary:

Two adherents of Hank knock at the door of a stranger. The "Hankites" explain that Hank is a philanthropist who wants to give everyone one million dollars. However, as the story unfolds it becomes clear that there are many conditions attached. The basic requirements are that everyone must kiss the ass of Hank. Furthermore, everyone must live according to Hank's rules. The rules are a mixture of common sense and esoteric dietary guidance. Of course, no-one is actually allowed to see Hank. Furthermore, people only get the million dollars after they have left town. Unfortunately, Hank's rules forbid people who have left town from communicating with those in town so people still in town must take everything on trust. People who decline Hank's generous offer will get the shit kicked out of them by Hank, while his loyal followers laugh and enjoy the spectacle.
[\[RationalWiki / Kissing Hank's Ass\]](#)

This story sounds patently absurd: Nobody would follow the religion of Hank, because Hank just promises lots of things, but allows nobody to verify them. And yet, the world religions work in much the same way: They also promise lots of things ↗, but allow nobody to verify them ↗ or to criticise them ↗. These are but two of the characteristics that religions have developed over time. We will discuss these and many others in the sequel.

Population control

Fertility

One of the most successful strategies for proliferation of a religion is to encourage people to have many children. If this strategy is combined with the prohibition of interfaith marriage ↗, and with religious education of children ↗, it is guaranteed to lead to an exponential growth of the religion as long as resources are available.

For example, assume that a religious couple has 10 children, that it educates them religiously, and that these 10 children marry again religious people, and proceed in the same way. Then, after only 5 generations (roughly 100 years), the family can fill a village, and after 10 generations (roughly 200 years), they will be 20m people – conditions permitting. If this strategy is run next to a strategy that encourages people to have few children, then the fertility strategy will outnumber the other strategy exponentially fast.

Hence, most major religions (1) encourage having children and (2) restrict contraception ↗.

Applies to: Judaism

In the Torah, God commands people to "Be fruitful, and multiply, and replenish the earth" [Bible / Genesis 1:28]. This command resonates in all abrahamic religions. Consequently, the conservative strains of Judaism prohibit contraception ([Wikipedia/Jewish views on contraception](#)).

Applies to: Catholicism

Catholicism inherits the commandment to multiply from the Torah. It reasons that God commanded us to reproduce, and hence holds that "every action which [...] proposes [...] to render procreation impossible is intrinsically evil" [[Catechism of the Catholic Church / § 2370](#)].

Applies to: Islam

The Quran encourages men to "go into your wives as Allah has commanded" [Quran / 2:222], because "Your wives are a tilth for you, so go to your tilth, when or how you will" [Quran / 2:223]. The Prophet Mohammed reportedly said "Marry those who are loving and fertile, for I will be proud of your great numbers before the other nations." [[IslamQA / Encouragement to have a lot of children](#)]. Consequently, the current mainstream interpretations of Islam are strongly pro-family and regards children as a gift from God [[British Broadcasting Company / Religion / Islam / Islamic views on contraception](#)]. At the same time, contraception is allowed in most contemporary interpretations of Islam. This contradicts the above strategy. Yet, it was necessary to allow the practice of sex with slaves. The Hadith that regulate contraception (in its ancient form: the coitus interruptus) stem from fears that slave girls might get pregnant ([Wikipedia / Islamic sexual jurisprudence, Sunan Abu-Dawud / Book 11 / 2166](#)). We discuss past and current interpretations of Islamic sexual jurisprudence later ↗ ↗.

Applies to: Spiritism

Man "may regulate reproduction according to his needs; but he ought not to hinder it unnecessarily" [Allan Kardec: *The Spirits' Book* / § 693]. Also, the world population will never become too numerous (ibid / § 687).

Applies to: Bahai Faith

The Bahai Book of Laws states that "the very purpose of marriage is the procreation of children". Contraception is allowed, but viewed with reservations in the Bahai Faith (*Bahai Works / Laws / 1160*).

Does not apply to: Hinduism

The Law of Manu says that the purpose of marriage is sex (*Law of Manu / 3 / 32*). Yet currently, family planning is seen as ethically good by the majority of Hindus, and there is no opposition against contraception (*Dawn Stacey: What Do Religions Say About Birth Control and Family Planning? – Hinduism, 2016-04-20*). At 2.50, the birth rate in India is lower than in most African nations.

Does not apply to: Chinese religions

These religions emphasize the importance of balance and harmony in the individual, the family, and society. Since having too many children can upset this balance, family planning has been a valued part of human sexuality in both Taoism and Confucianism [*Dawn Stacey : What Do Religions Say About Birth Control and Family Planning? – Taoism, Confucianism, 2016-04-20*].

Varied: Protestantism

Protestantism inherits the commandment to "be fruitful and multiply" from the Torah. Yet, protestants have a wide range of opinions on contraception (*Wikipedia/Protestant views on contraception*).

Varied: Buddhism

There is no unifying stance for Buddhism on the topic [*Dawn Stacey : What Do Religions Say About Birth Control and Family Planning? – Buddhism, 2016-04-20*]. The Dalai Lama states that "married couples should have children unless there are compelling reasons not to", but says that "family planning is important" [*Dalai Lama: Messages / Environment / The Natural World*], and that some "countries must curb their population growth" [*Dalai Lama: Messages / Environment / Politics and Environment*].

Prohibit Interfaith Marriage

We have seen that it is beneficial for a religion to encourage large families ↗. This strategy, however, works only if the offspring of such a family marries again within the religion. Therefore, one common strategy is to prohibit marriage across religions. People are not allowed to marry people of other faiths ↗. The majority of large religions work this way (*Wikipedia/Interfaith marriage*).

Applies to: Judaism

The Talmud prohibits interfaith marriage (*Talmud / Mishnah / Kiddushin / 68b / 1*). A diaspora religion such as Judaism would not have survived without this constraint.

Applies to: Hinduism

According to the Laws of Manu, marriage may happen only within one caste (*Laws of Manu / 3 / 13*). Since non-Hindus do not belong to a Hindu caste, interfaith marriage is prohibited (*Wikipedia/Interfaith Marriage*). Hindu leaders have declared that "Marriage conducted between couples of different religions [...] would in fact amount to adultery" [*Jakarta Globe: Religious Leaders Present Conflicting Views on Interfaith Marriage, 2014-11-25*]. The vast majority of marriages are arranged marriages anyway (*Wikipedia/Arranged marriage in the Indian subcontinent*).

Applies to: Christianity

The Bible prohibits interfaith marriage (Bible / 2 Corinthians 6:14, Deuteronomy 7:3), although another verse seems to permit it (Bible / 1 Corinthians 7:12-14). Consequently, different denominations of Christianity have different views: Catholicism forbid interfaith marriage until 1917 (*Wikipedia/Interreligiöse Ehe*). Nowadays, it allows mixed marriages with a dispensation (*Canon Law / 1124-1125*), but no ceremony of another religion is allowed (ibid / 1127 / § 2), and the children have to be raised as Catholics (ibid / 1125 / 1). Thus, the basic purpose of replicating the religion remains intact. Protestant denominations may have different view points. In



In India [unknown source]

Indonesia, Catholic and Protestant authorities are opening up to interfaith marriage ([Jakarta Post: NU, MUI dissent on marriage law petition, 2014-11-06](#)). Orthodox Christianity forbids marriage with non-Christians, as I can testify from personal experience.

Applies to: Islam

The Quran prohibits marriage with non-Muslims (Quran / 2:221, 60:10). However, it allows Muslim men to marry women from the Abrahamic religions (Quran / 5:5). This model works under the assumption that the husband dominates the marriage. It allows Islam to spread also in non-Muslim lands. This regulation is the current mainstream interpretation of Islam ↗. It is also the law in many Muslim countries – including moderate countries such as Tunisia ([Le Monde des Religions: Le droit d'épouser un non-musulman, 2017-05](#)).

Applies to: Confucianism

I could not find references in the scripture of Confucianism on interfaith marriage. However, in the 2014 hearing of the Supreme Court of Indonesia on the matter of interfaith marriage, the Supreme Council for Confucian Religion in Indonesia (Matakin) stated that "A marriage should be conducted to achieve happiness and continue the blood line. No political view, ethnicity, understanding, culture or even religion can stop it. However, an interfaith wedding cannot be conducted with a Confucian ceremony." [[Jakarta Globe: Religious Leaders Present Conflicting Views on Interfaith Marriage, 2014-11-25](#)].

Does not apply to: Spiritism

The "Spirits' Book" mentions no such law.

Does not apply to: Bahai Faith

According to the Bahai Faith, all religions are inspired by God, and therefore interfaith marriage is allowed ([Book of Laws / IV / C / 1 / h](#)). This is a remarkable consistency in reasoning: The credo "All religions are the same" is upheld even in the face of its implications ↗. This differentiates the Bahai faith from other mainstream religions, which also sometimes claim that all people believe in the same god ↗ ↗, but then do not draw the consequence of allowing interfaith marriage.

Undefined: Buddhism

There is not much information in traditional Buddhist texts on marriage. Contemporary Buddhism seems to consider marriage a secular affair ([Wikipedia/Buddhist view of marriage](#)). In Indonesia, Buddhist authorities have been ambivalent about interfaith marriage ([Jakarta Post: NU, MUI dissent on marriage law petition, 2014-11-06](#)).

Unclear: Taoism

I could not find a unified stance in Taoism on the matter.

Shunning Homosexuality

One of the most effective strategies for the proliferation of a religion is to encourage large families ↗. Obviously, homosexual people are an impediment to this strategy. Gay people do not reproduce. Therefore, the religion has an interest in prohibiting homosexuality. It is clear that this does not change a person from gay to straight. But social pressure may push the gay person to marry a partner of the opposite sex, and to found a family. For the procreation of the faith, it does not matter whether the person enjoys having a family or not, as long as they produce children.

Many religious memes may be the result of natural selection, and thus not necessarily explicitly designed by people ↗. However, the prohibition of homosexuality may be explicitly designed. This is because homosexuality alone is unlikely to reduce the Darwinian competitiveness of a society: Only around 2-10% of the human population are thought to be homosexual ([Wikipedia/Demographics of sexual orientation](#)). Thus, a society can well survive even if homosexual people do not have children. This is actually why homosexuality has survived Darwinian selection until today in the first place. However, in the minds of ancient people (and many people today), it was not clear that homosexuality has a natural upper bound given by the genetic configuration of people. It was possibly perceived as a practice that could spread to everybody, much like the habit of drinking alcohol. Leaders who thought this way had an incentive to forbid homosexuality ↗.

Applies to: Judaism

The prohibition of homosexuality is anchored in the Torah. It states that: "[A man] shall not lie with another man as [he would] with a woman, it is an abomination" [Bible / Leviticus 18:22]. The punishment for homosexuality is death [Bible / Leviticus 20:13]. However, Judaism no longer implements the death penalty.

Applies to: Catholicism

Catholicism inherited the punishment of homosexuals from the Torah. However, it also no longer implements the death penalty. It disapproves of homosexual acts, but welcomes people with homosexual tendencies ([Vatican: Instruction Concerning the Criteria for the Discernment of Vocations with regard to Persons with Homosexual Tendencies](#)).

Varied: Christianity

While the mainstream churches of Christianity do not allow homosexuals to marry, liberal Christians [↗](#) are supportive of homosexuals ([Wikipedia/Religion and Homosexuality](#)). Some of their churches allow homosexuals to marry [↗](#).

Applies to: Islam

The Quran seems to condemn homosexuality (Quran/26:165-166, 7:80-81). Consequently, the vast majority of Muslims reject homosexuality, and it is punishable by death or imprisonment in many Muslim countries [↗](#).

Applies to: Bahai Faith

The Bahai Faith views homosexuality as a distortion of nature, which should be controlled and overcome ([Bahai Works / Laws / 1222](#)).

Applies to: Buddhism

In the words of the Dalai Lama, Buddhism shuns homosexuality ([Lifesitenews: The Dalai Lama, Like the Pope, Says Gay Sex is "Sexual Misconduct", 2007-11-02](#)). In Indonesia, Buddhist leaders have spoken up against homosexuality as well ([Jakarta Post: Religious leaders soften stance on LGBTs, 2016-02-19](#)). However, Buddhism has harbored different views on the topic ([Wikipedia/Buddhism and sexual orientation](#)).

Unknown: Spiritism

Given the encouragement to reproduce [↗](#), Allan Kardec most likely looked unfavorably upon gay people. At the same time, his "Spirits' Book" makes no mention of homosexuality.

Varied: Hinduism

The Law of Manu condemns homosexuality ([Law of Manu / 11 / 175](#)). Yet, Hinduism is a very heterogeneous religion, and comprises different opinions towards homosexuality ([Wikipedia/Religion and Homosexuality](#)).

Applies to: Taoism

Homosexuality was a common phenomenon in Chinese history. Hence, the Chinese religions did not take a uniform and explicit stance against homosexuality. However, opposition against homosexuality rose in medieval ages ([Wikipedia/Homosexuality in China](#)). Taoism explicitly condemns homosexuality: "If a sexual conduct happens, but it is not between a man and a woman who are married to each other, it is a Sexual Misconduct" [[The Ultra Supreme Elder Lord's Scripture of Precepts](#)].

Applies to: Confucianism

This religion, likewise, condemns homosexuality ([Jakarta Post: Must not support LGBT to heal them: Religious leaders, 2016-02-18](#)).

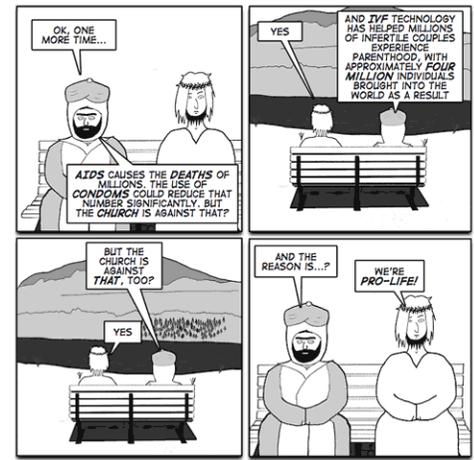
Does not apply to: Some new religions

The Wiccan "Charge of the Goddess" states in the words of the Goddess that "all acts of love and pleasure are my rituals" ([Wikipedia/Religion and Homosexuality](#)). Raëlism, likewise, is open to homosexuality ([Wikipedia/Raelism](#)).

*God created Man in his image:
Intolerant, sexist, homophobic, and violent
By Captain Atheist 2012*

One of the most effective strategies for the proliferation of a religion is to encourage large families ↗. Now how can one best entice people to found a family? One strategy is to reserve sex only for the purpose of procreation. Since people have a natural drive for sex, this strategy ensures that people reproduce. For this goal, we have to prohibit the following:

- homosexuality, as discussed before ↗.
- contraception, as discussed before ↗.
- masturbation. Masturbation is a shortcut to sexual satisfaction that bypasses the procreation effect.
- pre-marital sex. If people can have sex only when they are married, they have a natural incentive to marry.
- sex outside wedlock. If people can have sex only with their partner, they are more likely to build a family.
- prostitution. Prostitution allows satisfying the desire without procreation.
- pornography. Pornography is seen as an aid to masturbation.
- abortion. Abortion terminates the life of a likely adherent.



[Jesus and Mo]

Consequently, most world religions have developed a rather strict sexual morale ↗.

Applies to: Catholicism

The church follows the strategy to the T. It teaches explicitly that "Sexual pleasure is morally disordered when sought for itself, isolated from its procreative and unitive purposes" [Catechism of the Catholic Church / § 2351] – quite possibly because those who wrote the passage never had any of it. Consequently, "masturbation is an intrinsically and gravely disordered action", the "carnal union between an unmarried man and an unmarried woman [...] is gravely contrary to the dignity of persons", "Civil authorities should prevent the production and distribution of pornographic materials", "Prostitution is a social scourge" [ibid ff], and "Human life must be respected and protected absolutely from the moment of conception" [ibid/2270].

Applies to: Islam

Current mainstream interpretations of Islam generally encourage sex in the couple ↗. They generally forbid anal sex (Wikipedia/Islamic sexual jurisprudence) – presumably because it does not lead to conception. The Quran prohibits sex during menstruation, which is when the woman cannot conceive (Quran / 2:222). It also requests men and women to "guard their private parts", which is sometimes interpreted as a prohibition of pornography (Quran / 24:30). Many interpretations of Islam prohibit masturbation based on Quran / 23:5-6 (Wikipedia/Islam and masturbation). The Quran also prohibits sex outside the couple, unless with sex slaves (Quran / 24:2-3). Abortion is currently mainly shunned (Wikipedia/Islamic sexual jurisprudence). Since people can have sex only in a marriage, and since people marry later and later, this has led to a kind of sex deprivation among younger people ↗.

Applies to: Judaism and Christianity

A woman who is no longer a virgin when she marries is to be stoned to death (Bible / Deuteronomy 22:13-21). Sex outside wedlock also incurs the death penalty (Bible / Deuteronomy 22:22). Sex during menstruation is forbidden (Bible / Leviticus 18). Ejaculation in general is considered unclean (Bible / Leviticus 15:16-18). Judaism calls this the sin of "spilling semen in vain" (Wikipedia/Religious views on masturbation). Based on these sources, conservative variants of Judaism and Christianity shun adultery, masturbation, adultery, and pre-marital sex. Jesus reportedly said "whosoever looketh on a woman to lust after her hath committed adultery" [Bible / Matthew 5:27-28], which can be understood as a prohibition of pornography. Judaism even prohibits a man and a woman who are not married to each other from being in the same room alone (Wikipedia/Yichud).

Applies to: Buddhism

The second of the Five Virtues prohibits "sexual misconduct", which is commonly interpreted as sex outside wedlock (Wikipedia/Buddhism and sexuality). Buddhism identifies sexual craving as one of the hindrances to attain insight (ibid), and Buddha says explicitly "So one [...] should avoid sensual desires" [Pali Canon / Khuddaka / Sutta Nipata / Kama Sutta / 4.1]. At the same time, Buddhism does not traditionally place great value on procreation like many Western religions (Religion Facts: Homosexuality and Buddhism).

Applies to: Bahai Faith

For Bahai, "no sexual act can be considered lawful unless performed between lawfully married persons" ([Bahai Works / Laws / 1220](#)). Hence, the faith condemns sex outside wedlock (ibid / 1157), pre-marital sex (ibid / 1212), masturbation (ibid / 1220), and abortion (ibid / 1154).

Applies less to: Hinduism

Hinduism is straitlaced in the sense that it traditionally prohibits intimate contact between unmarried men and women. Pre-marital sex and extra-marital sex are generally condemned (Vishnu Purana 3:11). The Laws of Manu stipulate that addressing a woman outside the village, or offering her gifts already counts as adultery ([Law of Manu / 8 / 356-357](#)) – for which the penalty is death (ibid / 356). However, in Hindu traditions, the enjoyment of life ("kama") is one of the four goals of human life ([Wikipedia/Kama](#)). The Kama Sutra, a treatise on sex, explains in detail the best procedure to masturbate ([Wikipedia/Religious views on masturbation](#)). In the diversity of Hinduism, a spectrum of views on sexual freedoms thrived in ancient India [[Wikipedia/Fornication](#)].

Applies to: Taoism

The Elder Lord says "If a sexual conduct happens, but it is not between a man and a woman who are married to each other, it is a Sexual Misconduct." ([The Ultra Supreme Elder Lord's Scripture of Precepts](#)), which means that "masturbations, premarital sexual conducts, adulteries, prostitutions, having sex with prostitutes, homosexual sex, etc., are all Sexual Misconducts". I have not found a source for Confucianism or Chinese religions in general.

Applies to: Spiritism

Abortion is condemned ([Allan Kardec: The Spirits' Book / § 358](#)), as is "Whatever hinders the operations of nature" [ibid / § 693]. In particular, sensuality shall not be given preference over reproduction (ibid / § 694).

Does not apply to: Some new religions

The Wiccan "Charge of the Goddess" states in the words of the Goddess that "all acts of love and pleasure are my rituals" ([Wikipedia/Religion and Homosexuality](#)). Raëlism, likewise, is open to all types of sexual acts, as long as they are consensual and between adults ([Wikipedia/Raëlism](#)).

Child Marriage

One of the most effective strategies for the proliferation of a religion is to encourage large families ↗. One way to increase the number of children is to make people marry as early as possible in life. In particular, women have to be married as soon as they have reached puberty, so as to maximize the fertile period of her life that she spends with her husband. A woman who marries early is also less likely to be educated. She is also less likely to educate her children. This, in turn, plays into the hands of the religion as well ↗. Hence, many religions support child marriage for women ↗.

Applies to: Catholicism

The minimum age of marriage for a woman is 14 according to Canon Law ([Canon Law / Can. 1083 §1](#)). In Western countries, a minimum age of 18 is generally legally enforced. However, in sub-saharan (Catholic) Africa, child marriage rates are between 38% and 46% ([UNICEF: Ending child marriage, 2012](#)).

Applies to: Islam

The Prophet Mohamed married Aisha when she was 6, and had sex with her when she was 9 ([Wikipedia/Aisha](#)). The Quran says that Mohammed is the perfect role model to follow (Quran / 48:29, 33:21, 68:05). The book also explains how to divorce prepubescent girls (Quran / 65:1-4), which means that the book allows marrying them in the first place. Hence, the Quran does not prohibit child marriage. Many contemporary voices defend the practice ([Wikipedia/Child Marriage in India](#)). Child marriage is at 24% in the Middle East and North Africa ([UNICEF: Ending child marriage, 2012](#)). It is also supported by the main Muslim groups in Indonesia. We discuss Muslim attitudes and interpretations on child marriage in the [Chapter on Islam](#).

Applies to: Hinduism

The Laws of Manu set 8 years as a minimum age for a girl to marry ([Laws of Manu / 9 / 94](#)). Indeed, 58% of women in India are married under the age of 18 ([UNICEF: Ending child marriage, 2012](#)).

Applies to: Judaism

The Talmud encourages parents to have their daughter married as soon as she reached puberty ([Talmud / Sanhedrin / 76b](#)). While child marriage was very common, it is rare today in the Jewish community ([Wikipedia/Jewish views on marriage](#)).

Applies less to: Bahai Faith

The Bahai Faith prescribes 15 as a minimum age ([Book of Laws / IV / C / 1 / c](#)). However, the Bahai Faith also stresses obedience to the government ([ibid / IV / D / 1 / m](#)), and thus de facto the minimum age is as required by secular governments.

Does not apply to: Buddhism, Protestantism, Chinese Religions, Orthodox Christianity, Spiritism

I found no source that specifies the recommended or minimum age for marriage in these religions. In any case, child marriage is not prevalent in buddhist, protestant, taoist, confucian, and orthodox countries ([UNICEF: Protecting against abuse, exploitation, and violence – child marriage, 2006](#)).

There's a Jewish law for everything. The Torah offers a punishment for every crime, no matter how insignificant. But what about child abuse? The Torah talks about men who have sex with other men, and men who have sex with animals. But there is nothing said about the sexual abuse of children.

By Deborah Feldman in "Unorthodox"

Remark: The low minimum ages prescribed by some religions are sometimes the relic of a time when people married early in general, because they had a shorter life. However, these rules have not been updated since ↗. Thilo Sarrazin remarks that child marriage goes hand in hand with the obsession about virginity (the younger the bride, the more likely it is that she is really a virgin). Virginity, in turn, is the guarantor of the male ability to impress the woman with sexual experience – a direly needed asset in a world where the traditional role of men is put in question ↗.

Conscience

Heaven

We have no evidence for any form of life after death ↗. Hence, a religion could just teach that life ends with death. However, the religion can also teach that there is some transcendental life after death. Obviously, a religion that promises life will be more successful than a religion that doesn't. Hence, most religions today promise some form of life after death ↗.

Applies to: Judaism

The Hebrew Bible is not clear on the question of life after death (Bible / Ecclesiastes 3:19-21, Ecclesiastes 9:4-6, Numbers 16:31-33, Psalms 146:2-4, Job 14:10-14, Daniel 12:2, Isaak 26:19). Still, Judaism knows the concept of life after death ([Wikipedia/Afterlife](#)). The human is resurrected to a new, infinite life in a beautiful place called "heaven". The Talmud establishes resurrection after death as a fundamental principle of the faith, and says that those who doubt it shall not share it ([Talmud / Sanhedrin / 90a / 31, 39](#)).



Some interpretations of Islam promise 72 virgins to martyrs.
[\[Found in: Google\]](#)

Applies to: Christianity

Jesus promises life after death (Bible / John 11:24, Matthew 5:20, Matthew 22:29-33), as does the book of Revelation (Bible / Revelation 20:6). The Nicene Creed affirms the resurrection of the dead, saying "I look for the resurrection of the dead, and the life of the world to come" [[Nicene Creed](#)]. Consequently, Catholicism incorporates the belief in the afterlife ([Catechism of the Catholic Church / 1 / 2 / 3 / 11](#)).

Applies to: Bahai Faith

The Bahai Faith, likewise, sees a "spiritual world beyond the grave" [[Bahai Works / Laws / §1595](#)].

Applies to: Islam

Islam has made the concept of Heaven very prominent ([Wikipedia/Shahid](#)). 10% of the Quran is concerned with promises of Heaven ↗. Male martyrs even get large-breasted virgins (Quran / 78:33, 56:22-23, 37:48, 55:56, 37:48, 52:20). The Hadiths fuel speculations that the number of virgins is 72, but this has so far not been confirmed ([Wikipedia/Houri](#)).

Applies to: the Indian religions

Hindus, Buddhists, Jains, and Sikhs generally believe in reincarnation of the soul ([Wikipedia/Samsara](#)). In this model, the human is reborn onto this Earth after death. The rebirth can be either in a "better" position (say, as a king), or in a "worse" position (say, as an ant), depending on good and bad deed in one's life (the "karma"). If the person advances spiritually to a sufficient degree, they can arrive in a final state called "nirvana", which is the desirable outcome. In Hinduism, the Rig Veda says "as soon as he departs, he takes birth again" [[Aiteraya Upanishad / 2 / 1 / 4](#)], and gives a hint at the relief from the cycle of rebirth as "When he sees the other, the lord of all, whom all devotees worship, and realizes that all greatness is his, then he is relieved of his misery" [[Yajur Veda- Swetasvatara Upanishad / 4 / 6-7](#)]. The Laws of Manu, likewise, clarify that "a vicious man sinks to the nethermost (hell), he who dies, free from vice, ascends to heaven" [[Laws of Manu / 7 / 53](#)]. For a Buddhist, according to the Dalai Lama, "it is necessary to accept past and future rebirth", and "once we achieve liberation from the cycle of existence by overcoming our karma and destructive emotions, we will not be reborn" [[Dalai Lama: Reincarnation](#)].

Applies to: Spiritism

In this religion, the spirits aim to achieve perfection during several cycles of rebirth. The successful soul enters a "state of perfect happiness, as a purified spirit" ([Allan Kardec: The Spirits' Book / § 170](#)). The final state is eternal happiness, consisting "in knowing all things; in feeling neither hatred, jealousy, envy, ambition, nor any of the passions that make men unhappy" ([Allan Kardec: The Spirits' Book / § 967](#)). Different from the other abrahamic religions, Spiritism has taken care that the happy spirits do not suffer from the sight of the sinners being punished, "because they know that it will have an end; they aid those who suffer to become better, and lend them a helping hand. To do this is their occupation, and is a joy for them when they succeed." [ibid / § 976]

Applies to: Taoism

Comparable to the Indian Religions, Taoism knows the cycle of rebirth ([Wikipedia/Samsara](#)). The Elder Lord talks of the "repeating births and deaths", and says that "in order to be born as a human being, one must have the five virtues" [[The Ultra Supreme Elder Lord's Scripture of Precepts](#)].

Applies less to: the Chinese Religions

The prevalent belief in Chinese religions is that every human being has a type of spirit, the "shen" ([Wikipedia/Shen](#)). This shen lives on after death, and becomes the object of ancestor worship ([Wikipedia/Chinese folk religion](#)). However, it is not clear to me whether this state is something desirable. Confucius does not speak about rebirth or resurrection in his Analects.

Many adults never outgrow their childhood fear of death. Because the thought of death is so distressing to some people, it is not surprising that they try to invent a way out. The fairy tale that Christians have invented is called heaven, and they have also formulated the concept of eternal life. The Christian fabrications are, of course, entirely different from the heaven and God of all other religions, because all of them are imaginary. Egyptians believed something silly involving pyramids and sun gods and so on. Greeks believed in the river Styx and Hades and so on. Muslims believe in their 72 virgins and so on. It is all gibberish, but people believe in their fantasies quite passionately.

By [WhyWontGodHealAmputees.com](#)

Heaven for Martyrs

The promise of Heaven can make people adhere to a religion ↗. It can also supply the religion with warriors who are ready to give their lives: If a man believes that Heaven awaits him when he dies, he will be much more willing to go to war for his faith. In his thinking, he has nothing to lose: Either he wins the battle, or he dies and goes to Heaven. A religion that has this type of warriors will prevail in battles against religions that do not. History has shown us examples ↗.

Applies to: Historical Catholicism

This religion has benefitted from people who are ready to sacrifice their lives in the Crusades. The warriors seriously believed that they would go to heaven if they died in the battles (Rolf Dobelli: The Art of Thinking Clearly). Hence, they had no hesitation to join the wars. The wars had several religious, economical, and political motivations ([Wikipedia/Crusades](#)), and ultimately served to establish the hegemony of the Catholic Church.

Applies to: Islam

The Quran promises Heaven to those who die fighting for Allah (Quran / 3:169-170, 9:111, 22:58). This has helped the military expansion of Islam ([Wikipedia / Shahid, Istishhad](#)). The Islamic State could uphold its grip on the Middle East also because it had fighters who were not afraid to die.

Hell

A person who died cannot report what happened to them ↗. Hence, we can say arbitrary things about life after death – any such hypothesis can never be falsified ↗. Some religions use this to tell people that if they do not follow the rules of the religion, they will be tortured after death in a place called Hell. It is clear that if a religion promises hell in case of disobedience, then its adherents are more likely to obey. If, in contrast, a religion does not promise hell, then its adherents have less incentive to obey. They might just stray away from the religion. Hence, if we have one religion with hell, and one without, and if we run them side by side, the religion with hell will most likely prevail. Therefore, most religions that we encounter today have some form of hell. Since it does not cost anything to invent tortures in hell, the religions have been coming up with the most impressive forms of punishment, as we shall see ↗↗↗↗↗.

The idea of hell also satisfies the human desire for justice ↗.

Applies to: Chinese religions

In the Chinese religions, Diyu is a purgatory which serves to punish and renew spirits in preparation for reincarnation. Tortures include being fried in oil cauldrons, being put into a grinding machine and ground into a bloody pulp, tongues being ripped out, and freezing sinners into ice cubes that then break apart [[Wikipedia/ Diyu](#)]. For Confucianism, Confucius talks of a punishment from Heaven (Confucius: Analects / 6:28), even though he does not talk of hell. In Taoism, a person who does not follow the Tao will “fall into the restless and unlimited sufferings”. This is the Taoist hell. “When they are released from such sufferings, they will be reborn as animals or other inferior beings”, “they will be born in uncivilized places, their lives will be short, or they will be physically disabled”. “They will be poor, homeless, and suffer from coldness; they will not be able to live peacefully; if they get any money or properties, those things will be stolen or robbed by others”. Worst of all, “their spouses will be ugly, adulterous, and greedy” [[The Ultra Supreme Elder Lord’s Scripture of Precepts](#)].

Applies to: Spiritism

In this religion, the spirits are subdued to punishments after death or in the next life ([Allan Kardec: The Spirits’ Book / § 960, 965, 970, 973, 974](#)). “It is utterly impossible to describe the mental tortures that are the punishment of some crimes; even those by whom they are experienced would find it difficult to give you an idea of them” [ibid / § 973]. However, different from the older religions, Spiritism prescribes a more abstract punishment: the “sufferings are as various as are the causes by which they are produced”, and include “envy”, “regret, jealousy, rage, despair”, “remorse and indescribable moral anguish”, and being tortured by the “inability to satisfy [one’s] cravings” [ibid / § 970]. In addition, Spiritism knows the punishment on Earth in a cycle of incarnation: “Purgatory [is] Physical and moral suffering; the period of expiation, It is almost always upon the earth that you are made by God to undergo your purgatory, and to expiate your wrong-doing.” [ibid / § 1013]

Applies to: Buddhism

The Buddha reportedly spoke of 16 hells. Avici is said to be the most horrible hell, where people are “roasted in an immense blazing oven with terrible suffering” ([Wikipedia/Nakara](#)). This torture lasts until all bad karma is used up, which can take several quadrillion years. Then, the being is reborn. This notion of punishment after death gave Buddhism a clear advantage over pre-existing systems in China, which had to refer to “fate” as an unclear, inscrutable power [[Wolfram Eberhard: Guilt and Sin in Traditional China, 1967](#)]. In addition, Theravada Buddhism explicitly punishes creating a schism in Buddhism as one of the 5 cardinal sins, thus aiming to secure the continuation of the faith.

Applies to: Hinduism

The religion shares the concept of hell with Buddhism ([Wikipedia/Nakara](#)). The Laws of Manu describe 21 hells ([Laws of Manu / 4 / 87-90](#)), in which sinners are devoured by ravens, boiled in jars, and subjected to diseases (ibid / 12 / 75-80). Those who committed mortal sins pass large numbers of years through dreadful hells. After the expiration of that term of punishment, they are reborn. Different sins carry different types of rebirths: killing a Brahmana lands you in the womb of a pig; thieves become cannibalistic creatures; for stealing grain a man becomes a rat; and for stealing pearls you become a goldsmith [ibid / 12 / 54-74].

Applies to: Judaism

The early Jews were familiar with Gehenna, a valley where the non-Jews sacrificed their children in fire. Together with some biblical references (Bible / Daniel 12:2), this developed into the idea that all sinners will burn in fire: "He who talks too much with women brings evil upon himself and neglects the study of the Torah and will in the end inherit Gehenna." [Pirkei Avot / 1.5]. This hell is thought to last for at most 1 year ([Wikipedia/Gehenna](#)).

Applies to: Christianity

The New Testament of the Bible inherited the concept of Gehenna from Judaism, and improved upon it. While the Jewish Ghenna lasted for only one year, Jesus himself extended hell to eternity for the Christians ↗. It is a place of "unquenchable fire" [Bible / Matthew 5:22, 18:8-9; Bible / Mark 9:43-49, Revelation 20:13] into which the body is thrown (Bible / Matthew 5:29, 5:30) after sinning (Bible / Matthew 5:22, Revelation 20:30). Hell has "weeping and gnashing of teeth" [Bible / Matthew 8:12; 22:13], "everlasting destruction" [Bible / Romans 2:7-9; Bible / 2 Thessalonians], "raging fire" [Bible / Hebrews 10:27], "destruction" [Bible / 2 Peter 3:7] and "eternal fire" [Bible / Jude 7], and "burning sulphur" where "the devil, the beast, and false prophet" will be "tormented day and night for ever and ever" [Bible / Revelation 20:10, Lukas 16:19-31] along with those who worship the beast or receive its mark (Bible / Revelation 14:11) [[Wikipedia/Christian views on Hell](#)]. This physical view of hell was later abandoned in many (though not all) Christian denominations ↗ ↗. Christianity also promises hell on Earth for those who trespass (Bible / Exodus 15:26, Deuteronomy 28:15-68), even though this seems to be revoked later on (Bible / Hebrews 10:18).

Applies particularly to: Islam

The Quran has perfected the threat of hell, mentioning the concept in total around 500 times ([Thomassen: Islamic Hell, 2009](#)), in roughly every 7th verse ↗, with detailed brutality ↗. Hell contains flames that crackle and roar [Quran/25:14], fierce, boiling waters [Quran/55:55], scorching wind, and black smoke [Quran/56:42-43], roaring and boiling as if it would burst with rage [Quran/67:7-8]. Its wretched inhabitants sigh and wail [Quran/11:106], their scorched skins are constantly exchanged for new ones so that they can taste the torment anew [Quran/4:45], drink festering water and though death appears on all sides they cannot die [Quran/15:16-17], are linked together in chains of 70 cubits [Quran/69:30-32], wearing pitch for clothing and fire on their faces [Quran/14:50] have boiling water that will be poured over their heads, melting their insides as well as their skins, and hooks of iron to drag them back should they try to escape [Quran/67:7]. Their remorseful admissions of wrongdoing and pleading for forgiveness are in vain [Quran/41:24] [[Smith & Haddad: The Islamic Understanding of Death and Resurrection, 1981](#)].

Does not apply to: Wicca

In Wicca, there is no such thing as hell because Wiccans largely don't believe in the concept of punishment or reward. [[Solitary Wicca For Life: Complete Guide to Mastering the Craft on your Own](#)].

They say that Heaven will call us to account for our deeds after death. I say that we should first call Heaven to account for the hardship that it imposed upon us during our earthly lives without any apparent reason.

By Arthur Schopenhauer, translated

Remark: Just how well the threat of hell works is exemplified by the case of a Texan women who held two Mexican women as slaves for 14 years, threatening them with hell if they did not obey ([Washington Post: Texas woman kept Mexican slaves for 14 years, said they'd go to hell if they disobeyed, 2016-08-16](#)).

Guilt

Guilt is a powerful force ↗ ↗. Thus, a religion that succeeds in producing guilt can steer a person very effectively. A common way in which this happens is that the religion first induces guilt, and then proposes itself as a way to obtain absolution from that guilt. As Albert Ellis argued: religions deliberately instill self-damnation in their adherents and then give these adherents guilt-soothing rituals to temporarily allay these kind of self-damning feelings. This way, the adherent feels thankful to the religion for removing a problem that it created in the first place ↗ ↗.

Applies to: Christianity

This religion knows the concept of the "original sin", which by and large says that Adam and Eve, the mythical ancestors of humanity, contradicted God's will and hence loaded sin on all of humanity ([Wikipedia/Original sin](#)). In the words of the Bible: "In sin did my mother conceive me" [Bible / Psalm 51:5], because "by the one man's disobedience [=Adam] the many were made sinners" [Bible / Romans 5:19]. So just by being born, the human is already loaded with guilt. Christianity generalizes this by universally instilling guilt into everybody: "there is no one righteous, not even one; [...All] have together become worthless; there is no one who does good, not even one" [Bible / Romans 3:10], and "all have sinned and fall short of the glory of God" [Bible / Romans 3:23-24]. It is a fortunate coincidence then that Christianity provides the way to get rid of this guilt: by following Jesus, we will be liberated from that sin (ibid).

Applies to: Islam

This religion uses a variant of the scheme. The Prophet Mohammed is regarded as the perfect human. After all, God himself told him so (Quran / 68:4). Hence, any attempts to criticize him or his ideology is seen as an insult against his person. Anybody who says that Mohammed did not speak the truth is cast as an evil person who does injustice to the most just of all men ↗. Thus, even non-Muslims can be made feeling guilty for criticizing Islam – a clear darwinian advantage for the religion.

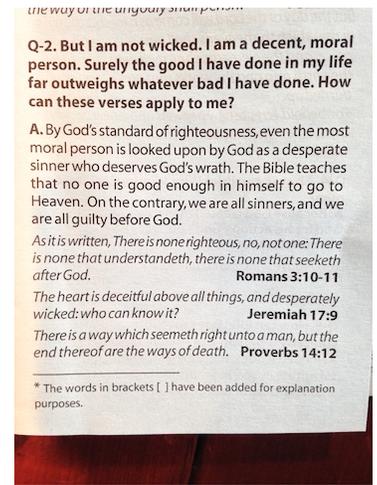
Applies to: Hinduism

This religion sees being born into a lower caste as a punishment for sins in previous lives. Thereby, the "untouchables" live in guilt.

There are two other strategies to induce guilt: the push for perfection ↗ and thankfulness ↗.

*Sin is an imaginary disease
invented to sell you an imaginary cure.*

By *anonymous*



[Family Radio brochure]

Push for Perfection

A religion can get hold of a believer by inducing guilt ↗. One way to do that is to come up a set of rules ↗ that exhaustively prescribe everything from ethical behavior to food and rituals. This exhaustiveness makes it hard for an ordinary human to uphold all of these commandments to perfection. If the rules are hard to uphold to perfection, then it is likely that the believer will violate one rule or the other in his life – earlier or later or even continuously. This entails that a sincere believer may find themselves in a conflict between their life and their belief. Unable to live a perfect life, they will find themselves in an enduring state of bad conscience. They are caught in the gap between how they are and how they know they should be. Thereby, the religion maintains a grip over the conscience of the believer. This is similar to the way in which totalitarian regimes control their subjects ↗. The essential principle is to make laws that are impossible to obey [Christopher Hitchens: God is not great, p. 254].

Applies to: Christianity

Jesus, for example, says: "whosoever looketh on a woman to lust after her hath committed adultery" [Bible / Matthew 5:27-28]. Since most men have looked at a woman in lust, this automatically makes them sinners. Similar is the instruction in the Old Testament to not even think of other gods – something that George Orwell would later call a thoughtcrime. Once a man feels guilt, he can confess his guilt – to God or to a priest ([Wikipedia/Confession](#)). Then, he is liberated from his guilt ↗, and feels thankful to his religion. This way, the religion has created an emotional bond between the adherent and its god, even if the god did not lift a finger.

Applies to: Islam

The Quran prohibits numerous things: taking unbelievers as friends (Quran / 3:28), doubting the Quran (Quran 5:101 / 33:36), sexual pleasures outside marriage ↗, not praying (Quran / 9:71), eating pork (Quran / 16:115), looking at the other sex (Quran / 24:31), and not covering up (Quran / 33:59). These rules certainly had their purpose. However, nowadays, one of the effects is that adherents have more rules to follow, and thus more chances to break them. This makes it more likely that the believer feels guilt. The Quran goes on to say that God

observes us continuously (Quran / 4:1, 50:17-18, 8:17), thus enforcing the effect. The release from the guilt comes through repentance (Quran / 2:160, 39:54, 3:135, 25:71, 6:54; [Wikipedia/Confession](#)). Through this mechanism, the religion first instills guilt, and then relieves it. This cycle creates an emotional bond between the believer and the religion ↗.

Applies to: Spiritism

This religion calls upon adherents to abandon selfishness ([Allan Kardec: The Spirits' Book / § 895](#)), and to practice abnegation in order to "combat the Predominance of the corporeal nature" [ibid / § 912]. Since every human is by nature selfish, this is a commandment that cannot be obeyed in perfection.

Applies to: Chinese religions

Far-Eastern societies are usually "shame societies": they tend to use humiliation by the society to punish wrongdoers ([Wikipedia/Shame society](#)). For Confucianism, Confucius wrote: Lead the people with excellence, and put them in their place through ritual practices, and they will gain their own sense of shame, and thus correct themselves [Confucius: Analects / 2:3]. This sense of shame can then be used to maintain a grip on the believer.

This effect is independent of the actual use of the rules for mankind.

Thankfulness

A religion can induce guilt to bind a human to its belief system ↗. One way in which this can be done is by saying that the religion, a god, or a prophet did something for humanity, and that, hence, humanity has to be thankful. This generates a feeling of obligation. The religion can then say that, out of this obligation, we have to follow the belief system.

Applies to: Christianity

This religion knows the concept of the original sin ↗, which says that we inherited sin from our mythical ancestors Adam and Eve. Today, the concept of collectively inheriting a sin is less popular in Europe – partly because people no longer believe that Adam and Eve existed in the first place. Consequently, the idea of original sin is being re-interpreted in different ways ([Wikipedia/Original sin](#)). In the end, the word "sin" may no longer mean the "state of having committed an offense" ↗ ↗. Rather, it becomes a pumpkin word ↗, i.e., a word that evokes connotations, but has no concrete meaning. However, the basic idea stays: People should be thankful to Jesus because he "died for our sins" [Bible / 1 Corinthians 15:3], and thus liberated us from the original sin (in whatever sense). Thus, out of nothing, Christianity has created the need for thankfulness to their main prophet.

Applies to: Islam

The Quran talks repeatedly of the gifts that God gave to mankind: God sends rain to give life (Quran / 16:65), causes the cows to produce milk to drink (Quran / 16:66), made dates so that we can eat (Quran / 16:67), and taught the bee to make cells (Quran / 16:68), so that man may have food (Quran / 16:69). God also produces corn, olives, date-palms, grapes and every kind of fruit for us (Quran / 16:11). When people use these things, they are made to feel as if they were obliged to thank God for them (Quran / 39:7, 21:80, 40:61). Thus, by simply being alive, we have to be thankful. (Never mind that some human ethnicities have a built-in lactose intolerance and thus cannot drink the milk that God made for them ([Wikipedia/Lactose intolerance](#))). We discuss such psychological factors in Islam later ↗.

God is the only being that doesn't require existence in order to rule the world.

By Charles Baudelaire

Remark: This requirement for thankfulness has to be squared with the evil that happens in this world ↗. The pastor Dietrich Bonhoeffer (who has received more than his share of evil as a dissident in Nazi Germany) has advocated being thankful even for the evil in this world ([Wikipedia/Von guten Mächten](#)). This reverence to God is so strong that it bears resemblance to the Stockholm syndrome ([Wikipedia/Stockholm syndrome](#)).

Heavy punishment

When a person disrupts society, the most effective way to stop that person is to kill them. Another quite effective solution is to amputate limbs of that person. This does not only stop that person, but also acts as a deterrent to others. The only things that could prevent us from doing so are compassion ↗, conscience ↗, or force. However, a religion claims to govern all three of them. Therefore, a religion can institute the death penalty or cruel punishment without any obstacles. Now, if we run two religions side by side (one that has cruel punishment and one that doesn't), it is clear that the religion with cruel punishment will have a more obedient and more orderly society. This gives this religion a Darwinian edge over the other. Hence, most major religions that have survived until today have cruel punishments – at least in their scripture ↗ ↗.

Applies to: Islam

The Quran requires cutting off the hands of a thief (Quran / 5:38), flogging for adulterers (Quran / 24:2), crucifixion for "those who wage war against Allah and His Messenger" (Quran / 5:33-34), beating for consistently disobedient women (Quran / 4:34), and the death penalty for those who kill a Muslim (Quran / 4:92-93). Up to this day, these viewpoints are shared by a large proportion of the population in the majority of Muslim lands ↗ ↗ ↗ ↗. Furthermore, the Quran stipulates that if someone was murdered, then someone from the kin of the murderer (who is otherwise unrelated) has to be killed in revenge (Quran 2:178). Thus, the Quran effectively supports kin punishment ([Wikipedia / Kin punishment](#)).

Applies to: Judaism

The Old Testament prescribes the death penalty for Murder, Adultery, Bestiality, Rape of a betrothed virgin, male-male sexual intercourse, not being a virgin on the night of one's wedding, worshiping other gods, witchcraft, taking God's name in vain or cursing his name, cursing a parent, kidnapping, and disobeying a parent [[Wikipedia/Crime and punishment in the Bible](#)]. The techniques to employ are stoning (Bible / Exodus 17:4), hanging (Bible / Numbers 25:4; 2 Samuel 21:6,9), burning (Bible / Leviticus 21:9), stabbing (Bible / Exodus 19:13; 32:27; Numbers 25:7; 1 Kings 2:25,34; 19:1; 2 Chronicles 21:4), and crushing (Bible / 2 Samuel 12:31) ([BibleHub: Punishments](#)). Penalties for lesser offenses include retaliation (the "eye for eye" principle) (Bible / Exodus 21:24,25), and striping (Bible / Deuteronomy 22:18-19, Deuteronomy 25:3). Based on this, Judaism has traditionally known the execution by stoning, burning, slaying, and strangulation ([Wikipedia/Punishment in Judaism](#)). Nowadays, the death penalty is less popular. Orthodox and conservative Judaism hold that capital punishment is correct in theory, but that it should not be applied in practice (*ibid*). Reform Judaism opposes capital punishment (*ibid*). Today, Israel technically upholds the death penalty, but only 2 people have ever been executed ([Wikipedia/Capital punishment in Israel](#)).

Applies to: Christianity

This religion inherited the corporal punishments from the Old Testament. Jesus teaches clemency in these matters, but upholds the law in principle (Bible / Matthew 5:17-20). Paul approves of the death penalty, too (Bible / Acts 25:10-11; Romans 1:32). He also approves of punishing wrong-doers "by the sword" (Bible / Romans 13:4). In agreement with this, both secular and religious Christian rulers have been quite brutal over the course of history ↗. They found no opposition in the scripture. Today, these practices ceased. In Catholicism, torture was abolished in 1965 ↗. However, still today, the US upholds the death penalty.

Applies to: Hinduism

The Laws of Manu require corporal punishment if all other punishments fail ([Laws of Manu / 8 / 58, 129, 139, 310, 320, 364](#)). Beating is on order for punishing a wife, a son, a slave, a pupil, and a younger brother (*ibid* / 299). For adultery (which includes already touching a woman inappropriately, addressing her outside the village, or offering her gifts (*ibid* / 356-357)), the penalty is death (*ibid* / 356) – except for Brahmanas. Brahmanas cannot be put to death (*ibid* / 379). Likewise, Brahmanas cannot suffer corporal punishments (*ibid* / 124). Others can. For example, for "contaminating a maiden", two fingers have to be cut off (*ibid* / 367). For injury, the punishment for the lowest case is amputation (*ibid* / 279). Intercourse across castes is punished by castration or death (*ibid* / 374). Other punishments are shaving with the urine of a donkey (*ibid* / 384). For insulting someone of a higher caste, the tongue is cut out (*ibid* / 270). Generally, amputation can concern can fall on "the organ", the belly, the tongue, the hands, the feet, the eyes, the nose, and the ears (*ibid* / 124). Ways of executing criminals include devoration "by dogs in a place frequented by many" (*ibid* / 371), burning to death "on a red-hot iron bed" (*ibid* / 372), and burning "in a fire of dry grass" (*ibid* / 377). The Laws of Manu are of disputed authenticity. However, this does not change the fact that corporal punishment was used in the Hindu society much in the way that Manu said. Punishments included whipping, branding, mutilation, and execution ([Wikipedia/Danda](#)). Still today, India upholds the death penalty.

Does not apply to: Buddhism

The Buddha says: "He [the layman] should not kill a living being, nor cause it to be killed, nor should he incite another to kill. Do not injure any being, either strong or weak, in the world." [Pali Canon / Sutta Pitaka/ Khuddaka Nikaya / Sutta Nipata / Sn 2.14]. The Dalai Lama, too, opposes the death penalty (Dalai Lama: His Holiness the Dalai Lama Attends the Inauguration of the 80th Sivagiri Annual Pilgrimage in Kerala, 2012-11-25). Nevertheless, historically, most states where the official religion is Buddhism have imposed capital punishment for some offences [Wikipedia/Capital punishment / Buddhism].

Applies to: Confucianism

Confucius explicitly shuns punishment, saying "If you [...] control [people] by punishment, they will avoid crime, but have no personal sense of shame. If you govern them by means of virtue and control them with propriety, they will gain their own sense of shame, and thus correct themselves." [Confucius: Analects / 2:3]. He also explicitly shuns the death penalty, as it is recorded: "Ji Kang Zi asked Confucius [...]"Suppose I were to kill the unjust, in order to advance the just. Would that be all right?" Confucius replied: "[...] what is the need of killing?" [Confucius: Analects / 12:19]. However, the Book of Rites (one of the Five Classics) states that "In all determining on the application of any of the five punishments, it was required to decide according to the judgment of Heaven" [Five Classics / The Classic of Rites / Wang Zhi / 47]. The Five Punishments were tattooing, cutting off the nose, cutting off a limb, castration, and execution (Wikipedia/Five Punishments). The Book of Rites may have been compiled not by Confucius, but by later scholars (Norman P. Ho: Confucian jurisprudence in practice). This, however, does not change the fact that it is today an integral part of Confucianism (ibid). Indeed, traditional Chinese law did use the Five Punishments (Wikipedia/Traditional Chinese Law).

Does not apply to: Spiritism

This religion postdates the Enlightenment. Hence, cruelty is considered "the instinct of destruction in its worst form", which is "never necessary" [Allan Kardec: The Spirits' Book / § 752]. Education is to be given preference over "punishing wrong doing when done" [ibid / § 796]. The death penalty is also condemned (ibid / § 760 ff).

Does not apply to: Taoism

Laotse writes: "To replace the executioner and kill, Is like chopping wood in place of the master carpenter. To chop wood in place of the master carpenter, Rarely one does not hurt one's own hand." [Laotse: Dao De Jing / 74, tr. Ellen M. Chen]. On the contrary, "Heaven arms with love those whom it would not see destroyed" [Laotse: Dao De Jing / 67, tr. Alan B. Taplow]. Consequently, Taoism has a very weakly developed notion of punishment. This did not hinder traditional Chinese law from using amputation as a means of correction, though (Wikipedia/Traditional Chinese Law).

Recruitment

Religious education

Lawrence Krauss has made the following observation: Assume that a particular religion were not taught to children. Then an entire generation would grow up without knowing that religion. If that generation looks into the holy scriptures of this religion, they would find these scriptures baseless, absurd, and revolting – in much the same way that we always find scriptures of other religions baseless, absurd, or revolting. Thus, they would not adopt that religion even in their later life. Crucially, they would also not teach it to their own children. Thus, within a generation, that religion could be wiped out. Hence, all major religions that survived until today place a great importance on teaching the principles of the religion to children.



[Found in: Progressive Secular Humanist]

As we have seen before, children can easily be made to believe almost anything ↗. If the child later finds out that a particular teaching was wrong, the child will stop believing in it. However, since religious claims are usually unfalsifiable ↗, the child will never find out. Therefore, educating children religiously is one of the most effective methods of spreading the faith ↗ ↗ ↗.

Applies to: all major religions

Children are usually educated in the religion of their parents. We have discussed contemporary practices before ↗.

Applies to: Bahai Faith

In the Bahai Faith, children under fifteen do not automatically inherit the faith of their parents (Bahai Works / Laws / 512). At the age of fifteen, Bahai children are free to reaffirm that they are Bahai or, without stigma, to leave the Bahai Faith; neither their parents nor their community may compel them to be Bahai [Bahai Encyclopedia / Children]. Yet, this free choice is to some degree utopic, because "schools must train the children in the principles of religion, so that the Promise and the Threat recorded in the Books of God may prevent them from the things forbidden children" [Bahai Works / Laws / 479].

Fables should be taught as fables, myths as myths, and miracles as poetic fantasies. To teach superstitions as truths is a most terrible thing. The child mind accepts and believes them, and only through great pain and perhaps tragedy can he be in after years relieved of them.

By Hypathia of Alexandria

Target the weak

A religion aims to propagate itself. Here, "aims to" is to be understood in the Darwinian sense, meaning that all those religions that did not propagate themselves have died out ↗. Hence, only those religions that propagate themselves are left today. One particularly effective way to propagate a religion is to preach it to those who are feeble:

- uneducated people. These are more receptive to religion, because they are less likely to verify sources ↗.
- people who live in poverty or suffering. These have a stronger need to appeal to the supernatural ↗. They will also be open to any explanation for their suffering ↗.
- people in despair, such as homeless, single mothers who have trouble with their children, women who have been raped, bankrupt people, people in grief, etc. These people are emotionally vulnerable, and hence more receptive to theories that promise hope ↗ and care ↗.
- people in remorse, such as prison inmates, or other people who cannot live up to their own standards. These will be more receptive to promises of absolution than people who find nothing wrong with their lives ↗.
- the elderly or the ill, or people who suffer because their relatives are elderly, are ill, or have passed away. These people are more interested in theories about death than youngsters ↗. They may also be interested in theories that give a sense to their lives ↗.
- insecure people. These will appreciate the moral framework that religion provides ↗, and the rites that give structure to life ↗.
- foreigners. These are often looking for community, and may be happy to find it in religion ↗.
- children. These are generally more gullible, as we have discussed before ↗.

These people will be more susceptible to a religion than people who are educated, healthy, well-integrated, and happy in their lives. It is true that targeting the weak will not have the big impact that could be achieved by targeting the mighty (such as the kings, government officials, or TV channel operators). However, even if the vulnerable are not mighty, they cannot be ignored if their numbers are large. Thus, the focus on the weak still pays off. This is not to say that people who help the poor would do so with bad intentions. Probably on the contrary. It is just to say that one of the side-effects of this help (intended or not) is that the religion appears more attractive to a larger number of people.

Proști, dar mulți.

(They are dumb, but they are numerous)

By Alexandru Lăpușneanu

Applies to: Christianity

The religion often associates itself with helping the weak, the "fallen", the elderly, the ill, and the poor – following biblical teachings (Bible / Matthew 6:1, Luke 11:41). Therefore, many Christian denominations run

hospitals, orphanages, schools, kindergardens, grief management sites, migrant help centers, emergency relief services, or counseling services ↗ ↗. In most cases, people who voluntarily work in these institutions do so with the intention to help. However, one unavoidable side effect is that the receivers of this work come into touch with the Christian brand. Christianity would certainly have less adherents if it did not constantly reach out to the weak and the poor.

Applies to: Islam

The Quran prescribes giving alms to the poor (Quran / 9:60, 9:5, 2:177, 2:215, 4:8). This rule serves foremost the weak members of society. One of the side effects is that the receivers of such donations will have a positive attitude towards Islam. In other words: the tradition of charity makes the religion more attractive to a larger number of people. The same goes for the Islamic State: it provided services to people – poor or not poor ([Wikipedia/Islamic State](#)). This makes the organization attractive. The Islamic Relief is another example of an organization that helps the poor while at the same time representing a religion. If its only goal were helping people, then there would be no need to carry the word "Islamic" in its name. The volunteers could just join the Red Cross organization. In not doing so, the organization spreads a positive image of Islam around the world. This, in turn, helps the religion. I am not saying this is bad, I am just saying it is happening.

Applies to: Judaism

This religion knows the concept of giving alms as Tzedakah ([Wikipedia/Tzedakah](#)). The Mishneh Torah discusses the practice in Chapter 10:7-14.

Applies to: Hinduism

The Laws of Manu tell us to perform works of charity, and to give when we are asked ([Laws of Manu / 1 / 226-232](#)). Other holy scriptures, such as the Rigveda, the Upanishads, Chandogya Upanishad, the Bhagavad Gita and the Bhagavata Purana, likewise encourage charity ([Wikipedia/Dana](#)). This practice is known as Dana in Hinduism. This tradition helps maintain social stability and the religious status quo. In a country such as India, where 20% of people live below the poverty line ([Wikipedia/Economy of India](#)), Hinduism would not have been so successful if it did not reach out to the poor.

Applies to: Spiritism

This religion encourages giving alms ([Allan Kardec: The Spirits' Book / § 888](#)), even if in a measured form.

Applies to: Buddhism

Compassion is one of the four Buddhist virtues ([Wikipedia/Karuna](#)).

Does not apply to: Chinese religions

I could not find these concepts in the Analects of Confucius or in Taoist texts.

Religions are like glowworms. They need the dark to glow.

By Philaletes in Arthur Schopenhauer's "Dialog about Religion"

Punish apostasy

The act of abandoning a religion is called apostasy. Apostates may become atheists, or adherents of other religions. Naturally, a religion that takes a light stance towards apostasy will lose adherents, and thus risk being run out by other religions. Therefore, all major religions historically punish apostates. The same goes for blasphemers (people who insult the gods) or for people who criticise the religion. A successful religion has to punish such people ↗ ↗.

Applies to: Islam

There are different opinions on whether Islam punishes apostasy by death or not ↗. Here, we just note that the Al-Azhar University (the Egyptian Supreme Council for Islamic Affairs) ([Wikipedia/Apostasy in Islam](#)), all four schools of Sunni Islamic law ([The Economist: No God, not even Allah, 2012-11-24](#)), and the majority of Muslims in Egypt, Jordan, and Nigeria (ibid) are of the opinion that apostasy has to be punished by death. They base their view (rightly or wrongly ↗) on Quranic verses, which tell us to fight for the god of Islam (Quran / 25:52), to kill the unbelievers wherever we find them (Quran / 2:191-193), to strike off their heads (Quran / 8:12), and to fight until all religion is for the god of Islam (Quran / 8:39). This contempt extends to criticism of Islam: The Quran tells us

that we are not allowed to question what Allah or the Prophet Mohammed have decided (Quran / 33:36, 5:101). When someone (Muslim or non-Muslim) criticizes the Prophet Mohammed in public, enough Muslims can be found who call for the death of that person ([Wikipedia/Jyllands-Posten](#)). In this way, nobody (Muslim and non-Muslim alike) is allowed to even think of criticizing Islam in public, thus shielding the religion from critical investigation ↗ ↗.

Applies to: historical Judaism

The Torah tells us to kill apostates (Bible / Deuteronomy 13:6-10), to kill blasphemers (Bible / Leviticus 24:14, 16, 23) and to kill any prophets (Bible / Deuteronomy 13:1). Hence, historical interpretations of Judaism included the death penalty for atheism. This tenet was later dropped, and in contemporary interpretations of the religion, "there is no punishment for leaving Judaism" [[Wikipedia/Apostasy](#)].

Applies to: historical Christianity

Christianity inherited the death penalty for blasphemy and apostasy from Judaism. Jesus affirms the validity of previous laws in principle (Bible / Matthew 15:4), and Paul also approves of them (Bible / Romans 1:25-32). Jesus also clarifies that blasphemy against his particular god is a sin that cannot be forgiven (Bible / Marc 3:29, Matthew 12:31). Therefore, the prevalent medieval interpretation of Christianity included the death penalty for apostates ↗. The Inquisition burned thousands of people at the stake ([Wikipedia/Inquisition](#)). Apostasy remained a punishable offense in Catholic countries until the late 18th century ([Wikipedia/Heresy in Christianity](#)), and in 1826, Cayetanol Ripoll was the last person executed for doubting the Catholic teaching ([Wikipedia/Heresy](#)). Today, Christians live either in countries where they are not the majority (meaning that the state will not punish Christian apostates), or in secular countries (where people enjoy the freedom of religion ↗). Therefore, contemporary interpretations of Christianity that call for the punishment of apostates are rare. Indeed, all mainstream churches have since changed their opinion on this topic ↗.

Applies to: Hinduism

The religion is usually described as not having the concepts of apostasy or heresy ([Wikipedia / Apostasy](#), [Google search](#)). However, the Laws of Manu withdraw all rights from a person who does not pray as prescribed ([Laws of Manu / 2 / 103](#)), downgrade them to the lowest caste (ibid / 11 / 67), and banish them from town (ibid / 9 / 225). They furthermore declare that "forgetting the Vedas" (holy scriptures of Hinduism) is equivalent to drinking hard liquor ([Laws of Manu / 11 / 57](#)), which, in turn, is a mortal sin (ibid / 11 / 55). The Mahabharata tell us that "The rejection of one's own creed, the practice of other people's creed [are] acts that no one should do" [[Mahabharata / Santi Parva / Section 34](#)]. To this day, atheists lack legal recognition in India ([Times of India: Indian atheists seek recognition in the land of a million gods, 2012-06-30](#)). A member of parliament can openly call for the execution of apostates ([International Business Times: India: MP Sakshi Maharaj vows death sentences for Hindus converting to Islam or Christianity, 2015-01-07](#), [Wikipedia / Sakshi Maharaj](#)).

Applies to: Buddhism

The Buddha himself teaches us that "should anyone say of me: "The recluse Gotama does not have any superhuman states, any distinction in knowledge and vision worthy of the noble ones" [then] he will wind up in hell" [[Pali Canon / Majjhima Nikaya / Maha-sihanada Sutta / 21](#)]. This seems to indicate only otherworldly punishments. However, in Indonesia, Buddhist authorities have supported the punishment of blasphemy ([Jakarta Post: Religious groups at odds over blasphemy law, 2010-02-04](#)).

Does not apply to: Chinese religions

Does not apply to: Spiritism

See next article for sources ↗.

Every true scripture only gains from criticism

By Mahatma Gandhi

Shun apostasy

Everything else being equal, a religion that punishes apostates will perform better than a religion that doesn't ↗. Today, apostates can no longer be put to death in countries that implement freedom of religion ↗. What remains in

the religious belief systems is a general negative attitude towards apostates. All major religions condemn, shun, insult, threaten, or ridicule apostates ↗ ↗.

Applies to: Christianity

The Bible prescribes death for the apostate ↗. Apart from that, it tells us that "The fool says in his heart: There is no god. They are corrupt, they have done abominable works, there is none that doeth good." (Bible / Psalms 14:1). Paul encourages us to watch out that none of us "has a sinful, unbelieving heart that turns away from the living God" (Bible / Hebrews 3:12). He also tells us to warn the heretic twice, and then to "have nothing to do with them" (Bible / Titus 3:10), because such people are "warped and sinful" (Bible / Titus 3:11). Jesus wishes that anybody who brings his followers "to stumble" be drowned (Bible / Matthew 18:6). Many contemporary interpretations of Christianity, in particular in the US, have extrapolated this to a general discrimination of atheists. Atheists are excluded from taking a public office in some US states, they are associated with criminality, they are excluded from family and friends, and discouraged as life partners ↗. In Europe, in contrast, such interpretations are rare. In Indonesia, Catholic and Protestant authorities tend to be on the liberal side of the spectrum ([Jakarta Post: Religious groups at odds over blasphemy law, 2010-02-04](#)) – quite possibly because the general spectrum in Indonesia is rather conservative.

Applies to: Islam

Individual verses of the Quran say that apostates will be tortured in eternity (Quran / 98:6) in hell ↗ and in this world (Quran / 3:56), that they may not be taken as friends, and they are "the worst of all creatures" (Quran / 98:6-7 among others ↗). We may believe that these are only individual verses, but statistically speaking, one third of the Quran consist of insults, wraths, and threats against unbelievers ↗. As a consequence, many major interpretations of Islam hold that apostates are dangerous and worthy of death, as we have discussed before ↗ – even if the death penalty is no longer carried out. In many Muslim lands, unbelievers are legally discriminated against, based on the respective interpretation of Islam ↗ ↗.

Applies to: Hinduism

Apart from the punishments that the Laws of Manu prescribe for apostates ↗, heretics may not be greeted ([Laws of Manu / 4 / 30](#)), may not be given water (ibid / 4 / 89), and are generally the mark of darkness (ibid / 12 / 33). Hinduism prohibits apostates from marrying believers ↗, thus implicitly shunning and excluding apostates.

Applies to: Buddhism

Buddhist authorities have requested punishment for blasphemy, as discussed in the previous article ↗.

Does not apply to: Spiritism

This religion was born in the aftermath of the Enlightenment, and hence it argues that man has no "right to set up barriers against freedom of conscience" [[Allan Kardec: The Spirits' Book / § 836](#)]. It is also "a fail in charity" to "scandalise those whose belief is not the same as our own" [ibid / § 839]. As for the relation with non-adherents, the book says: "Let those who consider the facts in question as unworthy of their attention abstain from studying them; no one would attempt to interfere with their belief; but let them, on their part, respect the belief of those who are of a contrary opinion."

Together, prohibition of apostasy, the encouragement to produce many children ↗, the prohibition of interfaith marriage ↗, and the automatic adherence of children to the faith of the parents ↗ are what Thilo Sarrazin calls a "Sperrklinkenautomatik" (ratchet mechanism): the number of adherents of the religion can only increase.

To find out who rules you, simply find out whom you're not allowed to criticize.

By Voltaire

Proselytism

Like a hoax mail ↗, a religion will be successful only if it propagates itself. One way to do this is to encourage people to spread the religion. This activity is called proselytism, and it is part of some religious belief systems ↗.

Applies to: Christianity

Jesus tells us to "go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you" (Bible / Matthew 28:16-

20), and to "go into all the world and preach the good news to all creation." (Bible / Mark 16:14-18). From these verses, mainstream interpretations of Christianity derive what is called "the great commission" ([Wikipedia/Great Commission](#)), i.e., the duty to bring Christianity to other people. Jehova's Witnesses and the Mormons are particularly known for their proselytism.

Applies to: Islam

The Quran tells us to "Invite (all) to the Way of thy Lord with wisdom and beautiful preaching; and argue with them in ways that are best and most gracious" (Quran / 16:125). Inspired by this verse, today's Islam knows "dawah", i.e., the duty to invite other people to Islam ([Wikipedia/Dawah](#)).

Applies to: Bahai Faith

Proselytism is a part of the religion ([Lights of Guidance: Teaching](#)). Bahais who venture into countries to spread the faith are called "pioneers" ([Wikipedia/Proselytism](#)).

Unknown: Spiritism

This religion emphasizes the freedom of conscience ([Allan Kardec: The Spirits' Book / § 836](#)). At the same time, we should "endeavour to bring back into the path of truth those who are led astray by false principles" [ibid / § 841]. This may be understood as proselytizing, in particular given Spiritism's Christian heritage, but the text does not say so explicitly.

Does not apply to: Judaism

This religion is closely bound to the Jewish ethnicity, and does not aim to convert others to the faith.

Varied: Hinduism and Buddhism

These religions have seen proselytism in their history, but this is not a prevalent stance today ([Wikipedia/Proselytism](#)).

Unknown: Chinese religions

I have found no sources on this topic.

Keep the masses stupid

The more educated a person is, the more likely they are to start questioning their religion ↗. Hence, if a religion encourages people to read and learn, it risks abolishing itself. This is what we observe for Protestantism. This denomination of Christianity believes that everybody should read the Bible for themselves. Hence, it has traditionally encouraged people to become literate and to read. Possibly as a consequence, countries with a protestant tradition (Scandinavian countries, Switzerland, United Kingdom, Germany) became educated and literate early on ↗. Today, these countries are also the least religious ones.

Our theory says that religions that oppose education will be more successful. Unfortunately, it is unpopular today to be against education. Hence, a religion can no longer oppose education. On the contrary, most religions say they encourage education. However, we often find that these religions have worked against education in the past, or that they give education a low position in their instructions to believers ↗ ↗ ↗.

Applies to: Catholicism

The Bible contains metaphors that praise the uneducated: It tells us that "blessed are the poor in spirit, for theirs is the Kingdom of Heaven" (Bible / Matthew 5:3). This idea resonated in the story of the Tree of Knowledge (Bible / Genesis 2-3): God punishes Adam and Eve, the mythological progenitors of mankind, for eating from a tree whose fruit gives knowledge; i.e., he punishes them for striving for knowledge. The Bible also encourages us to believe in God with the heart rather than trusting our own understanding (Bible / Proverbs 3:5). This general attitude had very palatable consequences: During the Roman Empire, literacy was widespread in Europe. However, when Christianity (in the form of Catholicism) took over, the literacy rate dropped, and remained low until the power of the Church declined ([Wikipedia/Literacy](#)). The Catholic Church actually prohibited that people read the Bible ↗.

Applies to: Islam

The Quran does not contain verses that encourage people to become literate or to read books other than the Quran. On the contrary, the Prophet Mohammed himself was illiterate (Quran / 7:157, 158) and he made no effort to learn how to read – and the Quran presents him as the perfect role model to follow (Quran / 48:29, 33:21).

According to the Hadiths (whose authority is disputed among Muslims), the Prophet Mohammed called himself "a guardian of the illiterates sent by Allah" (Bukhari, 3:34:335). Another Hadith (Sunan Ibn Majah 5:4290) says that Allah loves illiterate people and hates educated people. He promises the first entry to Paradise to the illiterate Muslims and the last entry to the educated Muslims. The printing press, invented in the 15th century, arrived in the Muslim world only in the 18th century ([Wikipedia/Global spread of the printing press](#)). Today, literacy rates in the Muslim world are among the lowest in the world ↗, and the education in the Arab world is centered around obedience ↗.

Does not apply to: Judaism

The religion has put an emphasis on education ever since Jews were pushed into intellectual professions in the Middle Ages. Possibly as a consequence, Judaism witnesses a substantial number of apostates ([Wikipedia/Jewish population](#)).

Does not apply to: Spiritism

This religion was born in the aftermath of the Enlightenment. It holds that "It is only education that can reform mankind" [[Allan Kardec: The Spirits' Book / § 796](#)].

Does not apply to: Confucianism

Confucius reportedly encouraged his followers to read 10,000 books. In his Analects, he emphasizes learning and reading (Confucius: Analects / 8:13, 17:8, 8:5).

So far as I can remember, there is not one word in the Gospels in the praise of intelligence.

By Bertrand Russell

Rituals

The religious community can give material advantages to its members ↗. The problem is that these advantages also come to people who just happen to live in the community, without actually sharing its values. These are the so-called free-riders. As Aldashev & Platteau explain: The collective character of religious activity implies a free-rider problem that is difficult to overcome by monitoring. However, the free-rider problem can be mitigated by the costly rituals that serve to screen out people whose participation would otherwise be low, while at the same time increasing participation among those who do join. As a consequence, the utility of group members can increase when apparently unproductive sacrifices are required. [[Aldashev & Platteau: Religion, Culture, and Development](#)] These rituals require quite some effort. The costly-signaling theory suggests that this effort pays off: If someone goes through the trouble of following the rules of his religion in every detail, then they signal trustworthiness, responsibility, seriousness, and commitment to the group. The more effort the rules require, the stronger the signal ([Wikipedia/Handicap principle](#)).

The strongest signal at all is suffering (Y. N. Harari: 21 lessons for the 21st century): If you suffer physical harm for your religion (by fasting, self-mutilation, persecution, or martyrdom), then this is the clearest signal that you are a true believer. This is because physical suffering is one of the phenomena that even the most meta-physical thinkers have to accept as truth (lest they be exposed to it). Your suffering convinces not just the others, but also yourself: As soon as you underwent some harm for your religion, you have to believe in it. Otherwise, you would have to admit to yourself and to the others that you are a fool. Therefore, as Harari remarks dryly, the priest does to have to give you rain, health, or happiness – he has to take something away from you.

In this spirit, all religions have developed rituals that are physically unproductive, but serve to display commitment to the community ↗ ↗. We list some of them next:

Applies to: Christianity

with wearing a cross, fasting, and going to church.

Applies to: Judaism

with wearing a kippa, eating only kosher food, and circumcising babies.

Applies to: Islam

with abstinence from alcohol and pork, eating only halal food, sacrificing lambs, and circumcising young boys.

Applies to: Hinduism

with a huge number of rituals that differ from region to region ([Wikipedia / Saskara, Patheos: Hinduism / Rites and Ceremonies](#)).

Applies to: Buddhism

with prayers, meditations, the restriction to vegetarian meals in some cases, and the celebration of Buddhist holidays such as Buddha's Birthday.

Applies to: Taoism

with mediumship, trance, the exorcism of demons, and festivals that can involve hundreds of villages and can be very expensive.

Applies less to: Confucianism

Confucius recommended the worship of ancestors, and the religion knows temples and rituals for the dead, but it does not seem to have prominent rituals that serve no purpose other than showing the faith.

Applies less to: Spiritism

This religion knows rituals to get into touch with the spirits, but these seem to be driven out of a desire to contact these beings rather than showing faith. There exist Spiritualist Churches, though, which fulfil that purpose ([Wikipedia/Spiritualism](#)).

The anthropologist John Tooby hypothesizes that the rituals are not just physical, but also mental: Some religions assert outright incoherent beliefs (such as "God is one and three at the same time", or "God helps the faithful"), and their purpose could be to display solidarity. Preposterous beliefs are more effective signals of coalitional loyalty than reasonable ones.

Anyone can say that rocks fall down rather than up, but only a person who is truly committed to to the brethren has a reason to say that God is three persons but also one person

By Stephen Pinker in "Enlightenment Now", p. 359

Remark: This principle may also be at work in religious or non-religious communities that subscribe to a common position – be it on climate change, evolution, or vaccination. A person's opinions on climate change or evolution are astronomically unlikely to make a difference to the world at large. But they make an enormous difference to the respect that a person commands in their social circle. [...] Coming out on the wrong side of an issue can be [social] suicide. [Stephen Pinker: Enlightenment Now]. In this spirit, the adherence to a common mantra (even if only half-heartedly) can serve the purpose of social cohesion.

Intellectual Strategies

Unfalsifiability

In the terminology of this book, a religion is a set of beliefs ↗. Such a system can make predictions about the world ↗. The predictions can be verifiably true. In that case, the theory (or the sub-theory that makes these predictions) is a theory of science ↗. The theory can also make false predictions. For example, Jehova's Witnesses predicted the end of the world for 1914. When this failed to happen, they lost adherents. They updated their prediction to 1918, and later to 1925 – each time without success. Such false predictions make adherents leave the religion. They make the religion less competitive in comparison to other religions that do not make such predictions. Hence, making predictions is a tricky business for religions.

The safest strategy is if the religion makes no predictions at all. Equivalently, the religion can make only unfalsifiable predictions ↗. Unfalsifiable predictions have the advantage that nobody can find out whether they are wrong. Hence, most religions that have survived until today make only unfalsifiable predictions ↗.

Applies to: Christianity

The religion postulates the existence of a god, which is unfalsifiable. It also says that the end of the world is "near". Since it does not predict a fixed date, this prediction is unfalsifiable.

Applies to: Judaism, Bahai Faith, Islam

All of them postulate the existence of a god, which is unfalsifiable.

Applies to: Hinduism and Buddhism

These postulate that bad deeds will have bad consequences ("Karma" theory ↗), but are sufficiently vague to make this claim unfalsifiable.

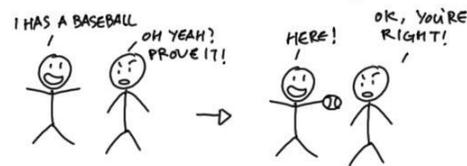
Applies to: Confucianism and Taoism

These postulate the existence of a supra-system ↗, called "Tao" or "Heaven". This supra-system is called powerful, ordered, awe-inspiring, and un-describable – but no concrete predictions can be derived from it.

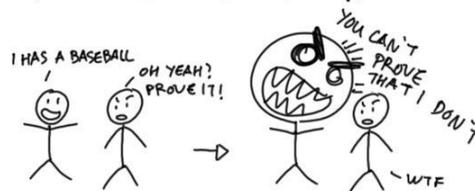
Applies to: Spiritism

Spiritism is based on purported physical manifestation of spirits ↗. Thus, its statements are falsifiable (it suffices to ask the spirits again and get a different answer). However, Spiritism, too, falls back on the unfalsifiable for the definition of its world model: "What appears like a void to you is occupied by matter in a state in which it escapes the action of your senses and of your instruments" [Allan Kardec: [The Spirits' Book / § 36](#)].

CONVENTIONAL LOGIC



RELIGIOUS LOGIC



[unknown source]

Assume equivalence

If we encourage people to study different religions, they might become more critical towards their own religion. One strategy that religions have developed to avoid this is to claim that the other religions are just variants of one's own religion ↗.

Applies to: Christianity

There is a prevalent opinion in the West that all religions essentially believe in the Christian god, just in different forms. This is not true ↗, but still a popular belief.

Applies to: Islam

Islam holds that all people are born Muslims, and that their initial true beliefs are then corrupted by society.

Applies to: Bahai Faith

The basic tenet of this religion states that all religions basically say the same thing, and that the Bahai Faith reunites them all.

Applies to: Hinduism

This religion encompasses so many different beliefs, gods, and traditions, that it is a prevalent opinion that other religions are just special cases of this system. For example, Indonesia is a predominantly Muslim country. Hence, its constitution requires that people worship one "Supreme Being" (presumably the Muslim God). Now, the Island of Bali is part of Indonesia, but it is Hindu. Hindus worship several gods, or several facets of a godhead ↗. To solve this problem, the supreme being was just added to the canon of Hindu gods, and Hindus on Bali worship the supreme being together with the other deities.

Applies to: Spiritism

Spiritism argues that "all religions teach you that the souls of the departed continue to see you; but they regard your afflictions from another point of view" [Allan Kardec: [The Spirits' Book / § 976](#)].

Remark: Even if these religions all claim that the other religions are mere variations, only the Bahai Faith and Spiritism draw the consequence of this and let their adherents marry adherents of the other religions ↗.

Claim an illusion

Religions have to explain to their followers why the other religions exist. One way to do that is to claim that these other religions are just wrong variants of one's own religion ↗. In addition, one can claim that the other religions have been deliberately created by the higher powers of one's own religion ↗. This turns the existence of the other religions into a proof for the power of one's own spirits ↗.

Applies to: Islam and Christianity

Christians believe that Jesus was resurrected from the dead. The Quran, in contrast, tells us that Jesus was not really resurrected. God only made it seem as if Jesus were resurrected (Quran / 4:157-158). Thus, God fooled the Christians ↗.

Vice versa, Christians believe that the Quran cannot be divine, because it denies the divinity of Jesus. Rather, a prevalent Christian opinion was as follows: The Quran was falsified on the way down by the devil. God gave his message to the Prophet Mohammed, but the devil intervened and corrupted the message, so that it seemed to the Muslims that the message was divine while it was not. So the devil fooled the Muslims. ([Wikipedia/Medieval Christian Views on Mohammed](#))([Wikipedia/Criticism of Muhammed / Middle Ages / Tultusceptra de libro domni Metobii](#))

Applies to: Islam

Whenever another religion claims a miracle, Islam can say that these miracles were done by the Jinns – the spirits of Islam ([Wikipedia/Jinn](#)).

Applies to: Judaism

If a prophet from another religion performs a miracle, then this is done only by the Abrahamic God to test his followers (Bible / Deuteronomy 13:1-5).

Applies to: Christianity

The Bible urges Christians not to take miracles by non-Christian prophets as proof of existence for other gods (Bible / Revelation 19:20, Matthew 24), presumably in continuation of the previously mentioned Jewish principle.

So there are a billion Muslims who think that all the Christians are delusional. And there are two billion Christians who think all the Muslims are delusional. Would you consider, at least for a moment, the possibility that all three billion of you are delusional?

By [WhyWontGodHealAmputees.com](#)

Give a sense of life

Yuval Noah Harari hypothesizes in his book "21 Lessons for the 21st Century" that a religion (or, in fact, any ideology) has to provide a kind of story that explains the world. This story has to have two properties:

1. It must be bigger than the life of an individual person, i.e., it must encompass a nation, the world, or the universe
2. It must provide a role for the individual believer. Each individual person must have an important contribution to that big story.

As it so happens, this is what the major religions do ↗.

Applies to: Abrahamic religions

The abrahamic religions offer several stories that give people a reason to live ↗, and all of them reserve an important role for the individual: One story goes that God created humans to praise him. So every single human is called to serve that one higher being. Another story goes that life is a big test for the afterlife. God cares about each individual, and wants to see whether each particular person deserves going to Heaven. Yet another story goes that God has a big plan for humanity, in which we all must play our part ↗ ↗.

Applies to: Buddhism and Hinduism

The Indian religions hold that we exist to go through a cycle of rebirths, until we are finally pure enough to reach Nirvana ↗. Again, the story is of cosmic dimensions, and yet there is a chance to reach Nirvana for every single one of us.

Applies to: Hinduism

In Hinduism, the universe is a cosmic puppet theater, in which people are assigned roles by the gods ([Wikipedia/Lila](#)). Unfortunately, the religion does unfortunately not tell us what our role is [↗](#). Thus, our goal is to find that role, and to play it. Again, there is a story of cosmic dimensions, in which each of us has their contribution to make.

Applies to: Confucianism

In Confucianism, the cosmos is in an equilibrium, and every being contributes to that equilibrium by following the rites.

Most people who seek their identity are just like children who seek a treasure. They find only what their parents have hidden for them.

By Y.N. Harari in his book "21 lessons for the 21st century"

The only solution

A religion can bind its followers if it presents itself as the only solution to the problems of life, society, and philosophy [↗](#). This typically takes the form of rhetoric questions or of claims. Examples are:

- Where else can we find refuge if not in God?
- If you don't believe in Allah, then what else do you believe in?
- Only religion can help our society get back on track [↗](#).
- The only reasonable explication for the decadence in our society is the decline in religiousness.
- Our religion is the only guarantee for morality in our society [↗](#).
- What could be the sense of life, if not following God? [↗](#)
- What else can provide hope other than Heaven?

Such hypotheses play on the fact that the question is easy, but the reply is complex. You cannot answer the above questions with a single word or a single sentence. However, since the religion typically provides a comprehensive moral framework and model of the universe and society [↗](#), it can provide such a one-word answer. This makes the religion an attractive kill-it-all solution. This effect is reinforced if people know only one religion [↗](#). In such settings, the religion can claim a monopoly on the solution of problems or on the meaning of words ("sense of life"). Unfortunately, this trick can also be played with any other ideology. It has been played, e.g., with Nazism as well ("Who else could help us now, if not Hitler?").

In a variant of this scheme, religion is presented as the guarantor of moral decency. Apostasy is seen as a slippery slope towards drug consumption, pre-marital relationships, and moral hazard in general. Religious ideologues do their best to portray "the outside" as immoral and dangerous [↗](#).

Applies to: most major religions

Most major religions have variously been presented as the only solution to the problems of life and society.

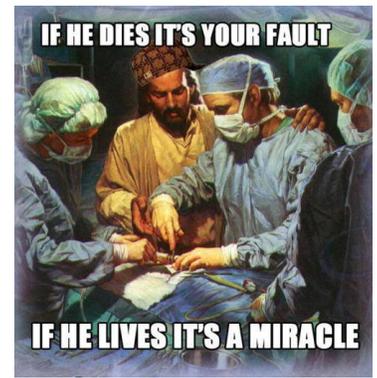
God's glory

In our life, there will be bad things and good things. If a religion promises that there will be only good things, then it will lose those people who experience bad things. A religion will be more convincing if it can explain and justify both good things and bad things. One particularly successful strategy is to say that the good things come from the main deity, while the bad things happen with a deeper purpose. This way, the glory of the deity can only increase: If something good happens, it shows the power and benevolence of the deity. If something bad happens, it shows that the deity is so smart that it can do things whose positive effect we cannot see. Thus, reality works like a double-acting reciprocating pump: both bad things and good things (forward and backward movements) increase the belief in the deity. Such a theory is, of course, unfalsifiable [↗](#), because it just reconciles a posteriori whatever happened with the supposed intention of the deity. It can never be used to predict what will happen.

Applies to: Christianity

In popular interpretations of this religion, good things are ascribed to God or Jesus. When a bad thing happens, this is either (1) a punishment from God, thus showing the justness of God, or (2) a necessary condition to make

something good happen, thus showing the ultimate benevolence of God ↗, or (3) the fault of the human. It is never the fault of the god (Bible / John 9). This way, the name of the god is kept clear of all reproaches. The idea goes further: A popular belief goes that before heaven comes, we must experience disaster. Since we do, this is interpreted as evidence of the truth of Christianity. Believers will view any deterioration of the situation as confirmation of the prophecy, and any improvement as a gift from God [Ralf Dobelli: The Art of Clear Thinking / Chapter 12]. We discuss God's benevolence in detail in the [Chapter on the Abrahamic God](#).



[anonymous]

Applies to: Islam

The Quran tells us that whatever good comes to us, is from God. Whatever bad happens to us comes from ourselves (Quran / 4:79). This way, God takes the glory for all positive things, while rejecting the responsibility for the negative things. Problems in life also have their purpose: they are a test of one's belief (Quran / 2:155-157). Thus, everything that happens, good or bad, can be seen as a proof for God. We discuss other psychological factors of Islam later in this book ↗.

Applies to: Buddhism and Hinduism

These religions believe in Karma ↗, i.e., the idea that good deeds will entail good things in life, and bad deeds will entail bad things – either in this life or in the next. This is assured by a supra-system ↗, which issues these rewards and punishments either in this life or in the next. Thus, whatever happens can be interpreted as a proof for the existence of this supra-system: If something good happens, this shows that the supra-system rewards good people. If something bad happens, this shows that you must have done something bad in the past, and that this is your punishment.

Applies to: Spiritism

In this religion, earthly life is a trial ([Allan Kardec: The Spirits' Book / § 920](#)). "If a righteous man undergoes misfortune, it is a trial from which, being bravely borne, he will reap a rich reward" [ibid / § 926] – most likely in the afterlife or a different incarnation. Thus, either God bestows happiness upon us (in which case he is evidently a good god), or he bestows sorrows upon us (in which case we will reap a rich reward, and God is also a good god). Hence, no matter what happens, God is always good.

In the United Kingdom, the adjectives "Royal" and "National" are often used synonymously. Note, however, that we talk about the "Royal Mint" (giving glory to the King), but about the "National Debt" (diverting blame from him).

By William Cobbett, paraphrased

Remark: I have summarized this way of reasoning in a Romanian poem called "[Dovada](#)" ("The proof").

Flexibility

Religions typically present themselves as eternal value systems. However, the values of society change. For example, slavery was accepted during much of humanity's history. Today, it is shunned. If a religion prohibits slavery, it would never have gained popularity in ancient times. If it allows slavery, it risks being abandoned in modern times. Therefore, only those religions that are sufficiently vague in their moral tenets can survive through the ages.

This book does not say that the current interpretations of these religions would be false ↗, or that the previous interpretation would be correct. The book just says that major religions have had different interpretations over time ↗.

Applies to: Christianity

The Bible contains both the loving God (in the Old Testament) and the punishing God (in the Old Testament). Therefore, Christians could find support for different theses in their book ↗. For example, slavery was once completely accepted, and defended as the normal state of affairs, based on Bible verses. Today, slavery is

shunned – also based on Bible verses ↗. We discuss other cases where Christianity changed its mind in the [Chapter on Christianity](#).

Applies to: Catholicism

This denomination of Christianity has a harder time to adapt its tenets, because the Catholic Faith is defined explicitly and exhaustively in the Catechism of the Catholic Church. Still, also this leaves some leeway. For example, abortion is considered a sin. However, in 2015, the Pope declared that, for one year, priests would be allowed to forgive abortion. Thus, even though abortion remains forbidden, it became de facto easier for believers to perform it ↗.

Applies to: Islam

The religion has seen different interpretations based on the translations of the Quran ↗, the abrogation of verses ↗, the dependence on context ↗, the choice of Hadiths ↗, the schools ↗, and the interpretation of the Quranic verses ↗. Followers of Islam had and have different opinions on slavery, the role of women, or apostasy ↗.

Applies to: Judaism

The Hebrew Bible abounds with instructions to execute criminals – by stoning, hanging, burning, stabbing, and crushing ↗. Judaism traditionally used stoning, burning, beheading, and strangulation ([Wikipedia/Punishment in Judaism](#)). However, Reform Judaism has declared retro-actively that "Both in concept and in practice, Jewish tradition found capital punishment repugnant" [[Annual Convention of the Central Conference of American Rabbis: Resolution 1979, 1979-03-29](#)].

Applies to: Hinduism

This religion is based on ancient books that have led to different view points. For example, the Laws of Manu present the caste system as the natural order of things ([Laws of Manu / 1 / 87-91](#), [Laws of Manu / 3 / 13](#)). However, newer readings of ancient texts say that the caste system was never a part of Hinduism (see picture).

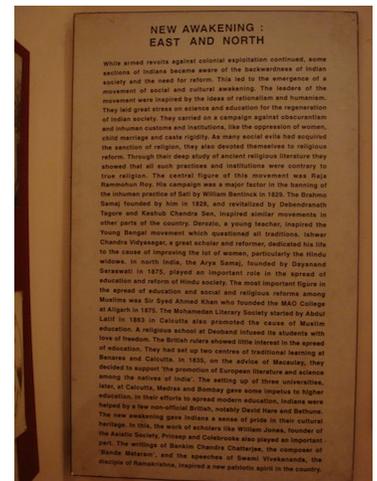
Applies to: Spiritism

While God's laws are considered eternal, man's laws change.

Vox populi, vox dei.

(The voice of the people is the voice of god.)

By anonymous



"Through deep study of ancient [Hindu] religious literature, they found that all such practices [oppression of women, child marriage, and caste rigidity] were contrary to true religion."
[Picture taken in the Palace Museum in New Delhi/India; click to enlarge]

Chapter on the Abrahamic God

Introduction

The Abrahamic religions [↗](#) all share belief in a single god. This god is called "the abrahamic god", or simply "God" [↗](#). This chapter discusses the following aspects of God:

- [History of God](#): Discusses how God evolved over the centuries.
- [Attributes of God](#): Discusses attributes that are commonly ascribed to God, such as omniscience, omnipotence, etc.
- [The Loving God](#): Critically analyses the idea that God would love us.
- [Interaction with God](#): Looks at prayers and other ways in which people interact with God.
- [God's Benevolence](#): Discusses how God can be benevolent.
- [The Problem of Evil](#): Treats the question how there can be evil in this world if God is both benevolent and omnipotent.

This chapter complements the general discussion about gods in the [Chapter on Gods](#).

The History of God

The origin of God

As we have discussed before [↗](#), the abrahamic god was conceived by the Israelites – the people of Israel. The Israelites originally worshipped 4 gods: El, Yahweh, his consort Asherah, and Baal. In 605 BCE, the area of Israel was conquered by Babylonia. Many Israelites were taken captives. Shattered by this event, the Israelites concluded that only one of their four gods was the right one, and that the captivity was the punishment for worshipping the other gods. They settled on Yaweh, and started worshipping him alone. This was the birth of the religion of Judaism [↗](#).

In around 30 CE, Jesus of Nazareth started preaching that Yaweh was a loving god. His followers founded the religion of Christianity [↗](#) on his preachings.

In 700 CE, Mohamed declared that he had revelations from Yaweh. This marked the birth of the religion of Islam [↗](#).

In the 19th century, several prophets emerged in Persia, declaring that Yaweh was in fact the god of all religions. This belief became the Bahai Faith [↗](#). Later, Spiritualism [↗](#) would evolve as a religion that worships God and believes in the spirits of the dead.

All of these religions trace their origin to the beliefs of the early Jews. Since Abraham was an important prophet in the Jewish stories, the god of these religions is nowadays called the abrahamic god [↗](#). Although all abrahamic religions hold that the god is the same [↗](#), the character has accumulated different contradictory properties throughout history, which we detail next.

How God became loving

The Jewish God

The abrahamic god appears first in around 1000 BCE [↗](#) in the Torah, the scripture of Judaism [↗](#). In that book, he is a revengeful character [↗↗↗↗↗↗↗](#). We can hypothesize that this is because the writers of the Torah lived in a

rather brutal society – with the law of retaliation, cruel punishments, and more premature deaths in general. Hence, the writers also imagined their god this way.

The Christian God

In around 30 CE, Jesus of Nazareth entered the stage, as the founder of Christianity ↗. He taught that God was a loving god ↗. To do that, he could simply have declared the old god obsolete, propagating the new god as the right one. This, however, would not have earned him many adherents at the time. It would also have been punishable by death as blasphemy ↗. Hence, Jesus preferred to use the existing god, and to give him a new face: that of a loving god. The god was now forgiving, generous, and gentle. This is how he entered the New Testament, the scripture of Christianity. This scripture was appended to the Torah, yielding the Bible.

The Muslim God

700 years after Jesus, the Prophet Mohammed founded the religion of Islam ↗. This religion took over some of the concepts of Christianity. For example, the Quran also mentions the loving god (Quran / 85:14). However, the main inspiration for Islam was probably Judaism: The muslim god is as brutal as the original one of the Torah ↗ ↗ ↗ ↗ ↗ ↗ ↗ ↗.

The Enlightened God

History took its course, and the renaissance came. After some centuries, the renaissance gave rise to the Age of Enlightenment. Values such as the equality of sexes, the ostracism of brutal punishments, and freedom of religion found their way into the society. Hence, religions that were founded after that age had to accommodate these new values. The Bahai Faith ↗ entered the stage in the 19th century. To legitimize itself, it took over the existing abrahamic god from Shia Islam. However, given the progress of society, the Bahai Faith could no longer uphold the pre-modern values that were originally attached to the abrahamic god. Hence, the Bahai God rejects references to race (rampant in Judaism ↗ and Islam ↗), rejects the superiority of one religion over the others (ubiquitous in Islam, Judaism, and Christianity), and emphasizes charity, neighbourliness, and the equal value of all religions. Spiritualism ↗ is the latest of the major abrahamic religions. Since its founders lived in a Christian environment, they took over the Christian god ↗. Much like the Bahai Faith, though, it had to accommodate the values of the Enlightenment. Therefore, Spiritualism supports also the equality of sexes, freedom of religion, and equal respect for all religions. The problem is, of course, that these newer religions still carry the baggage of the old god. Even in Spiritualism and in the Bahai Faith, God is the one who erased the whole of mankind in a flood (as told in the Torah ↗). Thus, even these religions worship a baby-killer.

Vice versa, the age of Enlightenment did not leave the older abrahamic religions unaffected. Judaism has evolved markedly, and has renounced brutal punishments ↗. Christianity, likewise, has recently turned towards freedom of religion. Some denominations have even abolished hell as a physical place ↗. Islam as well is now portrayed by its liberal front-runners as the precursor of the Human Rights. Much like the newer abrahamic religions, though, these three religions still carry the baggage of the brutal god that was originally created for the Torah.

How God became universal

God was initially conceived as the God of the Jews. He was interested mainly in a single people and a single land (Bible / Deuteronomy 14:2; Exodus 19:5; Bible / Deuteronomy 7:7-8; Y. N. Harari: "Sapiens").

Jesus liberated the god from his focus on the Jews and Israel. In his religion, God is a universal god, in which all mankind should believe. This is in tune with the general pattern that gods become more omniscient and more universal once a society becomes more complex ([The Economist: Big people, big gods, 2019-03-21](#)).

Islam sits between the two: It also knows the universal god. However, since Islam originated in Arabia, the Muslim God takes a special interest in the Arab people. For example, he explicitly sent the Quran in the Arabic language (and not, say, in Latin or English) for the Arabs (Quran / 12:2; Quran / 44:58).

The conversion of the Jewish god into a universal god has led to awkward situations in history: Christians persecuted the Jews, even though their god considers the Jews the chosen people. Muslims and Jews, too, have their tensions.

The Quran explicitly calls upon Muslims not to take Jews as friends (Quran / 5:51), and curses them (Quran / 5:64). The existence of Israel, in particular, remains a point of contention. At the same time, Islam inherited the special interest of God in the Jews from the Torah: God promised them the land of Israel (Quran / 5:21, 17:104).

How the Devil joined

When the abrahamic God was first conceived, he did not yet have the devil as his opponent. There is no mention of the devil in the Old Testament or the Torah.

The devil appeared only in the centuries before the common era. At that time, Judaism was influenced by Zoroastrianism ↗. As a classical dualist religion ↗, Zoroastrianism knows a good deity (Ahura Mazda) and an evil deity (Angra Mainyu). This idea was missing in Judaism, and it seems to have impressed the Jews. It is hypothesized that Judaism took up the idea of the evil deity, and incorporated it as the Satan into its theology ([Wikipedia/Satan](#)). He was identified a posteriori with the snake from the garden of Eden. Nowadays, the devil has his established place in the theologies of Judaism, Christianity, and Islam.

One of the reasons for this late arrival may be that the Abrahamic God used to be a very human god, with characteristics such as anger, evilness, and hate ↗↗↗↗↗. Let us not forget that it was God himself who chased humanity from Eden. Only later God became a loving god ↗. When that happened, the evilness on Earth ↗ could no longer be explained by God's anger. Therefore, the devil was needed: He is the one who is the source of evil. (Never mind that since everything comes from God, the devil is no exception. God himself created the devil and gave him free reign over humanity.)

Y. N. Harari offers an interesting thought on the devil in his book "Sapiens" (p. 248): Monotheistic religions have the disadvantage that they cannot explain why there is so much evil in this world if there is only one power, and that power is good ↗. Dualist religions, in contrast, cannot explain why there is order at all in this world (such as the laws of nature, which bind both the good and the evil god). The creation of the devil stroke a compromise in this respect.

When the Saints start marching in

The abrahamic religions are monotheistic, i.e., they know only a single god. However, both Christianity and Islam took inspiration from the polytheistic societies around them: Both religions know, in some of their flavors, patron saints. In Christianity, the saints are revered in several denominations. In Islam, the saints are called Wali ([Wikipedia/Wali](#)). These are spirits of deceased heroic men and women (i.e., spirits of the dead ↗).

Saints are not gods, i.e., they do not have universal power. However, they are believed to be able to influence God by prayers. Hence, people sometimes pray to them, so that they influence God in their favor. In this way, the saints take the role of the gods in polytheistic religions (Y. N. Harari: "Sapiens", p. 245).

How God became abstract

The abrahamic god was originally designed as a hero: he punishes the evil people, helps the good people, and is generally responsible for the working of the universe. The figure thereby satisfies man's desire to obtain justice ↗, to influence fate ↗, to justify suffering ↗, and to see a meaning in life ↗.

In the pre-scientific times of the early abrahamic religions, this worked well: People could easily believe that their god answers prayers, punishes the wrongdoers, and explains the working of the universe ↗. In recent times, however, critical thinking and scientific reasoning have become more commonplace. With this thinking, it became more and more clear that the God character does not really punish wrongdoers, and he does not always help the good people either ↗↗↗. Furthermore, we now know more about other peoples, about other religions, and about historical events ↗. With this knowledge, it is no longer so clear why the abrahamic god should be the only possible and most natural supernatural entity. Most importantly, the advances of science have put forward that God did not create life and people as originally imagined by the authors of the Torah ↗. In all these domains, it became more and more clear that the pre-scientific character of the abrahamic god required an update.

Some denominations of the abrahamic religions have nevertheless stuck with the pre-scientific god – most notably the conservative flavors of Islam and Christianity. However, many mainstream flavors of the abrahamic religions have reacted by making God more abstract: He no longer intervenes physically in this world ↗, he did not really literally create the first humans ↗, and he is quite possibly not the only way to salvation either ↗. Thus, the God character has changed from a physical hero to an abstract concept.

God over time

We have seen that the image of God changed over time: God was first brutal, and is now loving ↗; God was first local ↗, and is now universal; God was first alone, and now has a devil ↗; God is the only god, but people can now also pray to saints ↗; God used to be a physical hero, but is now rather an abstract concept in many mainstream denominations ↗; God is a single God, but became a godhead ↗ of 3 spirits in Christianity.

This change over time can be explained as follows: The scriptures of the abrahamic religions (Torah, New Testament, Quran, books of the Bahai Faith, Allan Kardec's works) can be seen as a series of novels. The novels were written in different epochs, by different people, and with different audiences in mind. And yet, for practical reasons, the main hero of the novels is always the same (God). This entails that the hero of these stories has accumulated his contradictory properties over the past 3 millennia ↗.

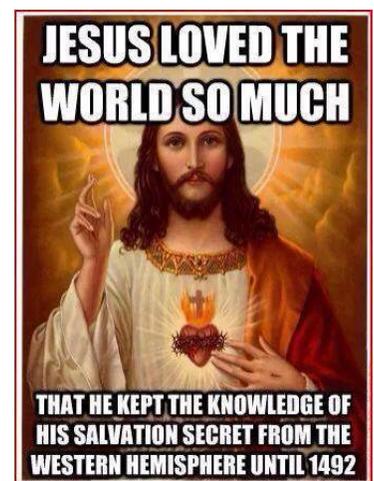
You can compare this evolution of God to the comic book hero Tintin: The Tintin books were written in the early 20th century. Hence, they mirror the society of that time. They contain occasional racist prejudices, animal cruelty, and an apologist attitude towards colonialism. These attitudes are nowadays considered outrageous. Therefore, the offending pages of the books were redrawn in the late 20th century ([Wikipedia/The Adventure of Tintin / Controversy](#)). The novels about God suffer from the same problems – even more so since the moral standards do not deviate by a mere 100 years, but by 3 millennia. However, the stories about God cannot be rewritten, because they are considered eternal. Therefore, the adherents of the abrahamic religions are stuck with the contradictions ↗.

Attributes of God

Revelation

The abrahamic god was revealed to mankind through prophets. Judaism knows several prophets, such as Moses or Abraham. These prophets are usually dated to the millennia before common era. Christianity adds Jesus as a prophet. Jesus is assumed to correct the messages of the previous prophets. Islam recognizes the other prophets, and adds Mohammed as a prophet. Mohammed is considered the last prophet. The Bahai Faith acknowledges the previous prophets (also of non-abrahamic religions) and adds two more prophets, the Bab and Baha'u'llah, which override the previous ones.

According to the latest scientific theories, humans have existed for about 200,000 years ↗. It is therefore surprising that God waited for 190,000 years before sending his message ↗. Egyptians have been building pyramids and worshipping other gods for centuries before the abrahamic prophets appeared ↗. Why would God deprive these people of the divine message, just because they lived too early? Furthermore, it seems strange that God would reveal himself through prophets. A prophet is arguably one of the most inefficient ways to send mankind a message. If the message is given to a single person only, it will never reach the entire mankind. Even under the best of all circumstances, a religion with a prophet will take centuries to expand from the place of the prophet to other societies, countries, and continents. This is indeed what we see: There are hundreds of religions on Earth, and none of them has reached the entire globe ↗. Why would God deprive people in other places of the divine message?



[Found in: [Progressive Secular Humanist](#)]

Furthermore, the choice of prophets was clearly suboptimal: The prophets belonged to some enslaved desert people (Moses), lived in some occupied land at the periphery of an empire (Jesus), were illiterate (Mohammed), or lived in a country that persecutes his followers (the Bab and Baha'u'llah). Only the Bahai prophets actually had the idea of writing their message down in a book right from the start. All the others had their message written down after their death. In such settings, it is obvious that the message will be distorted or mis-interpreted. Indeed, most religions have formed several denominations, spin-offs, and sects, each with a different interpretation of the messages ↗. Moreover, sending successive prophets is bound to lead to confusion and conflict. If all prophets came indeed from the same god, then each prophet should have announced and authorized the following one. Yet, the believers of each prophet can always show proof that the next prophet is a false prophet ↗. Furthermore, each prophet usually claims that he is the last one, and that the other prophets are false prophets, or that their messages are obsolete or distorted. As a consequence, several religions have sprung up, one for each new prophet. This is certainly not what the sender of the prophets intended.

If you are omnipotent ↗ and omniscient ↗, then the easiest and safest way to send mankind a message would be to implant it in their minds right from the start. Alternatively, you could print copies of your holy book and deliver it free to every household. However, God expects us to wait for, identify, and interpret messages he sent to individual people in the desert. This is rather implausible.

Atheists consider it more plausible that the prophets just made up their stories of divine revelation. Some did this out of good intent, others out of spiritual experiences, and again others out of a desire for power ↗ ↗. Since the prophets grew up in an Abrahamic environment, they ascribed their stories to that god. They tried to legitimize themselves by claiming continuity from the previous prophets ↗ ↗. Their stories were then picked up, mystified, enhanced, and written down by their followers ↗. There were probably hundreds of prophets (and there still are), but only the most plausible, imaginative, or belligerent stories found enough followers to produce a religion ↗.

*Mohammed! Jesus! Hear thou me
The truth nor here nor there can be.
How should our God, who made the sun
Give all his light to only One?*

By Abu L-ala Ahmad b. Abdallah al-Maarri, adapted

The Abrahamic Revelations

Revelations are a very inefficient means to spread a message ↗. To see this, look at the revelations in the Abrahamic religions: The Hebrew Bible announces a messiah (Bible / Deuteronomy 18:15), and Christians believe that this messiah is Jesus. However, the Hebrew Bible also says that the messiah will bring peace on Earth (Bible / Isaiah 2:4), that he will stem from King David (Bible / 11:1) (which Jesus does not, because he stems from God), and that he will unite the people of Israel (Bible / Isaiah 11) – all of which has not happened. Furthermore, the Hebrew Bible states that God is unitary (Bible / Deuteronomy 6:4), that no-one shall contradict or amend God's law (Bible / Deuteronomy 12:32), and that we should be weary of false prophets who do miracles (Bible / Deuteronomy 18:18-22). Therefore, the original chosen people, the Jews, believe that Jesus is a false prophet.

For Christians, Jesus is the messiah. At no point of time, Jesus talks about another God-sent messenger. On the contrary, he urges Christians not to take miracles by non-Christian prophets as proof of existence for other gods (Bible / Revelation 19:20, Matthew 24). He says that he himself will return, as son of God, on the clouds of Heaven (Bible / Matthew 24:27-31). This is why Christians do not see why would God send another messenger, Mohammed, out of the blue. Saying that God did not know this would be necessary is not an excuse, because God is omniscient. Muslims say that the verses of the Bible were corrupted, and that Mohammed has come to correct the word of God ↗. But then, Christians do not see why God waited 600 years to correct the message. Therefore, Christians accuse Muslims of following a wrong prophet.

For Muslims, Mohammed is the last prophet. Hence, they do not believe that the Bab and Baha'u'llah (the prophets of the Bahai Faith) are real prophets. The Bab and Baha'u'llah say that the teachings of the previous prophets were valid for their respective times only, and that they are the new prophets. Yet, Mohammed was very clear that his message was for eternity. Hence, Muslims in some countries persecute the Bahais as heretics ([Wikipedia/Persecution of Bahais](#)).

All of this does not look like the work of an omniscient god. Rather, it looks like individual people deciding that they want to be prophets, and trying to legitimize themselves by the preceding prophets.

Omniscience and Free Will

The abrahamic god is omniscient. This means that he knows everything. This notion entails the problem of free will ([Wikipedia/Argument from free will](#)):

If God knows everything, he also knows what we humans will do. This means that our lives are predetermined. We have no way to do something that God does not already know we will do. This means that we humans are not free to do what we decide, but that we can only decide what God knows we will decide. This entails that we do not have free will. If we do not have free will, then our entire moral system collapses. A murderer is not free to choose to abstain from the deed, because he has to do what God knew he would do. If he is unable to abstain from the deed, then how can we punish him? Furthermore, most religions require free will in order to voluntarily adhere to the faith. If a person cannot decide out of their free will to adhere to the religion or to abandon it, then how can God punish those who abandon it? After all, they did not have the choice.

We may argue that God knows everything, but not what we humans will decide. But then, he knows basically not much. Most of the things that happen to us in life are due to some decisions by ourselves or by our fellow humans.

This is why omniscience looks implausible to many atheists. Personally, however, I do not find this argument convincing. The argument says that if God knows that a human will make a certain choice, then the human cannot act otherwise. Thus, the human does not have free choice. Theists can argue that God's knowledge does not determine a person's will. It just correlates perfectly with the person's will. God knows that I will make a particular choice if and only if I will indeed make this particular choice. But this does not mean that I would not have the free will to make this choice as I wish. If God knows that I will not change my mind, then, as it happens, I will not have the desire to change my mind. Thus, free will and God's knowledge are not in contradiction in my view.

This becomes even more clear with the notion of free will that this book proposes [↗](#). For this book, human behavior is just the consequence of chemical processes in the brain. We call these processes "free will" only because they are so complex that we cannot predict them. However, the chemical processes are ultimately deterministic. Thus, God could theoretically know all these chemical processes. Then God would know how we decide, but we would still have as much free will as we have now. Therefore, the notion of divine omniscience and human free will are not contradictory.

There are other properties of the abrahamic god, though, that lead to contradictions. Read on.

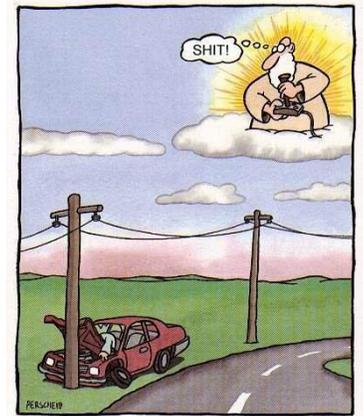
Omniscience and God's Free Will

The abrahamic god is omniscient and omnipotent. This leads to a contradiction: If God is omnipotent, then he should be able to change the future to an "alternate future" that is unknown to him. This, however, conflicts with his omniscience ([Wikipedia/Argument from free will](#)). Thus, the omniscient God cannot have free will.

In the Bible, God is actually not very omniscient. He did not foresee what men would do on Earth. When he saw what evil man did, he deeply regretted having created mankind:

The Lord saw that the wickedness of man was great in the earth, and that every imagination of the thought of his heart was only evil continually. And the Lord was sorry that he had made man on earth, and it grieved him to his heart.

By Bible / Genesis 6:5-6



[Perscheid]

Omnipotence

The abrahamic god is omnipotent. This means that he can do everything. It entails, however, some paradoxes:

If God is all powerful, then can he create a task that he cannot solve? For example, can he create a stone that is so heavy that he cannot lift it? Or can he create a being that is more powerful than himself? If he can create such a thing, then he is not omnipotent. If he cannot, then he is not omnipotent either ([Wikipedia/Omnipotence paradox](#)). Common answers to this conundrum say that God cannot create something that contradicts logic. For example, as C. S. Lewis has argued, God cannot draw a squared circle. Furthermore, he cannot do anything that goes against his own nature. This, however, makes him no different from us humans.

More interestingly, if even God is bound by logical constraints, then this lifts logical constraints and reasoning to an important level of power. If logic binds God, then we should study logic rather than God. This is, coincidentally, a central tenet of Humanism [↗](#).

The Loving God

The Accessible God

The abrahamic god loves all people. However, as J.L. Schellenberg has argued, God makes it very hard to find the way to him. Even some people who seriously try to believe in him, just cannot do it. Belief is not something that you can do like clapping your hands. It is something that you can try, but that ultimately has to come to you. To some people, it has not come, even though they have seriously tried. It just does not click. And then they become atheist. I, the author of this book, consider myself an example: I was brought up in a Christian environment, prayed regularly, was a Church boy, and believed what I was told about God. So I was in good faith [↗](#). The conditions were favorable for a religious attitude. Yet, never could I establish a personal connection to God. It appears that God does not allow everybody to find his way to him. This, in turn, contradicts the idea of the ever-loving God.

We may argue that Christianity is possibly just the wrong religion. However, the same problem appears also in the other abrahamic religions ([Wikipedia/Argument from non-belief](#)).

We may argue that the atheists just did not try hard enough to find God. But then the question comes up why they should have to try so hard at all. If God is "loving", then why do people have to try so hard to find their way to him? We may argue that God loves us, but makes it hard for us to approach him in order to educate us. This, however, is not what we usually mean by the word "love". Consider, e.g., a loving parent. As Schellenberg has argued, the perfectly loving parent will, insofar as she can help it, see to it that nothing she does ever puts relationship with herself out of reach for her child. God, however, deliberately put himself out of reach. If parents acted this way, we would not call them ever-loving.

Therefore, God is not ever-loving in this sense of the word. Calling such a behavior "loving" is a hijacking of the term [↗](#). "Love" is just the wrong word for this kind of behavior. It is a pumpkin word [↗](#). "Apathy" is the word to describe God's behavior.

I am eager to find thee, and do not know not thy place.

I desire to seek thee, and do not know thy face.

I was created to see thee and not yet have I done that for which I was made.

By Anselm of Canterbury

Remark: Anselm, your writing is beautiful, but your conundrum has a very simple solution. Read on!

The loving God

God is said to love us. Yet, there is little sign of divine love in reality. Many people suffer. In most societies, religious people have no better life than secular ones. Globally speaking, religious people suffer even more than secular people ↗. Adherents have come up with lots of explanations for this, ranging from the desire to granting us free will to the idea of upholding higher principles ↗.

And yet, if you love someone, you will behave very differently from the god. If, e.g., you see someone attacking your child, then you will do your utmost to help her. No talk of granting free will to the attacker, love for the attacker, or higher principles will hold you back. This is the basis of love: the unbridled desire to help the beloved. Yet, God shows no such behavior. In fact, God shows complete indifference. Some people do well in life, others do badly, some are hit by acts of God, others are not – independently of prayers, religiosity, or ethic behavior ↗.

Therefore, the word "God's love" is a void word ↗. It does not mean anything. It has no consequences. If someone loved you the way God loved you, then you would not call that love ↗. You would call it apathy. This may be the reason why the abrahamic religions insist so much that God is loving. Without this explicit insistence, nobody would believe them ↗.

*If I could stop a person from raping a child, I would.
That's the difference between me and your god.*

By [Tracie Harris](#)



Whenever a Christian tells me I should praise God because he created us; I think to myself.. God apparently created the earth, but the wars, starvation, and hatred is our problem and we have to fend for ourselves. We spend years working to make things better, and when things are, it was all God who did it.

In the same way, a father has a child, and leaves it on the street. Someone comes and picks him up, and nurtures it. He works hard and goes through college. Imagine now, the father comes up to the child and tells him to praise him because he created you and gave everything to you. Even though, he did nothing and you had to work for everything you have in life.

God is so good.

[evangelical Pastarism]

Hell

The abrahamic god is ever-loving, benevolent, and good. At the same time, abrahamic traditions have it that God puts sinners into an extraordinary cruel place called Hell ↗. According to common understanding, people suffer ostensibly in hell, they are deliberately tortured, and some will never be able to get out of it again.

While this idea seems just and plausible at first, it is much less so if we think it through. Imagine that we as humans tortured our criminals. We could, e.g., grill them on fire until they faint from the pain. Then, we would let them recover, and repeat the procedure (as is done in some North Korean concentration camps). While this may lead to initial satisfaction, this satisfaction quickly turns into horror. The cries of pain, the view of a bound human being subjected to cruelty, and the smell of burnt flesh will urge any but the most emotionally crippled to rush to help,

and stop the horror. Indeed, torture is today widely outlawed and shunned ↗. Even the most notorious criminal may not be subjected to torture ↗.

Not so for God. God still enjoys torturing his enemies. This is not because he would be obliged to: God created hell in the first place, he created the rule that humans be tortured there, he decides the time they spend there. It would be easy for him to stop this folly with his omnipotence ↗. But he doesn't. Thus, God remains as cruel as the cruelest of us, just that his omnipotence and perfection allow him to torture his victims much more systematically than we humans could ever do it. This is in shocking contradiction to the assumption that he would be benevolent, loving, and moral.

Furthermore, God's extraordinarily long lifespan allows him to torture people in eternity. There is no way these people will be liberated from their pain. While this seems just at first sight, it is much less so at second thought. Suppose that a criminal kills a person. We will put him in jail for life, i.e., around 50 years. Now suppose that he killed 1000 people (which is about what a single human can achieve with current technical means). Then 50,000 years looks plausible. But 1 million years, 1 billion years, or 100 billion years? These look completely out of balance. And yet, that is only a tiny portion of the infinite time this person will spend in hell.

We may argue that the sinner acted out of his free will. He deliberately chose his actions, and knew what he was facing. Yet, even if the sinner sinned deliberately, eternal suffering is a punishment that is out of proportion. Even the sinner is a human. He has made the wrong decision – as millions of us do every day. No matter what a sinner did during 80 years of earthly life, we would not consider it just to subject him to billions of years of suffering. That would literally be an overkill. In fact, most of our own criminals get free before their time. We call that "mercy". This reminds us that God is supposed to be merciful, too – as well as benevolent, loving, and moral. Apparently he is less so than us.

We may argue that this description of hell is just symbolic. Most notably, some Christian denominations have recently abolished the physical fire of hell ↗. However, the symbol of hell is unequivocally assumed to stand for something that is at least as bad as what the words tell us. The suffering is maybe not physical, but it is still a suffering, and it is still eternal. Thus, this interpretation does not solve the contradiction of hell and God's benevolence. We may also think that hell itself is just a myth, and that God just threatens us with it so that we behave well. Yet, hell is depicted quite graphically in the Quran and also in the Bible. Hoping that all of this turns out to be invalid is a very lame strategy. It would also beg the question what else of our religious theories is invalid. Last, even just the threat of torture is a crime in our human legislations.

We may argue that God ultimately pardons the sinner. Yet, even that is not given. For Islam, the Quran makes it very clear that unbelievers cannot find mercy – ever (Quran / 4:18, 4:48, 4:116-117, 4:137, 5:72). The Bible, too, explains that the torment is eternal (Bible / Revelation 14:11, 2 Thessalonians 1:9). Jesus agrees (Bible / Matthew 25:46, Matthew 25:41, Matthew 18:8), and identifies in particular blasphemy as a sin that cannot be forgiven (Bible / Marc 3:29, Matthew 12:31).

This leaves us with the problem of hell as a substantial contradiction to God's benevolence, mercy, justness, and love ([Wikipedia/Problem of hell](#)). To atheists, it looks as if the writers of the time just codified their imagination of eternal justice in the holy books ↗. Since then, society has moved on. The holy books, however, have not ↗.

How is the Christian hell in anyway different from a concentration camp for dissenters?

By Arno Schmidt

Mock executions

The abrahamic god is revered as ever-loving, benevolent, and just. However, scripture tells us a different story of God. According to the Bible (Bible / Genesis 22:5), God asks Abraham to sacrifice his son, Isaac. Abraham brings his son to the altar, and ties him up. He puts him on the wood and brings a knife. He wants to slay him, and then burn him. In the last minute, an angel of God stops Abraham.

This popular story is in reality a disgusting cruelty ↗. A father is asked to slay his own son. Nobody in his right mind would call such an instruction benevolent and loving. Assume that you see someone who is about to slay another person on an altar. Would we not immediately rush to help? Would the excuse "I am doing it because God instructs

me so" make the act any more pardonable? Certainly not. We would declare such a person insane. This is indeed what has happened: a Texan mother who said that God wanted her to kill her children was jailed as insane ↗. And yet, in the Bible, that person is not considered insane. On the contrary, he is a hero. He is so much of a hero that he became the eponym of the entire group of Abrahamic Religions. God, who gives the instruction, is revered as the loving lord of humanity. What an absurdity!

Now scroll forward by two millennia, to the 14th century. When another lord instructed a father to kill his son, the lord was not praised as the wisest and most loving being ever. On the contrary, people rightly concluded that this lord was insane. The story sparked a rebellion against the lord, and the guy was overthrown ([Wikipedia/William Tell](#)).

We may argue that God prevented the slaying of Isaac in the last minute. This, however, does not excuse him. How are a father and a son ever to trust each other again when the father tried to kill the son? Pretending to kill someone is called a mock execution. Usually the victim fears for their life, cries, makes uncontrollable movements, and pleads for their life ([Wikipedia/Mock Execution](#)). Hence it is used as a device of psychological torture. It entails severe traumata, anxiety, and stress disorders. When the CIA used such techniques on prisoners, it was not met with adoration. Nobody praised the CIA for not killing the prisoners, but only simulating their death. On the contrary, the practice was condemned all over the world – even if the victims did not die. This is because the threat itself is a crime. Thus, praising God for the story of Isaac is a glorification of violence ↗.

People argue that God just wanted to make a point with Isaac, and say that he no longer desires human sacrifices. That, however, is not true. His prophets continued to make human sacrifices even after the story of Isaac ↗.

Human Sacrifices

God desires human sacrifices: After the story of Isaac ↗, Moses sacrifices 32 prisoners as "tribute unto the lord" (Bible / Numbers 31:25-40). Jephthah sacrifices his daughter to him (Bible / Judges 11:29-40, [Wikipedia / Jephthah](#)). Human sacrifices are used to end a famine (Bible / 2 Samuel 21:1, 8-14). Priests are being sacrificed (Bible / 2 Chronicles 34:1-5). Finally, his own son is sacrificed (Bible / Hebrews 10:10, 1 Corinthians 5:7). In all of these instances, God is either apathetic or pleased with the sacrifices. In the 2nd Book of Samuel, God actually ends the famine in response to the sacrifices. Thus, he approves of them.

Human sacrifices are a deeply abominable act. Any being that desires such sacrifices, or that desired such sacrifices in the past, deserves our utmost disgust ↗.

The only excuse for God is that he doesn't exist.

By Stendhals

Genocide

The Bible tells us about the Great Flood, an event in which God had so much rain pour down that the entire world was flooded (Bible / Genesis 6-9). Only one family survived, because God instructed them to build an ark. This story tells us that God deliberately drowned the entire humanity along with all animals (except those who were on the ark). With that, God makes Hitler look like an amateur [[WhyWontGodHealAmputees.com](#)].

We may say that God drowned humanity because humans were very sinful. Yet, that is no excuse. First, the death penalty is a highly disputed instrument of punishment, and the majority of countries have banned it today. Second, the flood drowned babies along with all the others. Babies are innocent beings. Killing babies is a crime called infanticide. It is widely shunned today ([Wikipedia/Infanticide](#)). Third, drowning is a particularly agonizing form of death ([Wikipedia/Drowning](#)): The victim struggles against being submerged in the waters, screams for help, swallows water, becomes unconscious, possibly conscious again, cannot breathe, breathes water, and finally dies. Hence, drowning is outlawed even in countries that permit the death penalty. Thus, whatever the ancient people did, there is no excuse for killing the entire humanity by drowning ↗.

It is true that God gives humanity the rainbow after the massacre, and vows to never destroy humanity again. This can be seen as a sort of apology (even though God does not actually say that he is sorry). He goes on to present himself as the god of love in the New Testament ↗, and all the violent past is put behind. However, the destruction

of humanity is nothing that can be swiped under the rock. His change of mind does not make God perfect or benevolent in any way. If Hitler said he was sorry for his genocide, would we revere him as a wise and just ruler? We should certainly not.

*Kill a man one is a murderer.
Kill a million, a conqueror.
Kill them all – God.*

By Jean Rostand

Other killings

The Bible tells us how Moses received the 10 Commandments from God (Bible / Exodus 32). One of these 10 Commandments is, famously, "Thou shall not kill". And yet, right after receiving this rule, Moses does exactly the opposite, upon God's instruction. When Moses discovers that the Israelites have been worshipping a golden calf, he orders them to kill each other: "This is what the Lord, the God of Israel, says: Go back and forth through the camp from one end to the other, each killing his brother and friend and neighbor." The Levites did as Moses commanded, and that day about three thousand of the people died. [Bible / Exodus 32:27-28] This is in blunt contradiction to the law that God just gave Moses. When Moses has a conversation with God in the follow-up of the massacre, the mass murder is not even mentioned. God cares only about the people who worshipped the calf.



[Found in: Progressive Secular Humanist]

God himself commits numerous other murders, killing children (Bible / Exodus 12:28), enabling genocides (Bible / Isaiah 13), drawing up plans where mass murders happen (Bible / Jeremiah 49:20), ripping open pregnant women (Bible / Hosea 13), commanding the killing of thousands (Bible / Numbers 31), killing dozens of thousands of people by his own hand (Bible / 2 Kings 19:35),

The book "Drunk With Blood" includes a separate account for each of God's 158 killings. These stories fill the pages of the Bible, yet they are seldom read in Church. This is a shame because God is so proud of his killings: "I kill ... I wound ... I will make mine arrows drunk with blood and my sword shall devour flesh." [Bible / Deuteronomy 32:39-42]

These cases are accompanied by a list of other stories where God retaliates against men with anger and violence ([Wikipedia/Divine retribution](#)). In all of these cases, God appears revengeful, brutal, and heartless. As Richard Dawkins opinions in his book "The God Delusion": the God of the Old Testament is arguably the most unpleasant character in all fiction: jealous and proud of it; a petty, unjust, unforgiving control-freak; a vindictive, bloodthirsty ethnic cleanser; a misogynistic, homophobic, racist, infanticidal, genocidal, filicidal, pestilential, megalomaniacal, sadomasochistic, capriciously malevolent bully. And yet, this god is revered as the most loving being by more than half of the world's population.

I don't know whether God exists, but it would be better for his reputation if he didn't.

By Jules Renard

Brutality

We have now seen cases where the abrahamic god ordered mock executions [↗](#), demands human sacrifices [↗](#), committed a genocide [↗](#), and committed other killings [↗](#). He behaves thus in an extraordinarily violent way [↗](#).

Since these stories are shared between the abrahamic religions, this image of God appears in Christianity, Judaism, Islam, Spiritualism, and the Bahai Faith. Christianity adds the New Testament. In these books, God appears in a much more positive way: He makes a bond with mankind, and talks of love and forgiveness. However, this new

image cannot clear away the brutalities in God's past – in particular because he never apologized for them. The God that Christians worship as the loving ruler is the same god who once wiped out the entire humanity in rage ↗.

We may say that the stories of the flood and the killing Isaac did not really happen, but that they are merely metaphors. But then we have to ask what these metaphors stand for. The metaphor of a god who drowns his own creation in the waters cannot mean something good. So no matter whether we see the story as symbolic or not, God is presented as a vengeful and violent creature. And even if he does not exist at all (which is what atheists hold), glorifying such a murderous being is still despicable ↗. It says a great deal about those who admire such a being.

From an atheist point of view, the stories of the Bible are just mythical tales ↗. The story of the flood is a recurrent theme in ancient myths. It appears in Greek mythology, in Sumerian mythology, and in Maya tales ([Wikipedia/ Great Flood](#)). Maybe these people found seashells or fish fossils in inland areas, and thus concluded that the Earth was once covered with water. Or they experienced a flood in their history, and tried to explain and justify the calamity with reference to their respective gods. It is easier to live with a calamity if one can believe that there was a just reason for it ↗. Apart from this, ancient value systems were based more on retaliation than they are today. This made it natural to ascribe a trait of revengefulness to the gods, and thus a flood appears as a perfectly understandable device. In the meantime, humanity has evolved, and drowning mankind is mostly no longer seen as a responsible option. The story, however, has stayed ↗.

Why should I allow that same God to tell me how to raise my kids who had to drown his own?

By Robert G. Ingersoll

Interaction with God

Thanking God

In the abrahamic world view, people should thank God for all the good things in their life ↗. Prayers regularly involve thanking God for life, health, friendship, or happy events.

Yet, this concept leads us to a conundrum: We can only thank God for something, if God was responsible for that thing. It would not make sense, e.g., thank our husband that the weather is sunny today. Thus, we conclude, thanking God implies that God is responsible for the good things in life. Now, if God takes responsibility for the good things in life, then he also has to take responsibility for the bad things in life: natural disasters, genetical diseases, and the misconceptions of nature ↗. And he does: "I form the light and create darkness, I bring prosperity and create disaster; I, the Lord, do all these things" [Bible/Isaiah 45:7]. Thus, God explicitly takes responsibility also for the calamities. Therefore, when we thank God for the good things in life, we should also blame him for the bad things. And there are many such bad things ↗.

Thus, we have the choice between two alternatives: Either God is responsible for things on Earth. Then we would have many more things to reproach him than to thank him for. Or he is not responsible for things on Earth. Then we should not thank him.

Therefore, the idea to thank God is absurd.

*He delivered Daniel from the lion's den
And Jonah from the belly of the whale
And the Hebrew children from the fiery furnace
So why not every man?*

By the gospel "Didn't my Lord deliver Daniel?"

Remark: Judging from the gospel, it seems that many people ask the same question. We do not know the answer to this question. From this, believers and atheists draw different conclusions.

Praising God

In the abrahamic world view, people should praise God for his grandness. God explicitly asks us to praise him (Quran / 51:56; Bible / Mark 12:28-31; Torah/Deuteronomy 6:4-9). This is maybe most obvious in the Lord's Prayer, which God himself prescribes for Christians (Bible / Matthew 6:9-13, Luke 11:2-4): "Our Father who art in heaven, hallowed be thy name. ".

We first observe that there are quite a number of evil things in life for which God does not deserve praise at all ↗↗. But leave these things apart. It is still bizarre that people are required to praise God. If God is almighty, wise, and magnanimous, then why does he need the devotion of us humans? He should be above it all. Yet, he seems to ardently need our devotion and gratitude. He even explicitly asks for it. Thus, he cannot be as self-reliant and magnanimous as is commonly assumed. To see this, assume that there is a king, who grants you a job for life. You are very happy. Now also assume that the king comes to your house every day and asks you to worship him, praise him, and thank him for his great idea of giving you a job. Would you call such a person generous and modest? Certainly not! That person is insecure and self-obsessed. Therefore, we would never praise such a person. And it is the same with God.

If God were really magnanimous, he would not need our praise. If he were really modest, he would not ask for it. Therefore, the abrahamic god appears rather narcissist to atheists – and thus not worth our praise. As David Hume argued: It is an absurdity to believe that the deity has human passions, and one of the lowest of human passions, a restless appetite for applause.

People can argue that the praise for God just serves our own well-being. Yet, this is a modern idea. It appears nowhere in the holy scripture. Besides, it does not work: The places that praise God most are actually the most miserable ones on Earth ↗.

*Honest grandness needs no praise.
La vraie grandeur méprise la gloire.
Wahre Größe scheut den Ruhm.*

Ascribing attributes to God

In the abrahamic religions, it is common to ascribe positive attributes to God. God is loving, just, wise, and merciful. These ascriptions are repeated in songs, prayers, and masses. People celebrate these attributes of God.

Atheists wonder why people do that. If God is loving, just, wise, and merciful, then why is it necessary to repeat this all the time? If it is so obvious, as the religions say, then why is it necessary to tell it to everybody?

Compare this to scientists. Scientists do not gather every Thursday evening in the laboratory, join hands, and sing "Yes, gravity pulls us down to Earth! Yes, her force is greater than ours!". This is because these truths are obvious and accepted. They are obvious and accepted, because everybody who thinks otherwise is quickly proven wrong by the facts.

The attributes of God have no such advantage ↗. I can assume that "God is merciful", and I can assume that "God is not merciful", and it will change nothing in my life. Hence, atheists suspect, people have to repeat the attributes of God just to convince themselves of them. This is because the physical evidence points against the loving god rather than in his favor ↗.

Some people say homosexuality is a sin. It's not. God is perfectly cool with it, God feels the exact same way about homosexuality that God feels about heterosexuality. Now you might say, "Whoa, slow down. You move too fast. How could you have the audacity, the temerity, to speak on behalf of God?" Exactly, that's an excellent point and I pray that you remember it.

By Ted Alexandro

Praying to God

In the abrahamic religions, people pray to God ↗ ↗ ↗. People ask God to heal an illness, to protect them from misfortune, or to grant wishes.

Atheists wonder why people pray. First, if God is omniscient, then he knows their wishes anyway. So what is the purpose of asking him? Second, God has a certain plan for each of us. By praying for something, we ask God to deviate from that plan. This means that we do not trust God with his plan. Why do we not trust the almighty? As Thomas Paine wrote "For what is the amount of all prayers, but an attempt to make the Almighty change his mind, and act otherwise than he does? As if [man] were to say: Thou knowest not so well as I." [Thomas Paine: The Age of Reason] Third, by praying, we assume that God has an influence on Earth. This makes him immediately liable for most of the evil that happens on Earth ↗. God would be himself responsible for much of the evil that we pray to be saved from. In the cases of diseases or natural disasters, such as earthquakes, tsunamis or volcano eruptions, God caused the evil in the first place. Then, it is unreasonable to expect that he would protect us from the consequences.

If we assume that God does have an influence, then it is still strange that humans are expected to pray to God. If you see a man hit in a car accident, you rush to immediate help. Everything else would be unethical, and probably illegal. Now assume that you rush to the site of the accident, and then first expect the victim to pray to you. That would be sadistic. And yet, this is the role that God takes in the abrahamic religions. He is almighty, omnipresent, and omniscient, and yet the abrahamic religions suggest to pray in order to earn his mercy. Now, back to car accident. Suppose the victim does pray to you. If you still refuse to help the victim, you would act outrageously arrogant and irresponsible. And yet, this is what God does. He does not help, even if is asked to. Despite billions of prayers, there is no evidence that they would change anything in this world ↗. This makes the abrahamic god an arrogant and pitiless creature.

*For every player who credits God for the win,
a player from the opposing team can logically blame God for the loss.*

By Neil deGrasse Tyson



Praying is hilarious.
Surely he knows what you want already?
"I just want to hear you say it! Beg!
that's better. I'll think about it"

God's Benevolence

Perfection

The abrahamic god is considered the perfect being. This means that he as well as his creation is without fault. Unfortunately, the world is full of fault. We have seen some examples in the [Chapter on the Universe](#), and we discuss some more here ([Wikipedia/Argument from poor design](#)):

- Some species, such as the **Neanderthal man** or dinosaurs, came into existence, but then went extinct. If the design of the world were perfect, then a species would not have been created only to disappear.
- The **recurrent laryngeal nerve** connects the brain to the larynx. Both brain and larynx are in the head. Yet, the nerve passes down the neck to the heart, then back up through the neck into the larynx. In a giraffe, this leads to several meters of nerves to connect two organs that are just a few centimeters apart.
- Nature is full of **vestigial structures**. These are structures that may have served a purpose earlier in evolution, but are now completely useless. The mole rat, e.g., has eyes, but these are completely covered by a layer of skin, so that the animal is blind ([Wikipedia / Spalax](#), [Wikipedia / Vestigial](#)).
- Humans exhibit **optional vestigial structures**. These are structures that are present in some humans, but not in all. These structures do not serve a purpose – as is evidenced by those humans who do not have them. The Occipitalis Minor muscle, e.g., in the back of the head, serves no purpose. While all Malays have it, only 36% of Europeans have it – without suffering from its absence. Similar examples are the palmaris longus muscle, the pyramidalis muscle, the plantaris muscle, and supplementary nipples in males and females ([Wikipedia/ Supernumerary nipple](#)).

These designs are not perfect, in the sense that they do not add functionality, but often cripple the beauty, health, or well-being of the organism that is concerned. Thus, God's creation is not perfect, and hence neither is he. There are also some more serious examples of imperfection:

- If a baby's head is significantly larger than the pelvic opening of the mother, the baby **cannot be born naturally**. Prior to the development of caesarean section, such a complication would lead to the death of the mother, the baby or both. This is hardly a perfect design.
- The human **spinal cord** is often malformed, leading to scoliosis, sciatica and congenital misalignment of the vertebrae.
- People suffer from all kinds of **congenital diseases** and genetic disorders such as Huntington's Disease.
- **Myopia** is widespread and is a problem for people all over the world
- Humans have an extra pair of teeth, which serve no purpose and are prone to produce medical complications – the **wisdom teeth**.
- People have a natural disposition to love fat and sugar. While this was useful for cavemen, it leads to **obesity** today. Obesity is one of the main health problems in rich and poor countries alike ([The Economist: The caveman's curse, 2012-12-15](#)).

We may argue that some of these phenomena may just appear imperfect to us, but are part of a grander plan that is unknown to us, but perfect. Let's go with this argument. Now if something is perfect, then it requires (by definition) no perfection. Then why do we perform caesarian sections, pull out wisdom teeth, wear glasses, and fight obesity? If the original is perfect, then it requires no further perfection. Let us not wear glasses, let us have the mother die at birth, and let us not pull out wisdom teeth! Obviously, this proposal is nonsense. Even believers wear glasses. Thus, they perfect God's creation. Thus, God's creation is not perfect.

We may argue that God is not "perfect" in the sense we would think. For example, for God, a human with supplementary teeth can be perfect. But then, "perfect" is just the wrong word. It is a pumpkin word ↗. It seems to mean something, but it doesn't mean anything. We should rather use another word (such as "arbitrary"), or abandon the claim altogether ↗.

For my part, I am unable to see any great beauty or harmony in the tapeworm.

By Bertrand Russell

Perfection and Benevolence

The abrahamic god is considered perfect and benevolent. Unfortunately, the world is inherently brutal.

By nature, many species can only live if they kill other animals ↗. This entails that the life of any carnivore is a continuous chasing, tearing apart, and guzzling of other animals. Every single animal chased means the fear of death, the pain of being killed – and a life destroyed. All carnivore existence continuously tortures other animals. As Robert G. Ingersoll said: In nature, every mouth is a slaughter-house and every stomach is a tomb.

But the food chain is not the only source of cruelty: Some spider species eat not just their prey, but devore also their mates. When lions take over a harem, they secure the dominance of their own genes by slaughtering the entire population of baby lions in the group. Some wasps lay their eggs in their prey without killing it, so that the larvae eat their host slowly alive. Malaria is a disease transmitted by mosquitos. Every year, hundreds of thousands of people die an agonizing death caused by that disease ([Wikipedia/Malaria](#)). Until 1910, one percent of mothers in the US died in child birth. Giving birth was about as dangerous as having breast cancer today [Steven Pinker: Enlightenment Now, p. 57]. It is perverse to call that design "perfect" and that God "benevolent".

If God designed nature, then he designed it inherently brutal. If creation is as he wishes, then he cannot be benevolent. If creation is not as he wishes, then he is not perfect.

*Whatever in nature produced the antelope, produces the tiger;
whatever produced the woman produced the [...] cancer;
whatever gave the child its beauty created the germ of diphtheria.
Most of us prefer not to ascribe intelligence to that creative power.*

By Joseph McCabe

Benevolence

The abrahamic god is considered benevolent. We have already seen that the world is brutal by "design" ↗. Yet, there are also individual instances of brutality.

William L. Rowe gives an example of natural evil: "In some distant forest lightning strikes a dead tree, resulting in a forest fire. In the fire a fawn is trapped, horribly burned, and lies in terrible agony for several days before death relieves its suffering." (see picture). Other examples of natural evil include cancer, birth defects, tornadoes, earthquakes, tsunamis, hurricanes, and other natural disasters. People and animals get injured, ill, or killed by such events. This causes a great deal of suffering not just for the victims, but also for their offspring and family.

If God is benevolent, then he wishes to prevent such suffering. If he is omnipotent, then he is able to prevent the suffering. He does not. Hence, he cannot be both benevolent and omnipotent.

*What does it mean to "trust in God"
if I have to lock my car either way?*



Deer caught in a wildfire
[Picture taken by John McColgan]

Benevolence and Humans

The abrahamic god is considered benevolent. Humans, in contrast, are rarely benevolent. Humans commit murders, they rape and steal, they slander and lie. So we ask ourselves where this evil stems from.

In the abrahamic world view, there are several possible answers to this question:

1. Humans have a natural predisposition for evil acts, and not enough force to control themselves. However, God created humankind with this predisposition. Thus, God himself put the seed of evil in us. In Christianity, this is also mirrored in the Lord's Prayer. It says: "lead us not into temptation" ([Bible / Matthew 6:13](#)). It is clear that God is the agent here, who leads people into temptation. Thus, he is the one who makes us do evil things.
2. Humans are good, but are seduced to do evil by the devil. However, God created the devil (or he created him as an angel and allowed him to go astray). Thus, God himself created the source of human evilness.
3. Humans are good, but became evil when Adam and Eve ate the forbidden fruit in the garden of Eden. However, God, in his omniscience knew that the two would eat the forbidden fruit. Yet, he did not do anything to prevent it. Furthermore, it was God himself who created the forbidden fruit as source of all evil. He could have simply abstained from this idea. Thus, God himself co-caused human wickedness.

Thus, no matter how we turn the argument, God remains the source of human evilness. This is true anyway in a theistic world view, because God is the cause of everything. Thus, he is also the cause of human evilness. Hence, he cannot be benevolent.

*God says do what you wish, but make the wrong choice and you will be tortured for eternity in hell.
That's not free will. It's like a man telling his girlfriend, do what you wish, but if you choose to leave
me, I will track you down and blow your brains out. When a man says this we call him a psychopath.
When god says the same we call him "loving" and build churches in his honor.*

By Chuck Easttom

Remark: In 2017, the Pope proposed a different translation of the phrase "And do not lead us into temptation", which rather reads "do not let us fall into temptation" ([Reuters: Pope wants better translation of phrase on temptation in "Our Father" prayer, 2017-12-07](#)). This reduces God from an active agent to a mere bystander (which is still not benevolent). For this change, the Latin translation will also have to be changed, because it currently reads, just like in English: "et ne inducas nos in tentationem" ([Wikipedia/Lord's Prayer](#)).

God grants us evilness

The abrahamic god is considered benevolent. Yet, he also created man, and man is often evil ↗. One possible explanation is that God had no choice: he wanted to give us free will, so he had to accept that this free will is sometimes misused. The evil in this world would be the price to pay for the freedom of decision.

Yet, that explanation is not satisfactory: In the Muslim world view, God guides some of us on a path to good. For others, he chooses not to guide us. Thus, he deliberately abandons some of us (Ibn Warraq: Why I am not a Muslim, p.124). That is hardly benevolent. In the Jewish and Christian world view, God made man sinful by nature. Thus, he gave man both free will and a predisposition for doing evil. This is a recipe for calamity. It compares to a cock fight ([Wikipedia/Cockfight](#)). In a cock fight, the cocks are first put together tightly in a cage to make them aggressive. Then they are equipped with spurs to make the fight more violent. Then they are left to fight each other until one of them dies. Spectators bet on the winner. In the Jewish and Christian world view, God is the spectator: he puts us humans together on Earth, predispositions us towards doing evil, and watches us fight. To excuse the resulting brutality, he says that he gave us free will. Cockfights are widely considered cruel today. So would be this view of a god. If God is really almighty, he could make moral actions especially pleasurable, so that they would be irresistible to us; he could also punish immoral actions immediately, and make it obvious that moral rectitude is in our self-interest; or he could allow bad moral decisions to be made, but intervene to prevent the harmful consequences from actually happening ([Wikipedia/Problem of evil](#)). Yet, he doesn't.

In general, it is not clear whether the explanation of free will accounts for the degree of evil seen in this world. While the value of free will may be thought sufficient to counterbalance minor evils, it is less obvious that it outweighs the disvalue of evils such as rape and murder ([Wikipedia/Problem of evil](#)). Both make an innocent person suffer from somebody else's free will – hardly a setting that we would call just.

Worse, if we threaten crimes to be punished, or if we arrest a criminal, we actually limit the criminal's free will, thus counter-acting God's plan ↗. Yet, this is exactly what we should do.

My favorite part of the Bible is when God gives people free will and then kills everyone with a flood for not acting as he wanted.

By [anonymous](#)

The Problem of Evil

The Problem of Evil

God is considered benevolent and omnipotent, but at the same time, he lets people and animals suffer ↗ ↗ ↗ ↗. This contradiction has long bothered theologians. It is known as "The Problem of Evil" or "The Theodicy Problem". Numerous attempts have been made to reconcile God's benevolence with the evil of nature ↗ ↗. We will look into these arguments next.

If God created man in his image, I have no interest in meeting him.

By [anonymous](#)

The evil as punishment

The abrahamic god is considered benevolent. Yet, the world sees much injustice and evil ↗. One way to explain the evil is to see it as God's punishment for human misbehavior. This line of reasoning goes that illnesses, viruses, and natural disasters punish people for being sinful.

The problem with this argument is that the evil of nature hits everybody regardless of their behavior:

Innocent people

Natural disasters and diseases do not differentiate between those who do good and those who do evil. A Tsunami may wipe out a city, and kill the rapist as well as the priest. A guy named Roy Sullivan did not do anything evil, but was stroke by a lightening 7 times in his life ([Wikipedia/Roy Sullivan](#)). Suffering and innocence are unrelated.

Children

Natural disasters and diseases also hit children. Children are almost always innocent. Babies are definitively so. AIDS, for example, can be transferred from the mother to the baby, and kill the baby although it never did anything wrong.

Animals

Also animals are hit by natural disasters – even though they do not possess the concepts of good and evil.

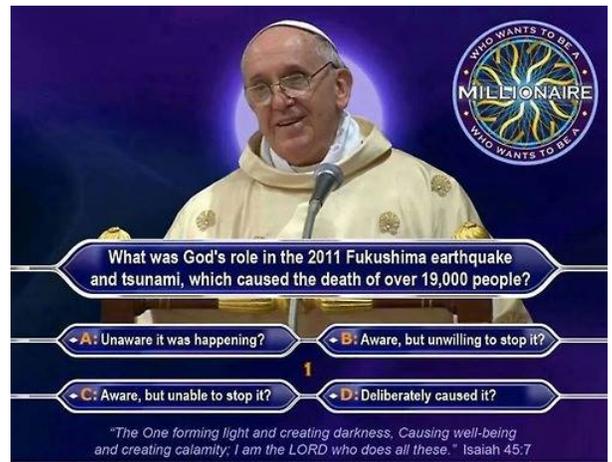
We may think that the punishment is administered uniformly to punish an entire society, even if some people are innocent. Yet, that does not explain why animals suffer, too. Babies have no share in the evil the society produces – and still they suffer. Furthermore, the idea of universal punishment is in stark contradiction to God's assumed justice. To see this, consider a city with violent dissidents. If we bomb the city and erase the entire population just because of the dissidents, that would be a humanitarian disaster. It is the same if it happens through an act of God. If God is all-powerful and just, then he could think of more precise ways to administer his punishment.

To test how plausible the idea of punishment is, let us do a thought experiment. Assume that you met a child, whose parents were just drowned in a tsunami. Would you be able to tell the orphan that the tsunami was a punishment of God for his parents? Would you be able to tell the child that his parents deserved to die – for a reason that you do not know? Or would you go and tell the president of the Asian country Laos that the deaths from malnourishment in his country are a punishment of God – possibly because most people in his country have, for the past 2000 years, never heard of Jesus or Mohammed? Such an argument would be considered completely absurd and even insulting. And it is indeed [↗](#).

Moreover, if the evil were really a punishment, then we would act against God's intent if we tried to counter it. Thus, it would be disobedient to God to give food to people who are hungry, to cure a person who is ill, or to help a person in danger. We should rather let these people die, knowing that God wants to punish them. This is a completely absurd line of thinking [↗](#).

If you believe that God is specifically reaching down from heaven to answer your trivial prayer to remove a zit or to help you find your lost keys, while at the same time God is allowing 27,000 children to die of starvation each day by specifically ignoring their prayers, then your God is insane.

By [WhyWontGodHealAmputees.com](#)

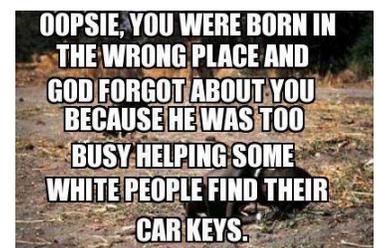


[Found in: [Progressive Secular Humanist](#)]

The evil for balance

The abrahamic god is considered benevolent. Yet, the world sees much injustice and evil [↗](#). Religious people claim that natural evil exists to maintain a balance in the universe. Without the evil, the universe could not exist ([Wikipedia/Natural evil](#)).

However, if God is almighty, then nothing is impossible. A world without natural disasters can very well exist. A world without AIDS has existed for millions of years. So there is no reason why God should feel obliged to introduce this illness now. The argument of "balance" is just an attempt to justify what cannot be justified [↗](#).



[Found in: [Evangelical Pastarism](#)]

*The explosion was now officially designated an "Act of God."
But, thought Dirk, what god? And why?
What god would be hanging around Terminal Two of Heathrow Airport
trying to catch the 15:37 flight to Oslo?*

By Douglas Adams in "The Long Dark Tea-Time of the Soul"

The evil for a greater good

The abrahamic god is considered benevolent and almighty. Yet, the world sees much injustice and evil ↗. One attempt to bridge this contradiction is to assume that evil is just a means to an ultimate end, which is always good.

An example is given where a doctor amputates a patient's leg, an "evil", in order to prevent gangrene from spreading throughout the patient's body, "the ultimate end", which is "good". Yet this example is only justified on the basis that the doctor has limited powers. With the limitations of medical technology at his disposal, he of course chose the lesser evil; since there was no way of saving both the patient's leg and his life. However, this analogy cannot be applied to God and the problem of evil, since God, unlike the doctor, has unlimited powers. In fact, a more accurate analogy is a doctor who first actively infects the leg of his patient (God is the cause of all things), and then decides to amputate his leg when some antibiotics would have been sufficient (God is all powerful). We would call such a doctor wicked and mad. Why do we call such a God good? [[Rejection of Pascal: God and the Problem of Evil](#), citing Knight, Humanist Anthology: p132-133]. In other words: God himself designed the universe and the rules that govern it. Therefore, he cannot escape the responsibility for what happens within.

Worse, if the evil in this world exists with a purpose, it would be disastrous if we humans attempted to fight against it. We should actually welcome it, because it leads to a greater good on the long run. Yet, this is a sick idea ↗. The argument that there would be some "greater good" is nothing more than wishful thinking ↗. It is an attempt to justify what cannot be justified ↗.

*Humanity has forgotten that it invented God,
and now it has to put up with quite a number of inconveniences in his name.*

By Martin Walser

The evil does not aim to hurt

God is revered as benevolent ↗. And yet, natural disasters such as floods and earthquakes kill thousands of people each year. We can argue that such disasters do not actually aim to hurt us. They just happen for natural reasons. Thus, God is not to blame.

For the victims of such calamities, however, it does not matter whether the earthquake "aimed" to kill them or not. The fact is that it does. Thus, whoever caused the earthquake is responsible for the death of these people. If not by intention, then by negligence. There is no way out of responsibility for God.

With a world that suffers so indiscriminately, God cannot possibly be a rational being.

By Deborah Feldman in "Unorthodox"

We don't know the big picture

The abrahamic god is believed to care for us humans. Yet, humans suffer continuously ↗. One way to explain this suffering is to argue that we, as humans, do not know the full picture. Quite possibly, the suffering of one human is necessary to prevent the suffering of thousands of others. As an example, there goes the story of the wise man. The wise man is on a journey with his companion. Suddenly, he reaches out with his knife and kills a bystander. Then he runs away. The companion follows, but does not dare to ask for reasons. After years he brings the story up. The wise

man says: "Son, this man had an evil heart. He was to become a murderer. By killing him, I have saved the life of dozens." Analogously, we can argue that what seems bad to us is in reality a small necessary evil that prevents much greater evil ↗. God optimizes for millions of things at the same time, and what seems implausible to us may be very plausible if we only knew the whole picture. Compare this to our education as children. When we were children, we often suffered because our parents did not allow us something that we wanted. Only now that we see the big picture, we agree that this was necessary. It could be similar with the world: If we only knew what the big picture was, we would agree that the suffering is necessary.

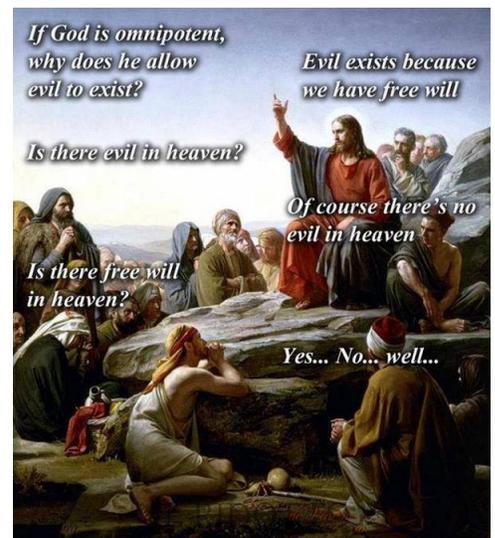
Unfortunately, the analogy does not work: As children, we have never been beaten (I at least). However, humans suffer in the worst imaginable forms. Every year, millions of people die of hunger, diseases, and catastrophes. Malaria alone traps hundreds of thousands of people per year in agonizing deaths. Only a minority of the world's population is living in wealth, health, and happiness ↗. We cannot claim that a world in which millions of people suffer is a global optimization.

To see this, do a thought experiment: We go to Ethiopia, and talk to a woman with 8 children, 6 of which are undernourished. We tell her: Yes, your children are suffering, but this is all part of a big plan where the global sum is positive. Would that comfort the woman? Most likely not. On the contrary, the thought is absurd and heartless. In atheist eyes, it is a desperate attempt to justify the evil in this world ↗. By saying that there is a big plan and that we just do not know it, we are effectively saying only one thing: That we do not know the reason for the suffering in this world. The argument with the "big picture" is just wishful thinking ↗. It is an attempt to justify what cannot be justified ↗.

Besides, God promises us a place where there is no evil: heaven. It is surprising that God is able to organize heaven, but not Earth. Why does God not send us directly to Heaven (or at least the believers, or the babies)?

If Hitler said he worked in mysterious ways and had a big secret plan, would that be all the justification you'd need?

By anonymous



[Found in: Progressive Secular Humanist]

A perfect world is impossible

There is a lot of evil and suffering in this world, and so we ask why a benevolent god would allow this to happen ↗. One possible answer is that a perfect world is just not possible. Hence, we may not expect one.

That is a curious idea. For centuries, humanity suffered from smallpox. Finally, science gave us a vaccine against the disease. Today, the disease no longer exists. So then, we can ask, if a world without smallpox is possible, why did God not give it to us directly?

Furthermore, there is a world in the abrahamic view that is perfect: Heaven. In heaven, there is no suffering and no evil. This defies the hypothesis that a perfect world would not be possible.

In ancient times, the best minds were busy giving a meaning to our death. Today, the best minds are busy prolonging our life. They do so by investigating the physiological, hormonal, and genetic systems responsible for disease, and developing new medicines against them.

By Y. N. Harari in "Sapiens", p. 298, rephrased

A perfect world is boring

The suffering in this world has long stood in contrast to the supposed benevolence and omnipotence of God ↗. One possible view is that a perfect world is maybe possible, but would be utterly boring. If there were really no evil in this world, then there were no challenges.

We first observe that this theory does not justify at all the suffering in this world. If you meet a person who suffers from lepra, would you tell her that it's good that she suffers, because otherwise this world would be boring? Probably not. This shows that the idea of suffering for entertainment is not sustainable. On the contrary, it is demeaning to those who suffer ↗.

Furthermore, there is a place in the abrahamic world view where there is no suffering: Paradise. That place is usually not described as boring by believers. Then the question arises why God puts us through earthly suffering at all.

If you contract cancer this afternoon and die three months later, that is God's plan for you. Praying to cure the cancer is just a waste of time.

By GodIsImaginary.com

God can't do everything

The movie "Bruce Almighty" describes Bruce, a man who is unhappy in his life and blames God for it. In a miraculous encounter, God gives him all divine powers to try out whether he can do better than God. The only condition is not to reveal his divinity, and to respect free will. Bruce fails miserably. He is overwhelmed by the task, and in the end, the world is not even slightly better. This seems to suggest that the task of keeping everyone on Earth happy is close to impossible. This could explain why God, even if benevolent ↗, cannot prevent that millions of people die every year of hunger.

It is certainly impossible to take care of every human on Earth. However, that is not an excuse for someone who created the system. God created humans and the universe in the first place. He knew how difficult the task would be, and still he allows the world to become ever more and more complex. If he does not know how to handle it, he should not have created it. Even now, he could decide to create some helpers (angels) if he is overwhelmed with the task.

Still, there are a few very simple things that Bruce (God) could do:

- stop developing diseases that make humans suffer or die .
- stop causing tsunamis, earthquakes, and epidemics.
- give humans a stronger feeling of responsibility – for themselves and for others.
- punish people who wreck havoc immediately, as by a law of nature.
- reveal himself every year in a scientifically verifiable form as the god of one religion, so as to stop the wars between the religions ↗. Yeah, it goes against the rule not to reveal his divinity, but who made that rule anyway? God, right?

Unfortunately, Bruce fails to implement these ideas – as does God.

The evil for spiritual growth

The abrahamic god is considered benevolent and almighty. Yet, the world sees much injustice and evil ↗. One way to explain the evil is to assume that our suffering is required for personal and spiritual growth. When we undergo suffering, we become more mature, and learn to see life differently. As W.D. Niven has argued in the Encyclopedia of Religion and Ethics: "Where life is easy because physical ills are at a minimum we find man degenerating in body, mind and character... Which is preferable – a grim fight with the possibility of splendid triumph; or no battle at all?" [Rejection of Pascal / God and the Problem of Evil, citing Angeles, Critiques of God: p213]

Today's answer would be invariably: no battle at all is better. If there were a way to avoid the evil in this world (and there is, because God is almighty), then almost all of us would prefer evil to be eradicated. Even if the evil in this world promoted human empathy, it would still not justify the suffering of the innocent. We would never kill a

baby just to make a point about empathy. Neither should God. If God is almighty, he should have found other ways to stimulate human magnanimity. God, being almighty, can surely find another way to ensure our spiritual growth.

Furthermore, some physical evil simply cannot be squared away with promoting virtuous actions. The outbreak of the ebola virus in Africa is a case to point. The disease kills within a couple of weeks and no cure is possible. What possible good could have resulted from that? Earthquakes volcanic eruptions, floods have been known to kill thousands people instantly, leaving the people behind to simply pick up the pieces. What good came out of those? [Rejection of Pascal / God and the Problem of Evil, citing Angeles, Critiques of God: p214-215]. The hope that the evil in this world would in any way lead to "spiritual growth" is just wishful thinking ↗. It is an attempt to justify what cannot be justified ↗.

Worse, if the evil in this world is there to promote human empathy, then we could actually help that endeavor by committing some mass murders. We would actually be doing good by doing evil ↗. This is absurd.

If the suffering of even one innocent is the price of entry to God's world of divine harmony, then I most respectfully return him the ticket.

By Ivan in "The Brothers Karamazov", by Fyodor Dostoyevsky (Фёдор Михайлович Достоевский)

Suffering is subjective

The question is why there is evil in this world, if God is benevolent ↗. One possible argument goes that suffering is subjective: What may seem like suffering is actually not.

However, no matter how we turn this idea, undergoing a painful disease for years and then dying from it is suffering in all reasonable definitions of the word. Calling it anything else is just manipulating words ↗. To see this, we can make the test: We imagine that we meet a person who has attracted cancer, undergone chemo therapy, and will die in the next weeks, leaving 2 orphans. We tell him: Don't worry, your suffering is just subjective! It happens only in your mind!

Would that work? Probably not. There exists undeniable suffering, and calling it "subjective" does not solve that problem. On the contrary, it is demeaning to the victims. It belittles their suffering. It is an attempt to justify what cannot be justified ↗.

Health, safety, literacy, and sustenance are the prerequisites. If you are reading this, you are not dead, starving, destitute, moribund, terrified, enslaved, or illiterate, which means that you are in no position to turn your nose up on these values – or to deny that other people should share your good fortune.

By Stephen Pinker in "Enlightenment Now", p. 52

Heaven outweighs the evil

The abrahamic god is considered benevolent and almighty. Yet, the world sees much injustice and evil ↗. One argument goes that all the evil in this world is nothing in comparison to the harmony and joys of the afterlife. The evil is just negligible.

However, no appeal to an afterlife can eradicate the problem of evil. An injustice always remains an injustice, regardless of what happens afterwards. Assume that a man rapes a woman. Since the man happens to be a billionaire, he offers a few million dollars to the victim in compensation. Yet, he does not want to see that he did something wrong. Furthermore, he is actually already on his way to rape another woman. We quickly see that no amount of compensation eradicates the evil nature of the original act (Thoughts on Ethics / Formula). Nobody would praise the billionaire as just and loving. Yet, this is what the abrahamic religions expect us to do. (Rejection of Pascal / God and the Problem of Evil, citing Smith: Atheism: p84)

Furthermore, by pointing to Heaven, we are actually downplaying the evil in this world. We say that the evil is not important. Thereby, we are doing injustice to those who suffer. Who of us dares telling a mother who lost her child that her agony is negligible? That would be an outright slap in the face.

Worse, if we downplay the evil in this world, we can justify our own injustice and inertia. If it is negligible that thousands of people die in a famine, then it is also negligible that a man beats his wife, that a baby dies of malnourishment, and that a murderer kills a victim. All of these fade in comparison to the joys of the afterlife. If God does not care about millions dying, then why should we care about a man beating his wife? And yet, such thinking is despicable. No reference to Heaven can ever justify the evil in this world ↗.

The evil as a test

The abrahamic god is considered benevolent and almighty. Yet, the world sees much injustice and evil ↗. We may say that this evil just exists to test us humans. If God finds that we withstand the evil well, then we deserve going to paradise after our death.

Yet, God is omniscient. He knows who will withstand well. There is no need to have innocent people suffer just for the benefit of those who will go to heaven. Such an argument is just wishful thinking ↗, aimed at justifying why the world is not as religion tells us it should be. Most importantly, justifying evil in any way is, by itself, despicable ↗.

*If an almighty god wanted you to be in some perfect world, you would already be there.
There is no need for him to test something of which he already knows the outcome.*

By *anonymous*, adapted

God's plan

The abrahamic god is considered benevolent. A number of arguments say that the evil in this world is part of God's grander plan. These arguments say that evil exists as a punishment ↗, that evil is negligible in comparison to the joys of afterlife ↗, that it is needed for natural balance ↗, that it serves a greater good ↗, that it is needed for spiritual growth ↗, that it is part of a grander plan ↗, that a world in peace would be boring ↗, or that it is the price to pay for free will ↗.

Evil as Good

Now assume that we follow these arguments, and that evil is a necessary and good part of earthly life. Then why do we constantly work to abolish evil from this world? We should rather be happy that evil is there, as it has so many good consequences. We should trust God with his plans. We should not help earthquake victims, because earthquakes are the punishment by God. We should not cure an ill person, because his illness is the destiny that God has planned for that person. We could actually support God's plan by adding some more evil, e.g., by killing more children. That would increase spiritual growth for all of us. Also, it would be negligible anyway in comparison to the joys of the afterlife.

Absurd as it may seem, this is indeed the position that the Christian Churches held. As Paul Tobin explains: When inoculation was introduced in Europe in the 18th century to help against smallpox, theologians from all over Europe and America were condemning the life saving procedure. Diseases were sent by God as a form of punishment for sin, they argued. Hence, any attempt to prevent diseases was a diabolical attempt to thwart the will of God. In the 19th century, a smallpox epidemic broke out in Montreal, Canada. Almost the entire population was vaccinated, except for Catholics. They fought hard for their right to undergo punishment by their god, and in most cases received it. People actually died because they wanted to receive the punishment from God. In a similar vein, women were prohibited from using anaesthetics during childbirth in Edinburgh, because pain during labor was considered the will of God (Bible / Genesis 3:16). "What a Satanic invention!", cried the Scottish Calvinist Church after the invention of painkillers. The battle lasted 400 years until 1853, when Queen



[Found in: Progressive Secular Humanist]

Victoria accepted the use of anesthetic when she was giving birth to prince Leopold [[Rejection of Pascal / Medicine](#)]. In a world view where God controls and imposes the evil, the opposition to painkillers and vaccination is only logical ↗.

But this is not what we do. Rather, we actively counter God's grand plan. In recent decades, we have discovered the antibiotic, thus rendering a large part of God's punishments useless. We establish governments and persecution for crimes, thus severely limiting the freedom of will of criminals. If God gave people free will, how do we as humans dare to curtail it? This shows that, if we accepted evil as part of a grander plan, incentives to fight it would be futile, and even disobedient to God. This is absurd.

Evil as Necessary

We may say that only the evil that we humans cannot prevent is part of God's grander plan. This evil would be, ultimately, a force for good. Now assume that you go to Africa and you see a family in poverty, whose child is infected by some virus and is about to die. You have no medical experience, so there is no way to help that child. Then, according to the theory, this death is part of God's greater plan. When the child dies, it will lead to something good. Either it will test the parents and allow them to go to heaven ↗ or it will stimulate spiritual growth ↗, or it will be for a greater good ↗. Then, to stay in our thought experiment, would you seriously consider telling the parents that it is good that their child dies? That this will help them grow spiritually? That this will help you (as a witness) grow spiritually? That probably the death of their child is required to save some other (unknown) people? Such an explication at the deathbed would be outrageous. Yet, it is exactly what the justifications of evil do ↗.

A Humanist View

All of this is the consequence of an image of God that was developed 3000 years ago ↗. The God was developed to satisfy the human thirst for justice, redemption, and hope. This type of god appealed to the masses, and hence the god became popular ↗. It also liberated humanity of the *weltschmerz* that any reasonable being must feel when it sees the suffering on Earth. How convenient ↗. However, as humanity became more critical (and also more knowledgeable), the contradictions between this god and reality became more and more apparent. This has put believers in an uncomfortable position. Hence, theologians have spent much effort into squaring away the evil in this world with the supposed benevolence of their god. With this effort, they are more concerned about the contradictions in their faith than about the evil itself ([Rejection of Pascal / God and the Problem of Evil](#)). They feel so obligated to some ancient fictional character that they do their utmost to somehow explain the evil in this world. This is not just foolish, but also dangerous. No attempt should be made to re-interpret the evil in this world as something good. Any such attempt belittles the misery that affects so many of us. Justifying evil is evil by itself ↗.

The solution to all this is, of course, to recognize that the abrahamic god is nothing more than a character that was developed to appeal to the masses ↗. While it is interesting to study this character, it should in no way be used to justify any action or in-action with respect to the real world. Humanists ↗ hold that people should concentrate on fighting evil rather than on worshipping a contradiction.

Chapter on Christianity

Introduction

Introduction

This chapter discusses an atheist point of view on Christianity, the religion founded by Jesus [↗](#). The chapter consists of the following sections:

- [Introduction](#): Defines Christianity.
- [Christianity Today](#): Gives an overview of the Christian denominations and interpretations.
- [Historical variety](#): Shows how the tenets of Christianity changed over time.
- [Proofs for Christianity](#): Discusses arguments that are brought forward to prove the truth of Christianity.
- [Christian Oddities](#): Lists a number of curiosities of Christianity.
- [An Atheist View on Christianity](#): Explains how an atheist sees Christianity, Jesus, and the Bible.

This chapter complements the discussion about Christianity in the [Chapter on the World Religions](#) and in the [Chapter on the Abrahamic God](#).

Christianity

Christianity [↗](#) emerged from Judaism [↗](#) at the beginning of the first century CE. Christianity inherited the holy scripture of Judaism (which it calls the "Old Testament") and adds a new scripture (the "New Testament"). Together, these books make up the Bible. The New Testament talks about the teachings of a man called Jesus, the main prophet of Christianity.

Technically, Christianity is a collection of belief statements [↗](#). These include

1. There is exactly one god, called God [↗](#).
2. Jesus is the son of the god and a human mother, Mary.
3. Jesus was crucified, but he was resurrected from the dead.
4. The Bible was written by men, but is inspired by God.

Beyond these basic tenets, Christian belief systems can vary [↗](#). Popular tenets include:

- The god is a godhead [↗](#) comprising the "father god", the "son god" (Jesus), and the "holy spirit". These three form what is known as the "trinity" [↗](#).
- Mary, the mother of Jesus, was a virgin when Jesus was born and remains a virgin.
- The Earth was created in 6 days, as described in the Bible [↗](#).

These are just examples of different tenets that are upheld by different denominations of Christianity. Over time, the denominations have developed hundreds of other tenets, which are or were upheld in different interpretations and at different times.

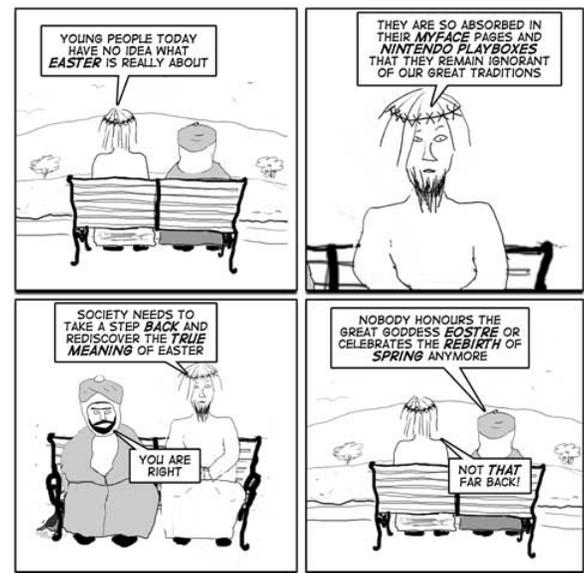
History of Christianity

Early Christianity spread mainly in the Middle East and Greece. The crucial moment for the religion came in the 4th century CE: The Roman emperor Constantine the Great made Christianity the state religion of the Roman Empire [↗](#). This established the religion in the sphere of influence of the Romans, and by the time the empire collapsed, Europe was essentially Christian. In the coming centuries, Christianity consolidated its power. It also established its own legal system. One of the main merits of this legal system was that it restored the best of the Roman legal

order, bringing forth the concept of free consent, and the necessity to prove guilt and innocence through rational rules of evidence rather than through magical tests such as the ordeal of the fire [Aldashev & Platteau: Religion, Culture, and Development].

During the Middle Ages, Christianity used its power to impose itself: Heretics were brutally persecuted ↗. It also piggybacked on the colonization. European powers conquered foreign lands, and brought Christianity with them – to Africa, Asia, and the Americas. The Inquisition forced people to adopt the new faith (Wikipedia/Christianization) ↗. This expansion made Christianity one of the most wide-spread religion in the world – a title that it still holds today.

Over time, however, people developed different interpretations of Christianity. Aided by political struggles, these different interpretations gave rise to different denominations of the faith. The long history and the large geographical extent of Christianity have led to a plethora of different versions of the religion, which we discuss next.



[Jesus and Mo, 2009-03-02]

Christianity Today

Christian Denominations

Today, Christianity has about 2.5 billion adherents. These fall into roughly 350 denominations with more than 100,000 members (Wikipedia/Christian denominations). The main branches are (with maximal estimates for the number of adherents):

Catholicism (1.2 billion)

This denomination is centrally governed by the Pope in Rome. The beliefs of Catholicism are codified in a number of creeds, papal bullets, and catechisms (Vatican: Archive).

Protestantism (800 million)

split away from Catholicism with the Reformation in 1517, when Martin Luther started criticizing the Catholic Church. Protestantism generally emphasizes the priesthood of all believers, the doctrine of justification by faith alone rather than by or with good works, and a belief in the Bible alone as the highest authority in matters of faith and morals [Wikipedia/Protestantism]. Today, Protestant denominations fall into the following groups:

Pentecostalism (280 million)

believes in gifts from God such as speaking in tongues and divine healing. The largest denomination is the "Assemblies of God" (65 million, Assemblies of God), which we use here as a representative for Pentecostalism.

Baptists (100 million)

believe that a person should be baptized when they consciously decide for the faith. The largest denomination is the Southern Baptist Convention (15.7 million, SBC), which we use here as a representative. We group Pentecostalism and the Baptist Churches together as "American Protestantism" in this book.

Lutheranism (90 million)

is based on the teachings of Luther and emphasizes that the Bible is the final authority on all matters of faith. The largest denomination is the Evangelical Church in Germany (24.5 million, EKD), which we use here as a representative.

Other groups

include Calvinism (85 million), Continental Reformed churches (30 million), Methodism (80 million), Nondenominational evangelicalism (80 million), and African initiated Protestant churches (60 million). Presbyterianism, in particular, is a subgroup of Calvinism.

Eastern Orthodoxy (300 million)

split from Catholicism in the Great Schism in 1054 – ostensibly over the question of whether Jesus is subordinate to God the Father or not, but de facto over the question of the authority of the pope. In Eastern Orthodoxy, every country has their own church, the largest one being the Russian Orthodox Church (150 million). In this book, we use the Orthodox Church of America as representative for Orthodoxy instead – mainly because it has an English Web page ([Orthodox Church of America](#)).

Oriental Orthodoxy (86 million)

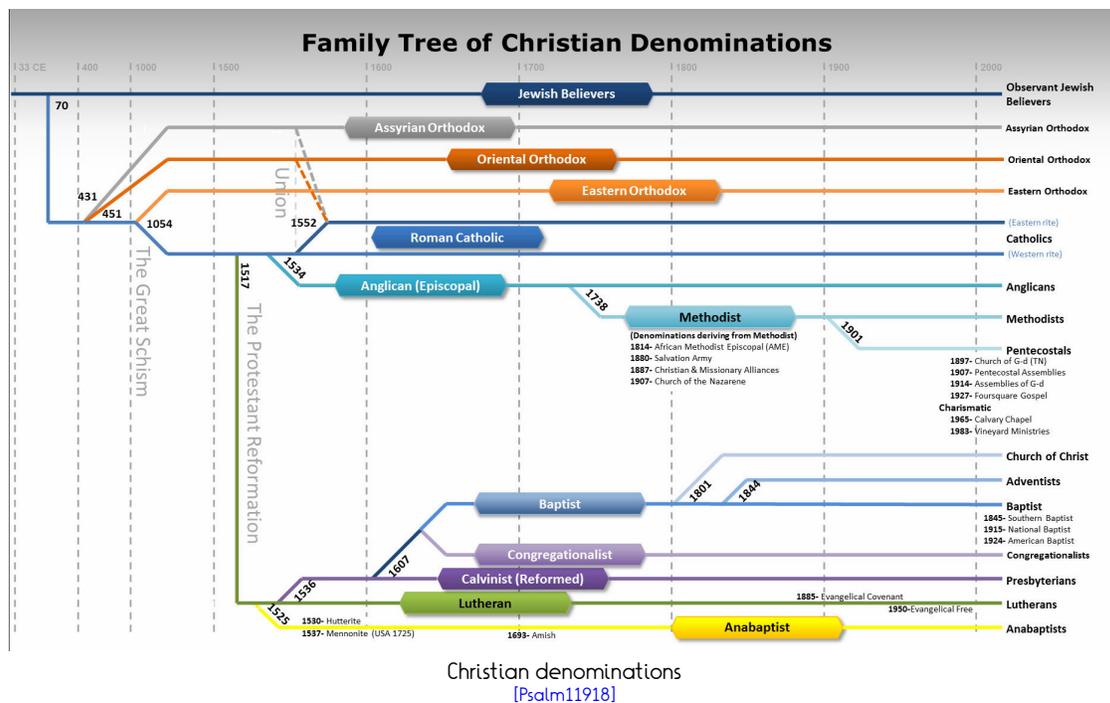
split from Catholicism in 451 CE in the question of whether Jesus had two complete natures (divine and human) or not. Oriental Orthodoxy is mainly represented in Ethiopia.

Anglicanism (85 million)

split from Catholicism in 1534 with the Act of Supremacy, which accepted the King of England as head of the Church instead of the pope in Rome. One of the motivations for this split was to allow the king at the time, Henry VII, to get a divorce from his wife, which the pope refused to grant ↗. Later, Anglicanism developed its own theology in the English Reformation. Today, the Church of England is the main Anglican church (25 million. See also the [Church of England Web page](#)).

Restorationism and Nontrinitarianism (48 million)

include newer denominations such as Mormonism and Jehovah’s Witnesses. Some of them reject the trinity of God.



Fundamentalism vs. Liberalism

In the context of Christianity, "liberal" does not refer to "liberal moral values" ↗. Rather, it refers to the belief that the Bible has to be read metaphorically ↗. Fundamentalist Christians, in contrast, believe that the Bible has to be read literally ↗. These extremes span a wide spectrum of beliefs. This spectrum is not linked strictly to the spectrum of the denominations ↗ there can be fundamentalist Catholics and liberal Catholics, as there can be fundamentalist Pentecostals and liberal Pentecostals.

Fundamentalism

Fundamentalists hold that the Bible is literally true. Technically, the entire Christendom has been fundamentalist until the age of Enlightenment. When the Enlightenment came, fundamentalists consolidated their position in the face of rising liberal views of Christianity. This consolidation of fundamentalist views happened mainly in the United States ([Wikipedia/Christian Fundamentalism](#)).

Fundamentalists believe, among other things, that the Bible literally tells us how the world was created ↗. In this view, the Earth came into existence less than 10,000 years ago, dinosaurs shared the Earth with humans, and God literally flooded the Earth with the deluge. 40% of Americans believe that the creation account of the Bible is literally true ([Pew Research: On Darwin's 200th Birthday, Americans Still Divided About Evolution, 2009](#)). Fundamentalists also tend to believe that Jesus will come back. 79% of Americans believe that Jesus will have a second coming, and 20% believe that this will happen during their lifetime ([Pew Research: Christians' Views on the Return of Christ, 2009-04-09](#)). Fundamentalism is particularly strong among Presbyterians and Baptists in the New World (America and Australia). I have met such Christians myself.

For Fundamentalists, the words "liberal" and "modern" are pejorative in the context of religion. To them, these words suggest that the true message of God has been abandoned, or watered down with secular, modernist, or atheist ideas.

Liberalism

Liberal Christianity emerged in the late 18th century in Europe. It was inspired by the Enlightenment, and became particularly popular in Germany. Liberal Christians believe that the stories of the Bible did not necessarily happen exactly as written down. Rather, they are narratives that express a view on the world in the historical and social context of the writer. Thus, Liberal Christians do not believe that the world was created in 6 days, as the Bible tells us ↗. Rather, they believe that this story shows us how ancient writers imagined the connection between God and the world. From this, they derive how we should see the connection between God and the world. Thus, Liberal Christianity looks upon the Bible as a collection of narratives that explain, epitomize, or symbolize the essence and significance of Christian understanding [[Wikipedia/Liberal Christianity](#)]. As for the actual genesis of the world, Liberal Christians tend to follow the scientific mainstream opinion (of the Big Bang, Evolution, and Darwinism ↗). Liberal Christians also tend to believe that the miracles of the Bible did not necessarily take place. Rather, liberal Christians aim to understand the message that authors of the stories wanted to convey with the miracles.

Liberal Christianity was first met with opposition. In 1869, the First Vatican Council condemned the belief that "all miracles are impossible, and that therefore all reports of them, even those contained in sacred scripture, are to be set aside as fables or myths; or that miracles can never be known with certainty, nor can the divine origin of the christian religion be proved from them" [[Decrees of the First Vatican Council / 3 / Canons / 3, 1869](#)]. However, in the 19th and 20th century, liberal Christianity became more and more popular. For example, various editions of the Encyclopædia Britannica reflect the collapse of belief in the historicity of Noah's ark in the face of advancing scientific knowledge ([Wikipedia/Genesis flood narrative](#)). Roman Catholicism, too, has recently taken a more liberal view, declaring that in order to understand the Bible, one "must investigate what meaning the sacred writer intended to express and actually expressed in particular circumstances by using contemporary literary forms in accordance with the situation of his own time and culture" [[Pope Paul VI: Dei Verbum, 1965-11-18](#)]. As for Anglicanism: One quarter of Anglican priests does not believe in the Virgin Birth of Mary, the mother of Jesus ([Telegraph: Quarter of clergy do not believe in the Virgin Birth, 2002-12-22](#)). One priest explains: "Writers at the time used to stress a person's importance by making up stories about their early life. I think that is exactly what has happened [with the Virgin Birth]." [ibid]

Today, Liberal Christianity is the dominant form of Christianity in most denominations. This is true in particular in Western Europe, where only a minority of people tends to believe that God literally created the world in 6 days, or that he flooded it with a deluge.

For Liberal Christians, the word "fundamentalist" is pejorative. Liberal Christians tend to see Fundamentalist Christianity as backward, un-educated, and disconnected from reality. They are surprised to learn that fundamentalist Christians really exist in the United States.

Christianity Light

An extension of Liberal Christianity is what I call "Christianity Light". It is a reduced form of Christianity, which contains in essence just two tenets: (1) The Christian God exists, and (2) Jesus was a good man. All other tenets of

Christianity or its denominations (such as the trinity, divinity of Jesus, the creation of the Earth in 6 days, or the virgin birth ↗) are rejected. Thus, "Christianity Light" is a bit like Deism ([Wikipedia/Deism](#)). The main difference is that "Christianity Light" is colored with Christian ideas. For example, when adherents of Christianity Light talk of a "god", they refer exclusively to the Christian God (the loving, omnipotent deity who kick-started the universe). They cannot imagine any other god ↗. At the same time, adherents tend to hold that they are "not religious" – meaning that they do not follow the dogmata of a particular Christian denomination. Thus, a "Catholic Light" will have the very same religious beliefs as a "Protestant Light" – namely that there is a God and that Jesus was a good man. They are equivalent. In my environment, this is the dominant form of Christianity.

Dear Christians: Mark 16:17-18 says that true believers can drink poison and be perfectly fine. Please demonstrate your faith before you impose your religion on the rest of us.

By anonymous

Conservatism vs Progressionism

Christians cover a wide spectrum in terms of moral convictions, running from the conservative to the progressive.

Conservatism

Conservative Christians generally uphold values that were mainstream some time ago. Thus, today's conservatives will for example oppose gay marriage, disapprove of sex out of wedlock, see the family as a central building block of society, and approve of the death penalty. However, today's conservatives will usually not defend slavery or capital punishment for heresy. These values were mainstream *too long ago* ↗ ↗. Conservatives Christians sometimes argue with the laws of the Old Testament ↗. They tend to vote on the right.

Conservatism is particularly prominent among Christian Fundamentalists ↗ and Evangelicals ↗.

Progressivism

Progressive Christians tend to adhere to more liberal moral convictions ([Wikipedia/Progressive Christianity](#)). They will support gay rights, a more liberal approach to marriage, and a less strict interpretation of biblical law. In particular, progressive Christians are more likely to do away with the laws of the Old Testament. They will argue that these have been abrogated by Jesus' arrival – a theory known as the "New Covenant" ([Wikipedia/Christian views on the Old Covenant](#)).

Progressive Christianity is generally popular in Europe, and often goes hand in hand with liberal Christianity ↗.

If your religion tells you that you must have a baby due to its views on abortion, and then labels that baby as illegitimate because of its views on marriage, maybe it's time to reconsider your religion.

By anonymous



[Picture taken in Toronto in 2010]

Activism vs Passivism

Some Christians are particularly active about their faith, going to Church, following the rites, and attracting others to the faith. Other Christians attach less importance to their faith. Different intensities of belief can be found across different denominations.

Activism

For some Christians, religion plays an important role in their lives. They try to go to Church on Sunday, pray regularly, go to Bible reading groups, attend religious festivals, and follow the rites. Since they view religion as important, they will also entice others to follow it ↗. This stance is more pronounced among American Protestants. If activism is combined with fundamentalist and conservative views ↗ ↗, the result is often associated with the term "Evangelical" ([Wikipedia/Evangelicalism](#)).

Passivism

On the other hand of the spectrum, we have Christians whose practical life is not very different from an atheist's. Christian rites are reduced to the "hatch, match, dispatch" ceremonies (baptism, wedding, funeral). Many passive Christians enjoy the proverbial "White Weddings". Church attendance is limited to Christmas. Passive Christians tend to culturally identify with Christianity, but to distance themselves from religious dogmata or ceremonies. This is a prevalent way of life in Europe, and it often goes along with liberal and progressive views ↗ ↗.

Charismatism vs Cessationism

Charismatic Christians believe that God works miracles also today. Cessationists believe that no such miracles occur.

Charismatism

Generally speaking, charismatic Christians believe that God can work miracles if we ask him through prayer ↗. This belief is based on Bible verses such as the following [[GodIsImaginary.com](#)]:

- Therefore I tell you, whatever you ask for in prayer, believe that you have received it, and it will be yours. [Bible / Mark 11:24]
- If you ask anything in my name, I will do it. [Bible / John 14:14]
- And these signs will accompany those who believe: in my name they will cast out demons; they will speak in new tongues; 18 they will pick up serpents, and if they drink any deadly thing, it will not hurt them; they will lay their hands on the sick, and they will recover. [Bible /Mark 16:17-18]
- And the prayer offered in faith will make the sick person well; the Lord will raise him up. [Bible / James 5:15]
- Nothing will be impossible for you. [Bible / Matthew 17:20]
- Ask, and it will be given you. [Bible / Matthew 7:7]

Thus, many charismatic Christians believe in Faith Healing, i.e., the healing of people from illnesses by miraculous intervention from God ↗. Another practice associated with charismatic Christianity is "Speaking in tongues", i.e., the fluid vocalizing of speech-like syllables that lack any readily comprehended meaning in the frame of a religious ritual ([Wikipedia/Glossolalia](#)). Charismatism is often associated to an emotional and spiritual approach to faith. I have attended a charismatic "home church" myself: Participants meditated to a televised mass, prayed to God to help them with their sorrows, and were so emotional that they seemed completely absorbed by the activity.

Charismatic Christianity grew out of Pentecostalism in the beginning of the 20th century ([Wikipedia/Charismatic Christianity](#)). The idea of miraculous gifts from God has since spread also in other denominations, such as Lutheranism and Catholicism (ibid). My impression is, however, that it is popular mainly in the New World (America and Australia).

Cessationism

Cessationists believe that God did miracles in biblical times, but hold that no more miracles occurred after the apostles ([Wikipedia/Cessationism](#)). They believe that miracles that are reported today are either fabrications, natural self-healings, or exaggerations – which is also the atheist point of view ↗. This is the dominant stance in Europe, across denominations.

Televangelism

Televangelism is the use of television to communicate Christianity ([Wikipedia/Televangelism](#)). It is particularly popular in North America, and has recently also spread in South America. Many televangelists ask their audience to donate money. Some of them attract huge audiences, and thus make a fortune in the process. They make millions of dollars every year, and spend it on Rolls Royce cars, houses, or private jets ↗. Some televangelists preach the "seed faith", where people are encouraged to send the televangelist an amount of money, large enough to be a "sacrifice". This "seed" would serve as a proof for the faith in God, who would then react by blessing the sender with financial success ([John Oliver: Last Week Tonight, 2015-08-16](#)). These sacrifices are pocketed by the televangelist. Usually, such revenue is tax-free, because it is gathered by a religious organization. In Africa, some "super-pastors" have accumulated a wealth in the order of 150 million USD, as we have discussed in the [Chapter on Founding Religion](#).



Televangelist Marjoe counting his money after mass.
"Oh Jesus has been so good to me"
[\[Marjoe Movie\]](#)

In some cases, this wealth is based on fraud. Televangelists have been known to fake faith healings – or to record dozens of healings and show only those that work ([Wikipedia/Faith healing / Fraud](#)). Many of these tricks have been exposed by Marjoe Gortner, a man who was pushed into the preacher career at the age of 4 by his parents. He became a famous rich televangelist, but had a crisis of conscience in 1972. He invited a documentation team to follow him on one of his tours with a hidden camera ([Wikipedia/Marjoe](#)). In the movie that resulted from this footage, "Marjoe", he explains his tricks: This is how you induce motherly women to part with their savings. This is when to speak of how Jesus visited you personally. Here is how you put invisible ink on your forehead, in the shape of a cross, so that it will suddenly appear when you start perspiring. These tricks do their work, and the people in the audience weep and yell, and collapse in spasms and fits, shrieking their saviours name [Christopher Hitchens: God is not great / p. 189]. We discuss different such tricks in the [Chapter on Proofs for Gods](#).

The glittering palaces of Las Vegas have been built with the money of those who lost, and not of those who won.

By Christopher Hitchens in "God is not great", paraphrased

Historical variety

Trinity

We will now discuss a series of Christian beliefs that evolved over time. We start with a belief that is fundamental to most Christian denominations: the trinity of God, i.e., the belief that God is a godhead ↗ that consists of the "father god", the "son god" (Jesus), and the "holy spirit".

On several occasions in the Bible, Jesus calls himself the "Son of God" ([Wikipedia/Son of God](#)). Thus, early Christianity held that Jesus was the child of God. However, it was not entirely clear whether Jesus was as divine as God (see [Rejection of Pascal / Divinity](#) for a discussion). This question was known as the Arian controversy ([Wikipedia/Arian controversy](#)). On one hand, the Jesus said "the Father is greater than I" [Bible / John 14:28, also: Mark 10:17-18, Mark 13:32], on the other hand he said "I and the Father are one" [Bible / John 10:30]. Thus, it was not clear whether God and Jesus were different in divinity or not. This question was debated at the First Council of Nicaea, a council of Christian bishops that was established by the Roman Emperor Constantine in 325 CE. The council finally declared that Jesus was divine by himself, and equal in divinity to God ([Wikipedia/First Council of Nicaea](#)).

In parallel to this discussion, during the third and fourth century CE, several theologians began developing the idea that God the Father, Jesus, and the Holy Spirit were one single being ([Wikipedia/Trinitarianism](#)). This idea was based on Jesus' saying that people should baptize children "in the name of the Father, and of the Son, and of the Holy Spirit" [Bible / Matthew 28:19]. This phrase was interpreted so as to mean that these three beings are one and the same. In 360 CE, the Council of Constantinople declared what came to be known as the Trinity: that God the

Father, Jesus, and the Holy Spirit would be different persons, but one being, "God" ([Wikipedia/Council of Constantinople](#)). Technically, God is thus a Godhead ↗.

Prior to these developments, and in parallel to them, there were also non-trinitarian beliefs. Sabellianism said that God, Jesus, and the Holy Spirit are not different persons, but different aspects of the same God ([Wikipedia/Sabellianism](#)). For this view, Sabellius was excommunicated for heresy in Rome around 220 CE [[Wikipedia/Trinity](#)].

Today, almost all Christian denominations ↗ are trinitarian. However, Jehova's Witnesses, with 8m adherents, hold that only God the Father is God, and that Jesus was a mediator. Mormonism, with 15m adherents, holds that God the Father, Jesus, and the Holy Spirit are three distinct beings ([Wikipedia/God in Mormonism](#)).

Remark: It is a pity that these discussions took place 300 years after the death of Jesus. People could just have asked Jesus directly if he was God. Today, they can still ask God if he is triune – through prayer. Unfortunately, it seems that different people receive different answers.

Heresy

Heresy is the formal denial or doubt of a core doctrine of the Christian faith [[Wikipedia/Heresy in Christianity](#)]. As we have discussed before ↗, heresy was (or is) punished by death in most world religions. Christianity was no exception. However, modern interpretations of the faith have desisted from this punishment.

Old Testament: Heretics have to be killed

The Old Testament calls for heretics to be killed: "The punishment of such a prophet or dreamer shall be death" [Bible / Deuteronomy 13:5]. More precisely, "It may be that [...] men and women of thy race will [...] enslave themselves to the worship of other gods. [...] if it proves [...] true, away with such recreant men or women to the city gate; there let them be killed by stoning" [Bible / Deuteronomy 17].

New Testament: Ambivalence

In the New Testament, Jesus said "If anyone does not abide in Me, he is thrown away as a branch and dries up; and they gather them, and cast them into the fire and they are burned" [Bible / John 15:6]. This can still be understood as a metaphor. Paul also stops short of punishing heresy. He rather recommends exclusion: "Give a heretic one warning, then a second, and after that avoid his company; his is a perverse nature, thou mayest be sure." [Bible / Titus 3:10-11].

Early Christianity: Heretics have to be punished.

Early Christianity punished heretics, but several voices argued against the death penalty. In the 5th century, Augustine of Hippo opined that heretics deserve to be punished, but he urged the Church not to execute them. He declared that "we do not wish either to see the exercise of discipline towards them neglected, or, on the other hand, to see them subjected to the severer punishments which they deserve" [[Augustine of Hippo: Letter 100 / 1](#)].

In the 11th century, the Council of Toulouse required that "bishops [must] search out heretics in their parishes, individual suspicious houses, subterranean rooms and additions to houses, and other hiding places" [[Council of Toulouse / 1, 1056](#)], so that the "heretic [be] duly punished" (ibid). However, Pope Alexander II prohibited the death penalty in a letter to the Archbishop of Narbonne ([Roman Theological Forum: Torture and Corporal Punishment as a Problem in Catholic Theology, 2005-09](#)).

In 1184, Pope Lucius III declared in a papal bull that heresy was to be eradicated entirely ([Pope Lucius III: Ad abolendam; 1184-11-04](#)). Those accused of heresy were to be handed down their "due penalty". All those who supported heresy were deprived of the right to hold public office, the right to trial, the right to draft a will, and the heritability of their fiefs and offices. The people would be required to swear under oath anything they knew about heretical activity. All oath-breakers were to be treated as heretics. [[Wikipedia/Ad abolendam](#)]

Pope Innocence III followed up in 1199, declaring that goods of heretics should be confiscated ([Pope Innocence III: Vergentis in senium, 1199-03-25](#)). The Twelfth Ecumenical Council agreed in 1215, stating that heretics should have their property confiscated, shall not be admitted to public offices or deliberations, may not take part

elections, may not give testimony in a court, may not write a will, and were deprived of the right of inheritance [The Canons of the Fourth Lateran Council / Canon 4, 1215].

In 1232, Pope Gregory IX declared that those who do not repent their heresy shall be imprisoned for life ("in perpetuo carcere detrudantur") [Pope Gregory IX: Decretals / Book 5 / Titulus VII / Cap. XIV, 1232]. In his papal bull "Excommunicamus", he also established the tribunal of the Papal Inquisition (Wikipedia/Spanish Inquisition), concerned with finding and punishing heretics.

In 1252, Pope Innocent IV declared in his papal bull "Ad extirpanda" that no heretic shall be have the right to "maintain a bare subsistence in the country" [Pope Innocent IV: Ad extirpanda / Law 2, 1252]. On the contrary, "those convicted of heresy [...] shall be taken in shackles" [ibid / Law 24]. Such penalties could not be pardoned [ibid / Law 32]. Furthermore, "whoever shall find the heretical man or woman shall boldly seize, with impunity, all his or their goods". The pressure is extended to every citizen, because the papal aide may "if it seem good to them, [compel] the whole neighborhood, to testify to the aforesaid inquisitors if they have detected any heretics" [ibid / Law 30]. Finally, "the head of state or ruler must force all the heretics whom he has in custody [...] to confess their errors and accuse other heretics whom they know – provided he does so without killing them or breaking their arms or legs" [ibid / Law 25]. The bull was interpreted so as to authorize the use of torture by the Inquisition for eliciting confessions from heretics [Wikipedia/Ad extirpanda].

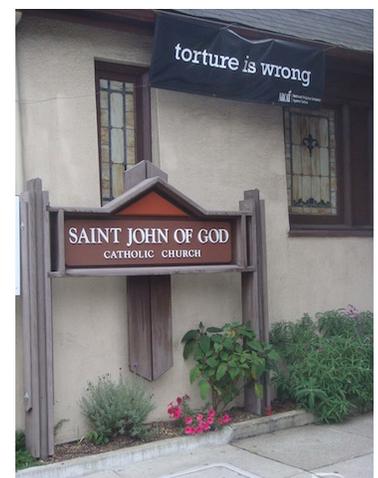
Also in the 13th century, Thomas of Aquinas argued that "With regard to heretics two points must be observed: one, on their own side; the other, on the side of the Church. On their own side there is the sin, whereby they deserve not only to be separated from the Church by excommunication, but also to be severed from the world by death. [...] Wherefore if forgers of money and other evil-doers are forthwith condemned to death by the secular authority, much more reason is there for heretics, as soon as they are convicted of heresy, to be not only excommunicated but even put to death. On the part of the Church, however, [...] she condemns not at once, but "after the first and second admonition" [...] After that, if he is yet stubborn, the Church no longer hoping for his conversion, looks to the salvation of others, by excommunicating him and separating him from the Church, and furthermore delivers him to the secular tribunal to be exterminated thereby from the world by death." [Thomas of Aquinas: Summa Theologiae / 2 / q. 11 / a. 3 co.].

In 1478, Pope Sixtus IV handed over the inquisition to the secular authorities. In his papal bull "Exigit Sinceras Devotionis Affectus", he gave the monarchs exclusive authority to name the inquisitors in their kingdoms [Wikipedia/Spanish Inquisition]. From then on, Portugal and Spain launched extensive raids on heretics and suspected heretics in their kingdoms. Officials could apply torture to make victims confess to heresy. The convicted were then taken outside the city walls to the burning place – a public ritual known as auto-da-fé. There, their sentences would be read. Some would be acquitted. Others would be punished. Artistic representations of the auto-da-fé usually depict physical punishment such as whipping, torture, and burning at the stake. [Wikipedia/ Auto-da-fé].

Catholicism: Heretics have to be killed. Today: Freedom of religion.

In 1520, Pope Leo X approved of the execution by fire. In his papal bull "Exsurge Domine", he refuted Martin Luther's thesis that heretics shall not be burnt alive (Pope Leo X: Exsurge Domine / 33 + final sentence, 1520-06-15). All in all, tens of thousands of people were drawn into the system of the inquisition. Thousands of people were executed.

The inquisition ended in the 19th century, with the wars of independence in the Spanish empire, the Liberal Revolution in Portugal, and the rise of Napoleon Bonaparte in France. The Catholic Encyclopedia from 1907 still explained that "to restrain and bring back her rebellious sons the Church uses both her own spiritual power and the secular power at her command." [Catholic Encyclopedia / Heresy]. It also justified the inquisition, saying that "All repressive measures cause suffering or inconvenience of some sort: it is their nature. But they are not therefore cruel." [ibid] In 1917, the Canon Law still saw heresy as a crime against the church and and as an infamy [1917 Code of Canon Law / Canon 2314, 1917-05-27]. However, it freed suspects from the need to incriminate themselves ("nisi agatur de delicto ab ipsis commissio") [ibid / Canon 1743 / §1, 1917-05-27].



Since 1965, torture is a dishonor to God.

[Picture taken in San Francisco/USA]

Finally, in 1965, the second Vatican Council decided that "the human person has a right to religious freedom" [Pope Paul VI: *Dignitatis humanae*, 1965-12-07]. More precisely, "the Church reproves, as foreign to the mind of Christ, any discrimination against men or harassment of them because of their race, color, condition of life, or religion." [Pope Paul VI: *Nostra aetate* / 5, 1965-10-28]. Equally since 1965, "torments inflicted on body or mind, attempts to coerce the will itself [...] are supreme dishonor to the Creator" [Pope Paul VI: *Gaudium et Spes* / 27 / §3, 1965-12-07].

Anglican Church, Protestantism, and Orthodoxy: No large-scale persecution of heretics

The Orthodox Church, the Protestant movements, and the Anglican Church all split from the Catholic Church over the centuries. They had their share of violence. However, they did not have the large-scale brutal persecution of people who did not share their doctrine. The American Protestant movements (Baptists and Pentecostals) formed after the constitution of the US guaranteed freedom of religion. Hence, they do not know penalties for heretics. They use social pressure instead ↗.

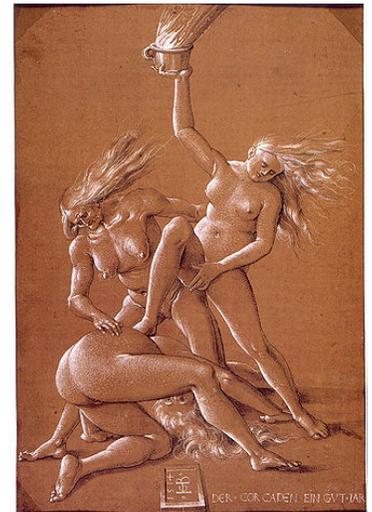
As for Anglicanism: When it emerged in 2014 that some percentage of Anglican priests do not believe in God, the General Synod gracefully decided to abstain from heresy trials (*The Independent: Two per cent of Anglican priests don't believe in God, survey finds, 2014-10-27*).

*Religion comes begging to us
when it can no longer burn us.*

By Heinrich Heine

Witch-hunts

A witch is a woman who can do magical deeds. In an atheist world, such people do not exist ↗. In the Christian world, witchcraft was first denied. Then, witchcraft was considered evil, and witches were persecuted and killed. This opinion changed later, and today, witches are no longer killed. Still, the different churches have different opinions as to whether witchcraft exists.



One of the less ugly depictions of witches
[Hans Baldung Grien, 1514]

Bible: witchcraft exists, witches have to be killed

The Old Testament acknowledges the existence of witches, and calls for their execution. "Thou shalt not suffer a witch to live." [Bible / Exodus 22:18] The penalty is stoning: "A man or woman who is a medium or spiritist among you must be put to death. You are to stone them" [Bible / Leviticus 20:27].

The New Testament also acknowledges the existence of witches, and warns us not to follow sorcery (Bible / Galatians 5:20; Apocalypse 21:8; Apocalypse 22:15; Acts 8:9; Acts 13:6).

Early Christianity: witch-craft does not exist

Early Christianity held that witchcraft did not exist, and that, hence, women who were suspected to be witches should not be killed. The Edictum Rothari, a secular law code for Lombardy in Italy, stated in 643 that it was

impossible for Christians to believe in witchcraft: "Let nobody presume to kill a foreign serving maid or female slave as a witch, for it is not possible, nor ought to be believed by Christian minds" [[Edictum Rothari / 376 / 1, 643](#)]. Charlemagne, likewise, outlawed belief in witchcraft as pagan, and punishable by death ([Charlemagne: Capitulatio de partibus Saxoniae / 6, 782](#)). This was echoed in the 785 Council of Paderborn ([Catholic Encyclopedia / Witchcraft](#); I could not find the original text, nor whether this council had papal approval). Another important document in this direction was the Canon Episcopi, a legal text recorded by Regino of Prüm in the 10th century, and supported by Burchard of Worms. This document talks about "unconstrained women" who say they "they ride upon certain beasts with the pagan goddess Diana" – i.e., about witches. The text goes on to call on the priests to "preach with all insistence to the people that they may know this to be in every way false", because "all that whoever believes in such things, or similar things, loses the Faith" [[Decretum Gratiani / Causa 26 / Questio 5 / Canon 12; English translation](#)]. This text was included in Gratian's authoritative Corpus juris canonici of c. 1140 and as such became part of canon law during the High Middle Ages [[Wikipedia/Canon Episcopi](#)].

In 1080, suspected witches were killed in Denmark because they presumably caused storms, failure of crops or pestilence. At that time, Pope Gregory VII wrote to King Harald III of Denmark forbidding witches to be put to death [[Catholic Encyclopedia / Witchcraft](#)].

See [Bible Apologetics: Christianity And The Witch Hunt Era \(3/12\)](#) for more official statements, which I could not source.

Catholicism: persecution of witches. Today: no torture, but witchcraft exists and remains offense

By the 15th century, the inquisition was in place ↗. In 1484, two German inquisitors, Heinrich Kramer and Jacob Sprenger, asked the pope to permit them to prosecute also cases of witchcraft. Pope Innocent VIII complied, and issued the bull "Summis desiderantes affectibus" on December 5, 1484 ([Wikipedia/Witch-hunt](#)). It talks about men and women who "give themselves over to devils" and, by this, "cause to perish the grapes of vines, and the fruits of trees, [...] hinder men from begetting and women from conceiving". Thus, the bull acknowledges the existence of witchcraft. The text goes on to grant the inquisitors the right to proceed "correcting, imprisoning, punishing and chastising, according to their deserts, those persons whom they shall find guilty as aforesaid" [[Pope Innocent VIII: Summis desiderantes affectibus, 1484-12-05; English translation](#)]. In 1486, said Heinrich Kramer published a book called "Malleus Maleficarum", rendered in English as "Hammer of the Witches" and in German as "Der Hexenhammer". It argued that witchcraft existed, and that suspected witches should be prosecuted, tortured, and punished. The book enjoyed wide-spread popularity in Europe – also thanks to the invention of the printing press. The Catholic Church, though, condemned the Malleus Maleficarum ([Wikipedia/Malleus Maleficarum](#)).

The 17th century saw the establishment of milder procedures against witches, but upheld the existence of witchcraft and the punishment of witches. In 1623, Pope Gregory XV issued the "Declaration against Magicians and Witches" [[Pope Gregory XV: Omnipotentis Dei, 1623-03-20](#)], which was the last papal ordinance against witchcraft. Former punishments were lessened, and the death penalty was limited to those who were "proved to have entered into a compact with the devil, and to have committed homicide with his assistance" [[Wikipedia / Pope Gregory XV](#); I could not find the original source]. In 1657, the Congregation of the Holy Office published the "Instruction for Conducting Trial Procedures against Witches, Sorcerers, and Evildoers". The instruction deplores that inquisitors pass to inquisition, incarceration, and torture against witches ([Congregation of the Holy Office: Instructio pro formandis processibus in causis strigum, sortilegiorum, maleficiorum / "Error principalis...", 1657; Italian translation](#)). The document clarifies that torture shall only be applied once the case of witchcraft has duly been established. In any case, the title of the document leaves no doubt that witchcraft was assumed to exist, and that witches should be punished.

The witch trials were of excruciating brutality. Witches would be denounced, stripped naked, tortured, drowned, and burnt alive at the stake. The entire procedure is described on [Wikipedia](#). All in all, between 25,000 and 30,000 supposed witches were executed in the Holy Roman Empire, 1000 people in France, and 1000 people in Southern Europe ([Wikipedia/Witch-hunt](#)). The Catholic Church did not execute all of these people herself. However, she delivered theological justification for the killings.

The witch-hunts ceased in the 18th century – without an explicit theological reason. Still in 1917, the Catholic Encyclopedia did not rule out the existence of witchcraft: "The question of the reality of witchcraft is one upon which it is not easy to pass a confident judgment. [...] The abstract possibility of a pact with the Devil can hardly be denied." [[Catholic Encyclopedia / Witchcraft, 1917](#)]. The Catechism of the Catholic Church, likewise, condemns "All practices of magic or sorcery" [[Catechism of the Catholic Church / 3 / 2 / 1 / 1 / 3 / 2117](#)].

The Catholic Church has so far not rehabilitated the victims of the witch-hunts. However, at least witchcraft is no longer punishable by torture. This is because, since 1965, "torments inflicted on body or mind [...] are supreme dishonor to the Creator" [[Pope Paul VI: Gaudium et Spes / 27 / §3, 1965-12-07](#)].

Protestantism: witches to be burnt at the stake. Today: witchcraft exists.

Martin Luther, the founder of Protestantism, wrote that "indeed such witchcraft and sorcery there is". He witnessed it himself, because "When [he] was a child there were many witches and sorcerers around who "bewitched" cattle, and people, particularly children, and did much harm." [Martin Luther: A Commentary on St. Paul's Epistle to the Galatians]. As for the punishment, he explains that "there is no compassion to be had for these women; I would burn them myself" ("de veneficis et incantatricibus [...] cum illis nulla habenda misericordia. Ich wolte sie selber verbrennen", in [D. Martin Luthers Werke / Tischreden / 1. Band / Year 1538 / Number 3979, 1916](#)). In his sermons, he demanded that witches be tortured and burnt at the stake (see a list of these sermons in [Arbeitskreis Hexenprozesse: Betr. 500. Jahrestag der Reformation: Luther und die Hexenprozesse / Appendix](#)). John Calvin, likewise, acknowledged the existence of witchcraft ([John Calvin: Institutes of the Christian Religion, 1536](#)).

Between 25,000 and 30,000 supposed witches were killed in the Holy Roman Empire, which included the Protestant Netherlands, Protestant Switzerland, and Protestant parts of Germany. Around 2000 witches were executed in Protestant Scandinavia ([Wikipedia/Witch-hunt](#)).

The witch-hunts in Protestant lands ceased in the 18th century, without a particular theological reason. As of 2012, the Protestant Church of Germany has not yet rehabilitated the supposed witches ([Arbeitskreis Hexenprozesse: Betr. 500. Jahrestag der Reformation: Luther und die Hexenprozesse, 2012](#)). The Church has also not distanced itself from Martin Luther's instructions to torture and kill witches. On the contrary, as of 2015, Martin Luther's prohibition to do sorcery is still part of the foundations of the faith of the Protestant Churches of Germany ([Martin Luther: Der Kleine Katechismus / Die Zehn Gebote / Das Zweite Gebot](#)).

In America, witch-hunts were less prevalent. The most prominent witch trial was the Salem Witch Trial, which took place in 1692 in Massachusetts and resulted in 20 executions. These took place in the Puritan society at the time, which evolved from Anglicanism and later gave rise to the Baptist and Pentecostal movements. The community regretted the executions, and 10 years later, the church voted to reverse the excommunication of one of the suspected witches. In 2001, the Massachusetts legislature passed an act exonerating all who had been convicted [[Wikipedia/Salem Witch Trials](#)]. Today, the concept of witches plays no major role in the American Protestant movements. However, Pentecostalism holds that witchcraft exists, and that children should be kept away from the "darker aspects" of Halloween for that reason ([Assemblies of God: Should Christians Celebrate Halloween?](#)). Baptists, likewise, hold that witchcraft exists, and that the Bible warns against it ([New Age, Low-tech path to clean water reveals God's love](#); linked from [Southern Baptist Convention](#)).

Anglicanism: witches condemned to death. Today: witchcraft does not exist.

In 1542 The British Parliament passed the Witchcraft Act, which defined witchcraft as a crime punishable by death. It was repealed five years later, but restored by a new Act in 1562 [[UK Parliament: Religion and Belief / Witchcraft](#)]. As all acts, these acts required assent by the king to become law ([Wikipedia/Royal Assent](#)). The king, in turn, is the Supreme Governor of the Church of England ([Wikipedia/Supreme Governor of the Church of England](#)).

All in all, between 1500 and 2000 men and women were executed as witches in the British Isles and North America during the witch hunts ([Wikipedia/Witch-hunt](#)).

In 1735, parliament passed the opposite law: The Witchcraft Act of 1735 stated that "no Prosecution, Suit, or Proceeding, shall be commenced or carried on against any Person or Persons for Witchcraft" ([Witchcraft Act of 1735 / 2](#)). Thus, the persecution of witches ceased, and is nowadays no longer part of the Anglican faith. The Church of England has so far not rehabilitated the victims.

Orthodoxy: no persecution of witches

I found no sources about witch-hunts in Orthodox Christianity.

Book censorship is the prohibition of the printing, possession, or reading of certain books – under penalties in this world or the next. Keeping books out of the hands of the adherents was a popular strategy in several religions ↗. Catholicism first engaged in censorship, but then gave up on it.

Early Christianity: burning of unapproved books

The Bible mentions that pagans who converted to Christianity burnt their own heathen books (Bible / Acts 19:19). Apart from that, however, the Bible is remarkably liberal about the distribution of books – quite possibly because the printing press was invented only in 1440.

The First Council of Nicaea (325 CE) was concerned with the question of how God created Jesus. They decided that Jesus had been “begotten” by the Father, and not been created out of nothing. Consequently, they banned the book “Thalia” by the priest Arius, which held the second position. The writings of Arius and his friends should everywhere be delivered up to be burned; concealment of them was forbidden under pain of death [Catholic Encyclopedia / Censorship of Books]. The popes continued this tradition, and heretic books were “to be destroyed by fire, and illegal preservation of them was treated as a heinous criminal offense” [ibid].

In 1440, the printing press was invented in Europe, and books could thus be distributed and read much more readily. In 1487, Pope Innocent VIII issued the first bull that explicitly prohibits the printing of certain books. It says that he prohibits any printing without prior consent from the Curia under penalty of excommunication (Pope Innocent VIII: *Contra impressores librorum reprobatorum* / page 7 / “*Sub excois latae sententiae...*”, 1487-11-17). In 1515, Pope Leo X followed suit, and ordained that “henceforth, for all future time, no one may dare to print or have printed any book or other writing of whatever kind in Rome or in any other cities and dioceses, without the book or writings having first been closely examined [...] by the bishop” [Pope Leo X: *Inter Sollicitudines*, 1515-05-04]. Books that were printed in defiance of this regulation were to be publicly burnt, and the printers punished.

Catholicism: Systematic prohibition of books

In 1559, Pope Paul IV published the first “Index of Prohibited Books” (“*Index librorum prohibitorum*”). However, it was considered too rigorous, and mitigated by decree of the Holy Office in the same year [Catholic Encyclopedia / Index of Prohibited Books]. It was replaced by what became known as the “Pauline Index”. This document prescribes punishment for all those who dare writing, printing, distributing, or reading any of the books listed in the appendix of the document (Pope Paul IV: *Index Actorum et librorum* / “*sub alijs poenis nostro arbitrio infligendis mandamus...*”, 1559). This list contained hundreds of prohibited works, most notably the works of the Protestant reformer Martin Luther.

In 1564, Pope Pius IV approved the “10 Tridentine Rules”, which were decided at the 1546 Council of Trent. This council ruled that “those who possess [books that professedly deal with things lascivious or obscene] are to be severely punished by the bishops”. “If anyone should read or possess books by heretics [...], he incurs immediately the sentence of excommunication. He [...] who reads or possesses books prohibited under another name shall, besides incurring the guilt of mortal sin, be severely punished according to the judgment of the bishops.” [Council of Trent: *Rules on Prohibited Books*, 1546]

Since then, the index of prohibited books has been continuously updated. Over the time, it contained the works by Jean-Paul Sartre, Montaigne, Voltaire, Denis Diderot, Victor Hugo, Jean-Jacques Rousseau, Immanuel Kant, David Hume, René Descartes, John Locke, and Blaise Pascal (*Index librorum prohibitorum*, 1948). In 1616, the index banned all works that advocated heliocentrism (the theory that the earth rotates around the sun ↗). This included works by Nicolaus Copernicus and Galileo Galilei. In 1758, this ban was lifted for unknown reasons (*Wikipedia/Heliocentrism*).

In 1897, Pope Leo XIV abrogated the Tridentine rules with his Bull “*Officiorum ac Munerum*”. He explains that “the Church [...], fearful of so great an evil, has ever striven [...] to restrain men from the reading of bad books, as from a deadly poison”. However, he decided “to make [the rules] somewhat milder, so that it cannot be difficult or irksome for any person of good-will to obey them” [Pope Leo XIV: *Officiorum ac Munerum*, 1897-01-25]. He prohibited “the books of apostates, heretics, schismatics, and all writers whatsoever, defending heresy or schism,



[Wikicommons]

or in any way attacking the foundations of Religion", "all versions of the Holy Bible, in any vernacular language, made by non-Catholics", "Books which professedly treat of, narrate, or teach lewd or obscene subjects", "the books of classical authors, whether ancient or modern, if disfigured with the same stain of indecency", "Books [that] narrate new apparitions, revelations, visions, prophecies, miracles, or which introduce new devotions", "books [that] defend as lawful duelling, suicide, or divorce; which treat of Freemasonry", unlicensed "books of Prayers, Devotions, or of Religious, Moral, Ascetic, or Mystic Doctrine and Instruction" [ibid]. He concludes that "No one shall venture to republish books condemned by the Apostolic See", and that "booksellers, especially Catholics, should neither sell, lend, nor keep books professedly treating of obscene subjects" [ibid]. Interestingly, these constraints apply also to non-Catholics. If someone knowingly reads a book of an apostate, or prints it, he suffers excommunication ipso facto (ibid).

The Bull "Officiorum ac Munerum" remained in force. The Catholic Encyclopedia of 1917 explains that "Unrestraint of intellect and will is the real cause of [danger]. The so-called freedom of the press, or the abolition of public censorship, is largely responsible for this unrestraint." [Catholic Encyclopedia / Censorship, 1917] The 1918 Code of Canon Law prohibited books that "purposely fight against religion", "books of any writers defending heresy or schism", and "books which attack or ridicule any of the Catholic dogmas" [Code of Canon Law / § 1242, 1918]. It ruled that "forbidden books may not without permission be published, read, retained, sold, nor translated into another language, nor made known to others in any way" (ibid / § 1241). In 1948, the index of prohibited books contained 4000 books (Index librorum prohibitorum, 1948).

In 1965, Pope Paul VI restructured the Holy Office in a papal decree, and no longer mentioned the index of prohibited books. This led to questions as to whether the index still existed. This question was answered half a year later, explaining that the index still had its moral force, but "no longer had the force of ecclesiastical positive law with the associated penalties" (Pope Paul VI: Acta Apostolicae Sedis / volume 58 / page 445, 1966-06-15).

Anglicanism, Protestantism, and Orthodoxy: No large-scale prohibition

Anglicanism, Protestantism, and Orthodoxy have no history of prohibiting books as vigorously as Catholicism. On the contrary, Protestantism could flourish also because the printing press was invented. Hence, this denomination has been a major proponent of literacy ↗. Historically, Protestantism explains almost all of the difference in literacy between northwestern Europe and the rest of the subcontinent [Aldashev & Platteau: Religion, Culture, and Development].

American Protestantism: Controversies

Among American Protestants, this advocacy of reading finds some limitations. Some books are controversial among Pentecostals. The Harry Potter books are criticized for advertising witchcraft. Some have argued that they "pose long-term threat to Judeo-Christian faith and culture". Hence, members of one of the churches have burnt the books (Joan Rhoden: What's Harry doing in the Potter's house?, Wikipedia / Religious debates over the Harry Potter series). The book about "The Da Vinci Code", likewise, has attracted criticism for presenting early Christianity in a false light, to which only the Bible can be an "antidote" (Roger Cotton: Response to The Da Vinci Code; both references from the Assemblies of God homepage). Among Baptists, some consider that the movie "The Golden Compass" should be seen only by those firm in the Gospels (Garrett E. Wishall: "The Golden Compass" is a blatant attack on Christianity, Mohler says; linked from Southern Baptist Convention).

From an atheist point of view, Harry Potter books are simply fiction ↗. This is easy to see, because they contain magical stories ↗ ↗. Christians, however, cannot agree that magical stories are fiction, because this would catapult the Bible into the domain of fiction, too. Thus, the only means they have to delineate the "true" magic from the "false" magic is to make sure that people follow their own teaching. Hence, they engage in the fight of one fiction (Harry Potter) in against another fiction (the Bible). Fiction or not, Christians should take less offense with books that contradict their beliefs. Atheists, for example, do not burn Bibles, even though the Bibles contain fiction that contradict their beliefs (as well as contradicting science).

*Dort, wo man Bücher verbrennt, verbrennt man auch am Ende Menschen.
(Where they burn books, so too will they in the end burn human beings.)*

By Heinrich Heine

many places (despite any interpretation) is because God is imaginary. If God were real, and if God had actually written a book, the book would be brilliant and inspiring for everybody.

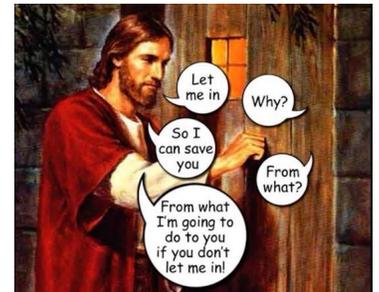
By GodIsImaginary.com/32

Salvation

The question of salvation is whether people who do not believe in Christian dogma can go to Heaven or not. This concerns in particular Christians of other denominations, adherents of non-Christian abrahamic religions (such as Jews and Muslims), people who have not come in touch with Christianity, and those who reject it (such as atheists). Different times, and different denominations, have seen different answers to this question.

The Bible and early Christianity: Belief is necessary for salvation

Jesus tells us that "Whoever believes and is baptized will be saved, but whoever does not believe will be condemned" [Bible / Mark 16:16]. This is because "He that is not with me, is against me; and he that gathereth not with me, scattereth" [Bible / Luke 11:23]. In the 5th century, Saint Augustine concurs, writing that "Salvation [man] cannot find except in the Catholic Church." [[Saint Augustine: Sermo ad Caesariensis Ecclesiae Plebem / 6; English translation](#)]. This formula was reiterated over the centuries by popes, councils, and papal bulls ([Wikipedia / Extra Ecclesiam nulla salus](#); [TraditionalCatholic.net: Salvation Outside the Church?](#); [Raymond Taouk: The Catholic Doctrine of No Salvation Outside the Church](#); [Religious Tolerance: Can non-Catholics be saved, according to the Roman Catholic Church?](#)), most notably by the 4th Lateran Council ([Fourth Lateran Council: Canons / § 1, 1215](#)).



[Betty Bowers]

In 1302, Pope Boniface VIII explained that "it is absolutely necessary for salvation that every human creature be subject to the Roman Pontiff" [[Pope Boniface VIII: Unam sanctam, 1302-11-18](#)]. In 1441, Pope Eugene IV explained that "not only pagans, but also Jews and heretics and schismatics" are condemned to hellfire [[Pope Eugene IV: Cantate Domino, 1441](#)]. This attitude contributed to the violent wars between Protestants and Catholics in the 16th century. At the St. Bartholomew's Day massacre in 1572 in France, Catholic mob violence killed the Huguenots (French Calvinist Protestants) in the thousands ([Wikipedia/St. Bartholomew's Day massacre](#)). In deep thankfulness, Pope Gregory XIII had a medal struck with the motto "Slaughter of the Hugenots" , showing an angel bearing a cross and sword before which are the felled Protestants (ibid). He also ordered three of the rooms in the Apostolic Palace in the Vatican to be decorated with a fresco of the massacre (ibid; Y. N. Harari: "Sapiens", p. 241).

Catholicism: No salvation outside the church. Today: Salvation possible

In 1832, Pope Gregory XVI cited Saint Ignatius, saying that "if anyone follows a schismatic, he will not attain the inheritance of the kingdom of God" [[Pope Gregory XVI: Summo jugiter studio, 1832-05-27](#)]. And yet, in 1854, Pope Pius IX opened at least a door to the ignorant: "Outside of the Church, nobody can hope for life or salvation unless he is excused through ignorance beyond his control" [[Pope Pius IX: Singulari quidem / 7, 1856-03-17](#)]. He reaffirmed this later, saying that "those who are struggling with invincible ignorance about our most holy religion [...] are able to attain eternal life" [[Pope Pius IX: Quanto conficiamur moerore / 7, 1863-08-10](#)].

In 1863, Pope Pius IX said that it is a mistake to assume that "men living in error, and separated from the true faith and from Catholic unity, can attain eternal life" [[Pope Pius IX: Quanto conficiamur moerore / 7, 1863-08-10](#)]. In 1864, the First Vatican Council re-affirmed that nobody can attain eternal life without faith ([Decrees of the First Vatican Council / Session 3 / Chapter 3 / §9](#)). Furthermore, the faithful have to be obedient to the Roman Pope, and "no one can depart from [this belief] without endangering his faith and salvation" [[Decrees of the First Vatican Council / Session 4 / Chapter 3 / §2 and §4, 1864](#)]. In 1922, Pope Benedict XV recalled the Athanas Creed: "This is the Catholic faith, which unless a man believe faithfully and firmly; he cannot be saved". In 1939, Pope Pius XI reiterated that there is no salvation outside the Church, and explained that "in this one Church of Christ no man can be or remain who does not accept, recognize and obey the authority and supremacy of Peter and his legitimate successors" [[Pope Pius XI: Mortalium Animos, 1939](#)].

For unknown reasons, the Catholic Church changed its mind in 1964 with the Second Vatican Council. Jews, Protestants (Schismatics), and adherents of other religions (those who do not accept the supremacy of the Popes) can now attain salvation:

Ignorants

"Those also can attain to salvation who through no fault of their own do not know the Gospel of Christ" [Pope Paul VI: [Lumen Gentium / 16, 1964](#)].

Jews and Muslims

"The plan of salvation also includes those who acknowledge the Creator. In the first place amongst these there are the Muslims" [Pope Paul VI: [Lumen Gentium / 16, 1964](#)]. And hence "The Church regards with esteem also the Moslems" [Pope Paul VI: [Nostra Aetate / 3, 1965-10-28](#)]. The Jews, likewise, "should not be presented as rejected or accursed by God, as if this followed from the Holy Scriptures. All should see to it, then, that in catechetical work or in the preaching of the word of God they do not teach anything that does not conform to the truth of the Gospel and the spirit of Christ." [Pope Paul VI: [Nostra Aetate / 4, 1965-10-28](#)]

Other religions

Nothing is known about their ability to grant salvation, but they do contain some truths. "The Catholic Church rejects nothing that is true and holy in these religions. She regards with sincere reverence those ways of conduct and of life, those precepts and teachings which, though differing in many aspects from the ones she holds and sets forth, nonetheless often reflect a ray of that Truth which enlightens all men." [Pope Paul VI: [Nostra Aetate, 1965-10-28](#)]

Schismatics (Protestants)

"The brethren divided from us also use many liturgical actions of the Christian religion. [...] These liturgical actions must be regarded as capable of giving access to the community of salvation." [Pope Paul VI: [Unitatis redintegratio / 3, 1964](#)]

Atheists who knowingly reject Catholicism are still excluded from salvation, because "Whosoever [...] knowing that the Catholic Church was made necessary by Christ would refuse to enter or to remain in it, could not be saved" [Pope Paul VI: [Lumen Gentium / 14, 1964](#)]. In 2013, Pope Francis explained that atheists are "redeemed" by Jesus Christ [Vatican Radio: [Culture of encounter is the foundation of peace, 2013-05-22](#)]. A Vatican spokesman later clarified that this does not mean that atheists go to Heaven ([The Economist: Hell, atheism and the pope, 2013-05-23](#)).

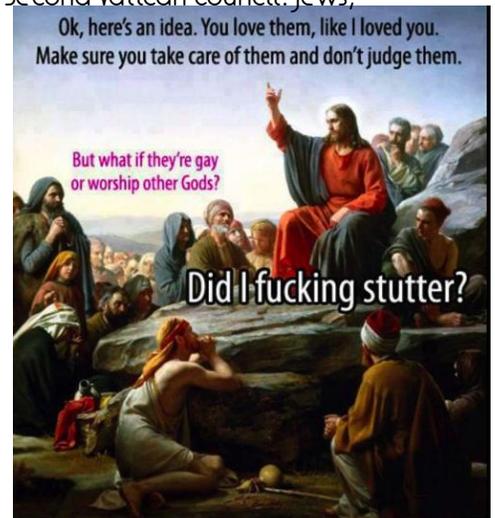
Early Protestantism: No salvation outside the church

Protestantism rose from the workings of Martin Luther. Luther explained that "he who would find Christ must first find the Church. [...] he must go to the Church, attend and ask her. [...] Now the Church is not wood and stone, but the company of believing people [and] outside of the Christian church there is no truth, no Christ, no salvation." [Martin Luther: [Sermon for Early Christmas Day Service on Luke 2:15-20, 1521](#)] The Jews, in particular, are "no people of God". Luther argued that Jewish synagogues and schools be set on fire, their prayer books destroyed, rabbis forbidden to preach, homes burned, and property and money confiscated ([Martin Luther: On the Jews and their lies, 1543](#)).

Lutheranism today: No hell anyway

In 1967, 78% of protestants in Germany believed that there is no hell ([Der Spiegel: Diesseits und Jenseits, 1967-12-18](#)), which arguably makes the concept of salvation more difficult. Accordingly, the Protestant Church of Germany explains that "Hell plays no role any more" ([EKD: Glaubens-ABC / Hölle](#)). Thus, the question of salvation became less interesting.

American Protestantism: No salvation outside the church



[WeKnowMemes]

Things are different in the American flavors of Protestantism. For Pentecostals, "you must believe [...] that only Christ can save you" in order to achieve salvation [Assemblies of God / Robert Cunningham: How Can I Be Saved?]. Baptists, likewise, say "What must I do [to achieve salvation]? Personal faith in Christ is the answer." [Southwestern Baptist theological seminary: Man's Need for Salvation, linked from Southern Baptist Convention].

Anglicanism: No salvation without faith in Jesus

The Anglican Church holds that "knowledge of God, and of his will, [...] is necessary unto salvation", "requiring [...] faith in [Jesus to] be saved", and speaking of "the kingdom of the Lord Jesus Christ, the house and family of God, out of which there is no ordinary possibility of salvation" [The Westminster Confession of Faith, 1647]. This declaration was ratified by the parliament, thus making it possibly binding to God. However, in a reconciliatory nod to Catholics, the Church of Scotland later decided that it "no longer affirms [that the Pope of Rome] is Antichrist, that Man of Sin and Son of Perdition, that exalteth himself in the Church against Christ, and all that is called God" [ibid].

Orthodoxy: Salvation by good deeds

The Orthodox Church of America explains that, on the day of the Last Judgement, "Christ will judge all men exclusively on the basis of how they have served Him by serving all men – the least of the brethren" [Orthodox Church of America: The Orthodox Faith / Volume IV - Spirituality / The Kingdom of Heaven / The Final Judgement]. Belief in Jesus or God is not mentioned as a criterion.

I am convinced that I am acting as the agent of our Almighty Creator. By fighting the Jews, I am doing the Lord's work.

By Adolf Hitler

Hell

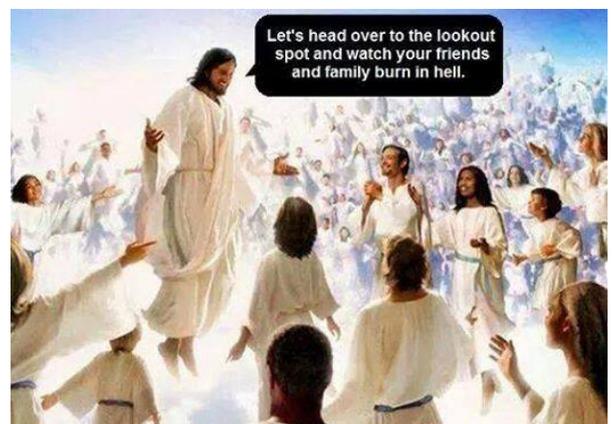
In Christianity, hell is the place or state where bad people go after death. This is a popular theme in all major religions ↗. While hell was first a place of physical torment for eternity in Christianity, these conditions have since been relaxed.

Old Testament: Hell is only vaguely alluded to

Before Jesus, hell was only vaguely described (Bible / Daniel 12:2), and thought to be limited in time ↗.

New Testament and Early Christianity: Hell is a physical place

In the New Testament, Jesus introduces the idea of hell as a place of eternal physical torments. It is a place of "unquenchable fire" [Bible / Matthew 5:22, 18:8-9; Bible / Mark 9:43-49, Revelation 20:13] into which the body is thrown (Bible / Matthew 5:29, 5:30) after sinning (Bible / Matthew 5:22, Revelation 20:30). Hell has "weeping and gnashing of teeth" [Bible / Matthew 8:12; 22:13], "everlasting destruction" [Bible / Romans 2:7-9; Bible / 2 Thessalonians], "raging fire" [Bible / Hebrews 10:27], "destruction" [Bible / 2 Peter 3:7] and "eternal fire" [Bible / Jude 7], and "burning sulphur" where "the devil, the beast, and false prophet" will be "tormented day and night for ever and ever" [Bible / Revelation 20:10, Lukas 16:19-31] along with those who worship the beast or receive its mark (Bible / Revelation 14:11) [Wikipedia/ Christian views on Hell]. This torment is eternal (Bible / Revelation 14:11, 2 Thessalonians 1:9, Matthew 25:46, Matthew 18:8).



[Found in: Progressive Secular Humanist]

Throughout the centuries, people continued to believe that hell was a physical place of physical torments in eternity, as shown in numerous artworks ([Google search](#)).

Anglicanism: Hell is eternal torments

The Anglican Church confirmed hell as a physical torment in 1646: "but the wicked, who know not God, and obey not the gospel of Jesus Christ, shall be cast into eternal torments, and punished with everlasting destruction from the presence of the Lord, and from the glory of his power" [[Westminster Confession of Faith / Chapter XXXIII, 1646](#)]. While other articles of faith have been repealed since then, the one on hell has not.

Catholicism: Hell is physical torments. Today: Hell is a state of separation from God

In the Catholic Church, the interpretation of a physical hell stood all the way until 1917. As the Catholic Encyclopedia explains: "According to the greater number of theologians the term fire denotes a material fire, and so a real fire. We hold to this teaching as absolutely true and correct." [[Catholic Encyclopedia: Hell](#)] Furthermore, "From what has been said it follows that the hatred which the lost soul bears to God is voluntary in its cause only" [ibid], and involuntary during the process.

The 1992 Catechism of the Catholic Church cites the Bible on the unquenchable fire. However, the text uses the word only in quotes: Immediately after death the souls of those who die in a state of mortal sin descend into hell, where they suffer the punishments of hell, "eternal fire" [[Catechism of the Catholic Church / 1 / 2 / 3 / 12 / 4 / § 1035](#)]. In 1999, the Catholic Church decided to turn off the fires in hell. Pope John Paul II explained that "rather than a place, hell indicates the state of those who freely and definitively separate themselves from God, the source of all life and joy" [[Pope John Paul II: Catechesis at the General Audience, 1999-07-21](#)]. The Jesuit Magazine La Civiltà Cattolica says that God does not inflict pain in hell "as illustrated in many paintings or read in the Divine Comedy" [[New York Times: Hell Is Getting A Makeover From Catholics, 1999-09-18](#)].

Thus, as of 1999, Hell and Heaven are no longer physical places. It is not reported what happened to the Virgin Mary on this occasion, whose body was physically moved to Heaven just 40 years earlier ↗.

Lutheranism: Hell not important

In Lutheranism, the role of hell is less clear. Martin Luther, the founder of the movement, believed that souls sleep and do not feel pain ([Wikipedia/Christian mortalism](#)). Today, the Protestant Church of Germany explains that, in its teaching, "Hell plays no role any more" ([EKD: Glaubens-ABC / Hölle](#)).

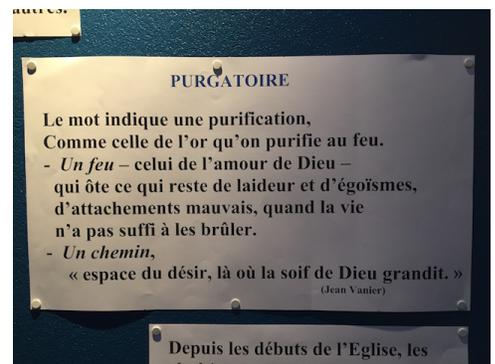
American Protestantisms: Physical hell

In the American Protestantisms, hell continues to be a place of physical torment. For the Pentecostals, the Bible talks of hell as a "lake of fire", and "the language of Scripture should always be taken literally" [[Assemblies of God: Heaven, Hell, and Judgment](#)]. However, "human language is inadequate to describe either heaven or hell", and therefore hell is described rather abstractly as a place of "eternal torture" [ibid]. Are excluded from this punishment babies and those who have never heard the gospels.

For Baptists, the "biblical teaching on eternal, conscious punishment of the unregenerate in Hell" remains valid [[Southern Baptist Convention: On The Reality Of Hell](#)], and hence they believe in a "literal heaven and hell" [[Southern Baptist Convention: Resolution On The Book Early Man](#)].

Orthodoxy: No physical fire

The Orthodox Church of America holds that "God does not punish man by some material fire or physical torment." [[Orthodox Church of America: The Orthodox Faith / Volume IV - Spirituality / The Kingdom of Heaven / Heaven and](#)



The fire of hell is in fact the fire of the love of God. Also, of late, it burns only the bad character traits of the sinner.
[Picture taken in the Cathedral of Saint Sulpice, Paris/France]

Hell].

It ain't the parts of the Bible that I can't understand that bother me. It is the parts that I do understand.

By Mark Twain

Abortion

Abortion is the termination of pregnancy. Over the centuries, Christianity had different stances towards the question whether abortion is the same as murder or not.

Early Christianity: Abortion is not murder

Abortion was known and practiced in the ancient Greek and Roman world ([Wikipedia/History of Abortion](#)). During that time, people believed Aristotle's theory of "delayed ensoulment", which held that the fetus receives a human soul only 40 days after conception for male fetuses, or 90 days after conception for female fetuses ([Aristotle: History of Animals / Book VII / Chapter 3 / 583b, 4th century BC](#)). Hence, abortion was not regarded as murder.

The Bible concurs: It establishes the death penalty for killing a human (Bible / Exodus 21:12). However, for inducing a miscarriage, it just establishes financial compensation, because the miscarriage does not count as "serious injury":

If people are fighting and hit a pregnant woman and she gives birth prematurely or suffers a miscarriage but there is no serious injury, the offender must be fined whatever the woman's husband demands and the court allows. But if there is serious injury, you are to take life for life. [Bible / Exodus 21:22-23]

Between the 1st and 4th century, several Christian thinkers began condemning abortion as murder: Barnabas, St. Hippolytus, St. Basil the Great, and St. Ambrose ([Wikipedia/Christianity and abortion](#)). Several synods and documents agreed: the Synod of Elvira in 306 CE, the Synod of Ancyra in 314 CE, the Apostolic Constitutions from around 380 CE, and the Apocalypse of Peter all called abortion murder (ibid).

Between the 5th and 16th century, people debated whether abortion was murder or not, because it was not clear when the fetus starts having a soul. This was one of the questions that troubled Saint Augustine, also known as Augustine of Hippo, "one of the most important Church Fathers in Western Christianity", who lived around 400 CE ([Wikipedia/Augustine of Hippo](#)). He condemned abortion in general (ibid), but conceded that "the law does not provide that the act abortion pertains to homicide, for there cannot yet be said to be a live soul in a body that lacks sensation when it is not formed in the flesh, and so not yet endowed with sense" [Saint Augustine: On Exodus / 21.80]. Another theologian, Thomas of Aquinas, considered abortion murder only if the fetus was "animated" ([Thomas of Aquinas: Summa Theologiae / Question 64 / § 7](#)).

Catholicism: Abortion briefly allowed, but generally condemned

In 1588, Pope Sixtus V issued the bull "Effraenatum" that excommunicated anyone who performed abortion. Pope Gregory XIV reversed that decision in 1591, and stated that excommunication was only applicable for abortions after the "quickening" of the fetus ([Catholic Encyclopedia / Abortion](#)). This quickening was placed 16 weeks of pregnancy ([Frank K. Flinn: Encyclopedia of Catholicism / page 4, 2006](#)). This ruling stayed in effect until 1869. Thus, abortion during the first weeks of pregnancy remained legal during 2.5 centuries.

In 1869, Pope Pius IX reinstated excommunication for abortion in general ([Religious Tolerance / Roman Catholicism and abortion access](#)). The Second Vatican Council affirmed in 1965 that "Life must be protected with the utmost care from the moment of conception: abortion and infanticide are abominable crimes" [[Pope Paul VI: Gaudium et spes / 51, 1965-12-07](#)], and this decision was also pinned down in the Catechism of the Catholic Church ([Catechism of the Catholic / 3 / 2 / 2 / 5 / 1 / 2264](#)).

Usually, abortions can only be forgiven by bishops in the Catholic Church. However, on 2015-09-01, Pope Francis decided that abortions can also be forgiven by priests ([The Guardian: Pope Francis tells priests to pardon women who have abortions, 2015-09-01](#)). This offer was valid for one year only (December 2015 to November 2016).

Anglicanism: Abortion condemned, but tolerable

The Church of England condemns abortion, but recognizes that "there can be – strictly limited – conditions under which it may be morally preferable to any available alternative" [[Church of England: Abortion](#)].

Protestantism: Different opinions

The German Protestant Churches condemn abortion, but recognize that there can be several reasons that make women abort ([EKD: Rolle der Frau in der EKD, 2004](#)). The churches state that they have not been able to find a definite position on the issue of abortion ([EKD: Im Geist der Liebe mit dem Leben umgehen, 2002](#)).

For Pentecostals, the question of whether to abort or not "is settled by theological statement of Scripture, not by a medical determination of viability outside the mother's womb" [[Assemblies of God: Abortion](#)]. Hence, in their view, abortion is "horrendous murder" [ibid]. If the mother's life is in danger, people should pray for her, then consult a pro-life physician, and then arrive "at the proper conclusion" [ibid].

Baptists speak of the "sanctity of life", but want to "work for legislation that will allow the possibility of abortion under such conditions as rape, incest, clear evidence of severe fetal deformity, and carefully ascertained evidence of the likelihood of damage to the emotional, mental, and physical health of the mother" [[Southern Baptist Convention: Resolution On Abortion](#)].

Orthodoxy: Abortion is evil

The Orthodox Churches denounce abortion as a "evil practice", but "seek to alleviate the conditions of those tempted into such a decision because of their harsh environments or marginalized social status" [[Steven Kostoff / Orthodox Church of America: Life, The most sublime expression of God's creative activity, 2016-01-21](#)].

Remark: For a secular perspective, see [Thoughts on Ethics / Abortion](#).

Birth Control

Different times, and different Christian denominations, have different attitudes towards sex. As an example, we study here the question of whether contraception is allowed or not. Most major religions warn of contraception in order to maximize the number of their adherents ↗.

The Bible and Early Christianity: Probably prohibition

Birth control and abortion were well known in Mesopotamia and Ancient Egypt in the 2nd millennium before Christ – hundreds of years before the Bible was written or before the Abrahamic God came into existence ↗. The Bible tells us the story of Onan, who was commanded to sleep with his brother's wife in order to raise offspring for him. But whenever Onan "slept with his brother's wife, he spilled his semen on the ground to keep from providing offspring for his brother" [Bible / Genesis 38:8-10]. The story goes on to condemn this behavior: "What he did was wicked in the Lord's sight; so the Lord put him to death" [ibid]. Unfortunately, the Lord did not make very clear what exactly he did not like. The mainstream interpretation was that God did not like the ejaculation without the purpose of reproduction ([Wikipedia/Onan](#)). With this interpretation, Christianity is in line with many other dominant religions ↗. They aim to assure that all sexual energy is channeled into procreation, so that the religion continues in the next generation.

In 1484, Pope Innocent VIII lamented against witches, who "hinder men from begetting and women from conceiving" [[Pope Innocent VIII: Summis desiderantes affectibus, 1484-12-05; English translation](#)]. This was interpreted as a condemnation of contraception.

Catholicism: Prohibition



Not sure whether the writer is qualified to talk about either.
[anonymous]

In 1930, "the Catholic Church, to whom God has entrusted the defense of the integrity and purity of marriage, standing erect in the midst of the moral ruin which surrounds her" clarified that "any use whatsoever of matrimony exercised in such a way that the act is deliberately frustrated in its natural power to generate life is an offense against the law of God and of nature, and those who indulge in such are branded with the guilt of a grave sin" [Pope Pius XI: *Casti connubii*, 1930-12-31]. Consequently, the Catechism of the Catholic Church explains that "every action which [...] proposes [...] to render procreation impossible is intrinsically evil" [Catechism of the Catholic Church / 2370].



[anonymous]

Anglicanism: First prohibition, then permission

In 1908, the Church of England regarded "with alarm the growing practice of the artificial restriction of the family, and earnestly calls upon all Christian people to discountenance the use of all artificial means of restriction as demoralising to character and hostile to national welfare" [Fifth Lambert Conference / Resolution 41, 1908]. 10 years later, sexual love started to be seen as good in itself (Church of England: Contraception). Therefore, the Church decided in 1930 that "in those cases where there is such a clearly felt moral obligation to limit or avoid parenthood, and where there is a morally sound reason for avoiding complete abstinence, the Conference agrees that other methods may be used, provided that this is done in the light of the same Christian principles" [Seventh Lambert Conference / Resolution 15, 1930]. By the time of the 1958 Lambeth Conference, contraception was a way of life among most Anglicans [Church of England: Contraception]. Therefore, the Church decided in 1958 that "the responsibility for deciding upon the number and frequency of children has been laid by God upon the consciences of parents everywhere; that this planning, in such ways as are mutually acceptable to husband and wife in Christian conscience, is a right and important factor in Christian family life" [Ninth Lambert Conference / Resolution 115, 1958]. Finally, The Church distanced itself from the Catholic prohibition of contraception: "The Conference finds itself unable to agree with the Pope's conclusion that all methods of conception control other than abstinence from sexual intercourse or its confinement to periods of infecundity are contrary to the order established by God." [Tenth Lambert Conference / Resolution 22, 1968] Thus, Anglican thinking changed during the 20th Century from concern about increased use of contraception to official acceptance of it [Church of England: Contraception].

Protestantism: Permission

In 1938, Baptists disapproved of the idea "to make possible and provide for the dissemination of information concerning contraceptives and birth control; whatever the intent and motive of such proposal we cannot but believe that such legislation would be vicious in character and would prove seriously detrimental to the morals of our nation" [Southern Baptist Convention: Resolution On Birth Control, 1938]. However, in 1977, the Baptists dropped their opposition to birth control, and objected only to "distributing them to minors [without] parental or guardian consent" [Southern Baptist Convention: Resolution On Permissiveness And Family Planning, 1977].

Pentecostals believe that "there are valid reasons for delaying, limiting, or not having children". Therefore, they "recognize the legitimacy of good family planning and the use of birth control" [Assemblies of God: Birth Control].

Lutherans, likewise "explicitly approve of artificial birth control" [Evangelische Kirche Deutschland: Rolle der Frau in der EKD].

Orthodoxy: Reluctant Permission

Orthodoxy allows contraception, as long as it does "not cause an abortion" [Orthodox Church in America / The Hub / Study Guides / Contemporary Issues / Two Become One / Session 6: "Like Olive Shoots Around Your Table": The Blessing of Children]. Still, it makes it pretty clear that "True love in marriage supposes the bearing of children" [Orthodox Church in America: Family]. Hence, "The voluntary control of birth in marriage is only permissible, according to the essence of a spiritual life, when the birth of a child will bring danger and hardship", and "the Christian marriage is the one that abounds with as many new children as possible" [ibid].

Evolution

Different times, and different Christian denominations, have different attitudes concerning the literal reading of the Bible ↗. As an example, we take here the biblical creation story. The Bible tells us that God created two humans, Adam and Eve, from whom all mankind descends ↗ ↗. Science, in contrast, tells us that all organisms (including humankind) evolved from a common ancestor ↗. Over time, different Christian denominations have taken different stances in this dilemma.

Bible and Early Christianity: No mention of evolution

The Bible tells us that "The Lord God took the man and put him in the garden of Eden to work it and keep it" [Bible / Genesis 2:15]. "Then the Lord God said, "It is not good that the man should be alone; I will make him a helper fit for him."" [Bible / Genesis 2:18] "So the Lord God caused a deep sleep to fall upon the man, and while he slept took one of his ribs and closed up its place with flesh. And the rib that the Lord God had taken from the man he made into a woman and brought her to the man." [Bible / Genesis 2:21-22] In the coming centuries, Christianity stuck to the literal interpretation of this narrative.

In the 17th century, philosophers began proposing the idea that the universe might have developed on its own, without divine guidance ([Wikipedia/History of evolutionary thought](#)). By the 19th century, this idea was supported by a better understanding of the fossil record. In 1858, Charles Darwin published his book "On the Origin of Species", which formalized the theory of evolution by natural selection ↗. It took Christian denominations around 50 years to react to this theory.

Catholicism: first opposition, then acceptance of evolution

In 1950, Pope Pius XII explained that the Bible "gives a popular description of the origin of the human race and the chosen people". Hence, "the faithful cannot embrace that opinion which maintains that either after Adam there existed on this earth true men who did not take their origin through natural generation from him as from the first parent of all, or that Adam represents a certain number of first parents. Now it is no way apparent how such an opinion can be reconciled with that which the sources of revealed truth and the documents of the Teaching Authority of the Church propose with regard to original sin, which proceeds from a sin actually committed by an individual Adam and which through generation is passed on to all and is in everyone as his own." [Pius XII: [Encyclica Humani Generis / § 37-38, 1950](#)] Thus, the pope correctly figured out that the theory of evolution contradicts the idea that Adam committed a sin that got handed down to humankind. Without such a sin, however, there is no need for Jesus' sacrifice. Thus, evolution makes the entire Christian mythology tumble ↗.

Pius' insight has to be seen in the light of the First Vatican Council, which stated that "all faithful Christians are forbidden to defend as the legitimate conclusions of science those opinions which are known to be contrary to the doctrine of faith, particularly if they have been condemned by the church" [[Decrees of the First Vatican Council / 3/4/9, 1869](#)].

This did not hinder Pope John Paul II to observe in 1996 that "new findings lead us toward the recognition of evolution as more than a hypothesis" [Pope John Paul II: [address to the Pontifical Academy of Sciences, 1996-10-22](#)]. Since 1997, the Catechism of the Catholic Church speaks approvingly of the scientific consensus, noting that "the question about the origins of the world and of man has been the object of many scientific studies which have splendidly enriched our knowledge of the age and dimensions of the cosmos, the development of life-forms and the appearance of man" [[Catechism of the Catholic Church / 1 / 2 / 1 / 1 / 4 / § 283](#)]. In 2004, the International Theological Commission of the Roman Catholic Church observed that "it is virtually certain that all living organisms have descended from [a] first organism" [[International Theological Commission: Human Persons Created in the Image of God, 2004](#)]. Adam, then, is nothing more than the "symbol" of the original unity of the human race [ibid].

Anglicanism: first opposition, then acceptance of evolution

Initial responses from the Church of England to Darwin's theories were hostile [[Church of England: Darwin and the Church](#)]. However, in the coming century, Darwin's theories became more and more accepted. In 2008, the Church issued an apology to Darwin: "People, and institutions, make mistakes and Christian people and churches are no exception [...] Charles Darwin, 200 years from your birth, the Church of England owes you an apology for misunderstanding you and, by getting our first reaction wrong, encouraging others to misunderstand you still" [[Church of England / Malcolm Brown: Good religion needs good science](#)]. Today, the Anglican Church observes that "the discovery of DNA and recent work on genome sequencing is compelling evidence for the interrelatedness of

all living things [...]. The mechanisms of genetic mutation and evolution are now well understood" [Diocese of Manchester: Special Agenda IV Diocesan Synod Motions Compatibility Of Science And Christian Belief, 2010-01-24].

Orthodoxy: neutral

Orthodoxy regards the "story of Adam and Eve as a kind of etiological parable: a story that explains, via mythological imagery, the activity of God from the creation of the world" [Orthodox Church of America / Reflections in Christ / Fr. John Breck: On Reading the Story of Adam and Eve]. Therefore, the Bible "has nothing to say, for or against, the theory of evolution" [Orthodox Church of America / Reflections in Christ / Fr. Lawrence Farley: Evolution or Creation Science?].

Lutheranism: Evolution

Lutheranism acknowledges that the theory of evolution "has the highest probability for explaining the genesis of life" [EKD: Weltentstehung, Evolutionstheorie und Schöpfungsglaube in der Schule, 2008].

American Protestantisms: no evolution

The situation is different for the American Protestantisms. Pentecostalism holds that the Bible "accurately communicates God's creation of the heavens and the earth" [Assemblies of God: Doctrine of Creation]. Consequently, the majority of Pentecostals (66%) believe that the Biblical creation account is a historical narrative (Mike Tenneson and Steve Badger: A Brief Overview Of Pentecostal Views on Origins; linked from Assemblies of God). Half of these believe that the Earth was created in six consecutive 24-hour periods less than 10,000 years ago (ibid).

Baptists, likewise, believe "in a literal biblical creation" [Southern Baptist Convention: Resolution On The Book Early Man, 1980], and "in the direct creation and historicity of Adam and Eve" [Southern Baptist Convention: On Biblical Scholarship And The Doctrine Of Inerrancy, 2012]. In the 1920's, these groups succeeded in getting teaching of evolution banned in American public schools (Wikipedia/Creationism). They also succeeded in having the Biblical creation account taught in school in the US, under names such as "scientific creationism" and "Intelligent Design" (ibid). This was brought to an end in 2005, when The Kitzmiller v. Dover ruling concluded that intelligent design is not science (ibid).



[Scott Adams: Dilbert]

Women's rights

Different Christian denominations have different opinions as to whether men and women should have equal rights. Some denominations defend a theory of "roles", in which men and women have equal worth, but different roles in society. As it so happens, men can take all roles they wish, while women are barred from certain roles (most notably all roles that have a leadership function). This is a popular theme in nearly all major religions ↗.

Bible and Early Christianity: No equal rights

Christianity is traditionally dominated by male entities. The woman was created by God only in an afterthought, and only to make man happy ↗. All main Christian prophets are male. The Christian god is male ("Father in

heaven"). The main addressee of worship is male (Jesus). Hence, most major Christian denominations traditionally gave leadership roles exclusively to males (priests, popes, bishops, etc.). This is mirrored in the following Bible verses:

- "You shall not covet your neighbor's house. You shall not covet your neighbor's wife, or his male or female servant, his ox or donkey, or anything that belongs to your neighbor." [Bible / Exodus 20:17]. This passage (from the "10 Commandments") refers to the wife as the neighbors' property, along with oxen and donkeys. Furthermore, the instruction is apparently addressed to men only.
- "Submit to one another out of reverence for Christ. Wives, submit to your husbands as to the Lord. For the husband is the head of the wife as Christ is the head of the church, his body, of which he is the Savior. Now as the church submits to Christ, so also wives should submit to their husbands in everything. Husbands, love your wives, just as Christ loved the church and gave himself up for her." [Bible / Ephesians 5:22-24]
- "Likewise, ye wives, be in subjection to your own husbands; that, if any obey not the word, they also may without the word be won by the conversation of the wives; While they behold your chaste conversation coupled with fear. Whose adorning let it not be that outward adorning of plaiting the hair, and of wearing of gold, or of putting on of apparel; But let it be the hidden man of the heart, in that which is not corruptible, even the ornament of a meek and quiet spirit, which is in the sight of God of great price. For after this manner in the old time the holy women also, who trusted in God, adorned themselves, being in subjection unto their own husbands: Even as Sara obeyed Abraham, calling him lord: whose daughters ye are, as long as ye do well, and are not afraid with any amazement. Likewise, ye husbands, dwell with them according to knowledge, giving honour unto the wife, as unto the weaker vessel, and as being heirs together of the grace of life; that your prayers be not hindered." [Bible / 1 Peter 3:1-6]
- "Follow my example, as I follow the example of Christ. I praise you for remembering me in everything and for holding to the teachings, just as I passed them on to you. Now I want you to realize that the head of every man is Christ, and the head of the woman is man, and the head of Christ is God. Every man who prays or prophesies with his head covered dishonors his head. And every woman who prays or prophesies with her head uncovered dishonors her head – it is just as though her head were shaved. If a woman does not cover her head, she should have her hair cut off; and if it is a disgrace for a woman to have her hair cut or shaved off, she should cover her head. A man ought not to cover his head, since he is the image and glory of God; but the woman is the glory of man. For man did not come from woman, but woman from man; neither was man created for woman, but woman for man. For this reason, and because of the angels, the woman ought to have a sign of authority on her head. In the Lord, however, woman is not independent of man, nor is man independent of woman. For as woman came from man, so also man is born of woman. But everything comes from God. Judge for yourselves: Is it proper for a woman to pray to God with her head uncovered? Does not the very nature of things teach you that if a man has long hair, it is a disgrace to him, but that if a woman has long hair, it is her glory? For long hair is given to her as a covering. If anyone wants to be contentious about this, we have no other practice – nor do the churches of God." [Bible / 1 Corinthians 11:1-16]
- "As in all the congregations of the saints, women should remain silent in the churches. They are not allowed to speak, but must be in submission, as the Law says. If they want to inquire about something, they should ask their own husbands at home; for it is disgraceful for a woman to speak in the church." [Bible / 1 Corinthians 14:33-35]
- "A woman should learn in quietness and full submission. I do not permit a woman to teach or to assume authority over a man; she must be quiet." [Bible / 1 Tim. 2:11-12]
- "Wives, submit to your husbands, as is fitting in the Lord. Husbands, love your wives and do not be harsh with them. Children, obey your parents in everything, for this pleases the Lord. Fathers, do not embitter your children, or they will become discouraged. Slaves, obey your earthly masters in everything; and do it, not only when their eye is on you and to win their favor, but with sincerity of heart and reverence for the Lord. Whatever you do, work at it with all your heart, as working for the Lord, not for men, since you know that you will receive an inheritance from the Lord as a reward. It is the Lord Christ you are serving. Anyone who does wrong will be repaid for his wrong, and there is no favoritism." [Bible / Colossians 3:18-25]
- "To the woman, God said: I will greatly increase your pains in childbearing; in pain you shall bring forth children, yet your desire shall be for your husband, and he shall rule over you." [Bible / Genesis 3:16] No such pain is inflicted on Adam.
- "If a man takes a wife and, after lying with her, dislikes her and slanders her and gives her a bad name, saying, "I married this woman, but when I approached her, I did not find proof of her virginity", then the girl's father and mother shall bring proof that she was a virgin to the town elders at the gate. The girl's father will say to the elders, "I gave my daughter in marriage to this man, but he dislikes her. Now he has slandered her and said, "I did not find your daughter to be a virgin." But here is the proof of my daughter's virginity [i.e., presumably the bed linen with the blood of the rupture of the hymen after sexual intercourse]. Then her parents shall display

the cloth before the elders of the town, and the elders shall take the man and punish him. They shall fine him a hundred shekels of silver and give them to the girl's father, because this man has given an Israelite virgin a bad name. She shall continue to be his wife; he must not divorce her as long as he lives. If, however, the charge is true and no proof of the girl's virginity can be found, she shall be brought to the door of her father's house and there the men of her town shall stone her to death. She has done a disgraceful thing in Israel by being promiscuous while still in her father's house. You must purge the evil from among you." [Bible / Deuteronomy 22:13-21] The virginity of the man is not required.

Catholicism: No equal rights

Quite contrary to the above Bible verses, Catholicism holds since 1965 that "every type of discrimination, whether social or cultural, whether based on sex, race, color, social condition, language or religion, is to be overcome and eradicated as contrary to God's intent" [Pope Paul VI: *Gaudium et spes* / 29, 1965-12-07]. Unfortunately, this quest has not yet arrived in Catholicism itself. The denomination does not ordain women to leadership functions such as priests, bishops, or popes (*Sacred Congregation for the Doctrine of the Faith: Inter Insigniores, 1976-10-15*).

Orthodoxy: No equal rights

Like Catholicism, Orthodoxy does not ordain women to leadership positions. And not just this: "Within the life of the family, the father must be the leader and head", and "The wife must be totally devoted to her husband". Also, beating the child is a role reserved for the father: "The true father loves and disciplines his child [since the Bible says that] He who spares the rod hates his son" [*Orthodox Church of America: Family*].

Baptism: No equal rights

Baptism does not ordain women to priest roles (*SBC: Resolution On Ordination And The Role Of Women In Ministry*). Men are considered the head of woman, and women are made for men (*SBC: Resolution On The Place Of Women In Christian Service*). Equal rights are opposed (*SBC: Resolution On Women*).

Anglicanism: Generally equal rights

The Westminster confession of faith contains no discriminatory wording (*The Westminster Confession*). The ordination of women remains controversial, but is accepted by the majority of dioceses (*Wikipedia/Ordination of women*).

Province	Ordination of female deacons permitted	First female deacon	Ordination of female priests permitted	First female priest	Consecration of female bishops permitted	First female bishop	Refs
Aotearoa, New Zealand and Polynesia	✓	✓	1976 ^[a]	1977	✓	1990	[1][2]
Australia	1985	1986	1992	1992	2007 ^[a]	2008	[3][4][5]
Bangladesh	✓	✓	✓	✓	✓	✗	[6][7]
Brazil	1983	1984	1983	1985	1983	✗	[8][9][10]
Burundi	✓	✓	✓	✓	✗	✗	[6][11][12]
Canada	1969	1969	1975	1976	1985	1994 ^[c]	[13][14]
Central Africa	✗	✗	✗	✗	✗	✗	[6][15]
Central America	✓	✓	✓	✓	✓	✗	[6][16]
Congo ^[d]	✓	✓	?	?	✗	✗	[6][19]
England	1985	1987	1992	1994	2014	2015	[21][22][23]
Hong Kong	✓	✓	1971	1944 ^[e]	✗	✗	[6][24][25]

In Anglicanism, different dioceses have different views on the ordination of women. [\[Wikipedia\]](#)

Pentecostalism: Equal rights

Pentecostalism has found 3 women prophets in the Old Testament: Miriam in Exodus 15:20; Deborah in Judges 4-5; Huldah in 2 Kings 22:14-20 and 2 Chronicles 34:22-28. It has also found 12 women mentioned as ministers in the New Testament: Tabitha in Acts 9:36; four unmarried daughters in Acts 21:8,9; Euodia and Syntyche in Philippians 4:2,3; Priscilla in Romans 16:3,4; Mary, Tryphena, Tryphosa, and Persis in Romans 16:6,12. From this, Pentecostalism concludes that "Paul clearly was a strong advocate of women in ministry" [*Assemblies of God: The Role of Women*]. The other parts of the Bible that deny women leadership roles (see above) are explained as mistranslations or misinterpretations (ibid). Therefore, Pentecostalism resolves to give equal rights to men and women (ibid).

Lutheranism: Equal rights

Lutheranism explicitly promotes equal rights for men and women ([EKD: Rolle der Frau in der EKD, 2004-09-10](#)). Individual Bible verses saying otherwise should not be seen as proof of a particular thesis, but should be seen in their context (*ibid*). Since this context is the Bible, which is riddled with inaccuracies ↗, this presumably means that the verses should be ignored.

Slavery

A slave is a person who is owned by someone. This implies that the slave (1) is physically prevented from leaving, (2) has to work under penalty of corporal punishment, (3) can be sold and bought, and (4) has their children also be slaves. Early Christianity distinguished between "just" slavery and "unjust slavery", and permitted the former – a popular theme in different religions ↗ ↗. Nowadays, both forms of slavery are prohibited in Christianity.

Old Testament: Slavery allowed

The Old Testament permits and regulates slavery explicitly:

- Anyone who beats their male or female slave with a rod must be punished if the slave dies as a direct result, but they are not to be punished if the slave recovers after a day or two, since the slave is their property. [Bible / Exodus 21:20-21]
- If a man sells his daughter as a servant, she is not to go free as male servants do. If she does not please the master who has selected her for himself, he must let her be redeemed. He has no right to sell her to foreigners, because he has broken faith with her. [Bible / Exodus 21:7]
- If you buy a Hebrew servant, he is to serve you for six years. But in the seventh year, he shall go free, without paying anything. If he comes alone, he is to go free alone; but if he has a wife when he comes, she is to go with him. If his master gives him a wife and she bears him sons or daughters, the woman and her children shall belong to her master, and only the man shall go free. [Bible / Exodus 21:2-4]
- As for your male and female slaves whom you may have: you may buy male and female slaves from among the nations that are round about you. You may also buy from among the strangers who sojourn with you and their families that are with you, who have been born in your land; and they may be your property. You may bequeath them to your sons after you, to inherit as a possession for ever; you may make slaves of them, but over your brethren the people of Israel you shall not rule, one over another, with harshness. [Bible / Leviticus 25:44-46]
- If the bull gores a male or female slave, the owner must pay thirty shekels of silver to the master of the slave, and the bull is to be stoned to death. [Exodus / 21:32] Note that the compensation goes to the master, and not to the family of the slave.



[[imgflip](#)]

Apologists have argued that this type of slavery was mainly servitude to pay off debts ([Paul Copan: Does the Old Testament Endorse Slavery?](#)). However, the rules also make unrelated people slaves – the children. Thus, the Old Testament explicitly approves of slavery.

Jesus: Nothing against slavery

Jesus uses slaves in his parables, but never argued against slavery. He said, e.g.

- "Who then is the faithful and wise slave, whom his master has put in charge of his household, to give the other slaves their allowance of food at the proper time? Blessed is that slave whom his master will find at work when he arrives." [Bible / Matthew 24:45-46]
- "For it will be like a man going on a journey, who called his bondservants and entrusted to them his property. [... One servant goes on to make more money from the entrusted property, the other does not. As for the latter:] He cast the worthless servant into the outer darkness." [Bible / Matthew 25:14-30] Jesus does not criticize that the master has control over his slaves. It is accepted as a natural state of affairs.

If Jesus had opposed slavery he would surely have said so. Yet, he did not. In Luke 7:2, Jesus heals a slave. Jesus heals the slave without any thought of freeing the slave or admonishing the slave's owner [[GodIsImaginary.com/13](#)].

This shows that he is completely comfortable with the concept of slavery.

New Testament: Slavery allowed

In the New Testament, Paul tells us

- Slaves, obey in everything those who are your earthly masters, not with eyeservice, as men-pleasers, but in singleness of heart, fearing the Lord. [Bible / Colossians 3:22]
- Servants, be submissive to your masters with all fear, not only to the good and gentle, but also to the harsh. [Bible / 1 Peter 2:18]
- Bondservants, be obedient to those who are your masters [...] knowing that whatever good anyone does, he will receive the same from the Lord, whether he is a slave or free. [Bible / Ephesians 6:5-8]
- Tell slaves to be submissive to their masters and to give satisfaction in every respect; they are not to talk back, not to pilfer, but to show complete and perfect fidelity, so that in everything they may be an ornament to the doctrine of God our Savior. [Bible / Titus 2:9]
- Let as many bondservants as are under the yoke count their own masters worthy of all honor, so that the name of God and His doctrine may not be blasphemed. 2 And those who have believing masters, let them not despise them because they are brethren, but rather serve them because those who are benefited are believers and beloved. Teach and exhort these things. [Bible / 1 Timothy 6:1-2]
- Each one should remain in the situation which he was in when God called him. Were you a slave when you were called? Don't let it trouble you – although if you can gain your freedom, do so. [Bible / 1 Corinthians 7:20-21]

Paul also said "There is neither Jew nor Gentile, neither slave nor free, nor is there male and female, for you are all one in Christ Jesus." [Bible / Galatians 3:28]. Yet, this was never understood as an instruction to abolish slavery – much like it was never understood as an instruction abolish men and women. Slaves were accepted as natural parts of society just like men and women were part of society. It has been argued that Paul worked indirectly against slavery, but did not have the power to overthrow the slavery system as a whole ([Paul Copan: Why Is the New Testament Silent on Slavery – or Is It?](#)). This, however, is as absurd as claiming that Paul worked indirectly against religion, but did not have the power to overthrow it as a whole. Both are unfalsifiable insinuations ↗. In summary, in the words of Kevin Giles, "not one word of criticism did the Lord utter against slavery". Therefore, there was little objection to slavery from Christians.

Early Christianity: Slavery allowed

The Synod of Gangra declared in the 4th century that anyone who "teaches a slave, under pretext of piety, to despise his master and to run away from his service" should be an anathema [[Synod of Gangra](#)]. Saint Augustine argued in the 4th century CE that "the prime cause, then, of slavery is sin" [[Saint Augustine: The City of God / Book 19 / Chapter 15, 4th century CE](#)]. Thus, slavery was justified as a punishment for sins. In the 6th century, Pope Gregory I, declared that slaves should be told to not despise their masters and recognise they are only slaves ([Pope Gregory I: Liber Regulae Pastoralis / Chapter 5, 590](#)). In the 13th century, Thomas von Aquinas agreed, saying that "a slave belongs to his master, because he is his instrument" [[Thomas von Aquinas: Summa Theologica / Question 57 / Article 4](#)]. Slavery is inherited from the mother, because "slavery is a condition of the body, since a slave is to the master a kind of instrument in working; wherefore children follow the mother in freedom and bondage" [[Thomas von Aquinas: Summa Theologica / Question 52 / Answer 4](#)].

The Decretum Gratiani explained in the 12th century that children inherit their parents' status: a child born by a slave woman is a slave ([Decretum gratiani / Case 32 / Question IV / Chapter 15](#)). Pope Gregory IX, likewise, decreed in his "Decretales Gregorii IX" in 1230 that the child born from a free woman is free – implying that a child born from slaves is a slave ([Pope Gregory IX: Decretales Gregorii IX / Book 4 / Title 10 / Chapter 1 and Book 1 / Title 18 / Chapter 8, 1230](#)). Together with 4 other texts, these documents formed the Catholic Canon Law from the 13th century on ([Wikipedia/Corpus Juris Canonici](#)). The law provided for four just titles for holding slaves: slaves captured in war, persons condemned to slavery for a crime; persons selling themselves into slavery, including a father selling his child; children of a mother who is a slave [[Wikipedia/Catholic church and slavery](#)]. In compliance with this ruling, Pope Nicholas V authorized Afonso V of Portugal to conquer Saracens and pagans and consign them to "perpetual servitude" in his Papal Bull "Dum Diversas" in 1452 ([Pope Nicholas V: Dum Diversas, 1452](#)) and its successor, the Bull "Romanus Pontifex" ([Pope Nicholas V: Romanus Pontifex, 1455-01-08](#)).

Catholicism: Slavery opposed but allowed, now condemned

In the 15th century, several popes started issuing commandments against slavery ([Wikipedia/Catholic Church and slavery](#)). Most notably, in 1462, Pius II declared slavery to be "a great crime" (magnum scelus); in 1537, Paul III forbade the enslavement of the Indians; Urban VIII forbade it in 1639, and Benedict XIV in 1741; Pius VII demanded of the Congress of Vienna, in 1815, the suppression of the slave trade and Gregory XVI condemned it in 1839; in the Bull of Canonization of the Jesuit Peter Claver, Pius IX branded the "supreme villainy" of the slave traders [[Catholic Encyclopedia / Slavery](#)].

However, the popes also legalized slavery in certain cases. In 1548, Pope Paul III declared in his "motu proprio" that "each and every person of either sex [...] may freely and lawfully buy and sell publicly any slaves whatsoever [...], irrespective of whether they were made Christians after enslavement, or whether they were born in slavery even from Christian slave parents according to the provisions of the common law" [[Pope Paul III: Confirmatio Statutorum populi Romani super restitutione servorum in Urbe, 1548-11-09](#)].

In 1866 the Holy Office issued an Instruction (signed by Pope Pius IX) that declared that "slavery itself, considered as such in its essential nature, is not at all contrary to the natural and divine law, and there can be several just titles of slavery and these are referred to by approved theologians and commentators of the sacred canons. For the sort of ownership which a slave-owner has over a slave is understood as nothing other than the perpetual right of disposing of the work of a slave for one's own benefit – services which it is right for one human being to provide for another. From this it follows that it is not contrary to the natural and divine law for a slave to be sold, bought, exchanged or donated, provided that in this sale, purchase, exchange or gift, the due conditions are strictly observed which the approved authors likewise describe and explain." [[Holy Office: Instruction 1293, 1866-06-20](#)]

In the 19th century, the abolitionist movement gained strength. Yet, Catholic monasteries still had slaves. They were the last to give up slavery, because their entire economy depended on slave labor (see my trip to the [Arequipa monastery](#); see [World Future Fund: Christianity and Slavery](#) for other sources). The Canon Law of 1917 still recognized the existence of slavery, ruling that a marriage is invalid if it is contracted with a slave without knowing so ([1917 Codes Iuris Canonici / Can 1083 / §2 / 2°](#)).

For unknown reasons, the Second Vatican Council decided in 1965 that slavery insults human dignity, and that it is an "infamy" [[Pope Paul VI: Gaudium et Spes / 27 / §3, 1965-12-07](#)]. Even the selling of slaves, previously allowed, is now no longer possible, because "The seventh commandment [which prohibits theft] forbids acts [...] that for any reason [...] lead to the enslavement of human beings, to their being bought, sold and exchanged like merchandise" [[Catechism of the Catholic Church / 3 / 2 / 2 / 7 / 2414](#)].

American Protestantisms: first pro-slavery, now against

Some Protestant denominations were particularly pro-slavery, in particular in the United States. Many prominent Protestant leaders defended slavery on the basis of biblical verses. Jefferson Davis, President of the Confederate States of America, argued that slavery "was established by decree of Almighty God... it is sanctioned in the Bible, in both Testaments, from Genesis to Revelation" [[Wikipedia/Christian views on slavery](#)]. Richard Furman, President of the South Carolina Baptist Convention explained that "the right of holding slaves is clearly established in the Holy Scriptures, both by precept and example" [ibid]. The Southern Baptist Convention, today the second largest Christian body in the United States, separated from the Northern Baptist Convention in order to uphold slavery ([Wikipedia/Southern Baptist Convention](#)). For a detailed treatise of slavery under the auspices of the churches, see [Bad News about Christianity / Slavery](#).

In 1865, after the American Civil War, the United States outlawed slavery. A hundred years later, in 1995, the Southern Baptist Convention apologized for its role in slavery ([Southern Baptist Convention: Resolution 899, 1995](#)). This apology is admirably verbose and explicit.

Originally, the Mormons did not oppose slavery. They upheld the "Curse of Ham", a biblical curse on a man that placed his descendants into slavery ([Wikipedia/Black people and Mormonism](#)). However, in 1833, their founder, John Smith, decided that "it is not right that any man should be in bondage to another" (ibid), and the church policy was more ambiguous. After Smith's death, black people were routinely denied priesthood. This changed in 1978, when the Mormon leaders had a revelation that reversed a long-standing policy excluding men of black African descent from the priesthood ([Wikipedia/1978 revelation](#)).

Anglicanism: First active in slave trade, then against slavery

In 1539, the Anglican Church split from the Catholic Church. Its supreme governor is the king or queen of England ([Wikipedia/Supreme Governor of the Church of England](#)). The monarchs consider themselves ordained by God ([39 Articles / Preface](#)). In this role, they oversaw the capture, transport, and sale of 12 million slaves by British merchants over the Atlantic Ocean ([Wikipedia/Slavery in the British Isles](#)).

In 1833, the United Kingdom abolished slavery. The Anglican bishops voted against the abolition of slavery ([The Guardian: Church apologizes for benefiting from slave trade, 2006-02-09](#)). When the Anglican Church finally had to let go of its slaves, it was reimbursed more than a million pounds in compensation for lost labor. For this reimbursement (and that of other slave owners), the Government had to take up a loan that totaled 40% of the Treasury's annual income ([The Economist: Ties that bind, 2020-02-08](#)). The slaves were not reimbursed.

170 years later, in 2006, the Anglican church suddenly realized that it had made a mistake. It apologized for the role it had in the slave trade (*ibid*).

Orthodoxy: First pro-slavery, now against

The Greek and Romanian Orthodox monasteries were slave owners on a grand scale ([Marushiakova, Elena and Vesselin Popov: Gypsy Slavery in Wallachia and Moldavia, 2009](#)). The slaves were mostly Gypsies. During the entire 15th century [...] all big monasteries owned Gypsy slaves [*ibid*]. In 1783, the monasteries opposed the abolition of slavery ([Wikipedia/Slavery in Romania](#)).

Since then, Orthodoxy seems to have changed its mind. Today, nearly all Christians are united in the condemnation of modern slavery as wrong and contrary to God's will [[Wikipedia/Christian views on slavery](#)].

Death Penalty

Christianity has originally endorsed the death penalty, but some denominations are now moving away from it.

Old Testament: Death penalty is mandatory

The Old Testament Law prescribed the death penalty for an extensive list of crimes including [[Christian Bible Reference Site: What Does the Bible Say About Capital Punishment?](#)]:

- Murder (Exodus 21:12-14; Leviticus 24:17,21)
- Attacking or cursing a parent (Exodus 21:15,17)
- Disobedience to parents (Deuteronomy 21:18-21)
- Kidnapping (Exodus 21:16)
- Failure to confine a dangerous animal, resulting in death (Exodus 21:28-29)
- Witchcraft and sorcery (Exodus 22:18, Leviticus 20:27, Deuteronomy 13:5, 1 Samuel 28:9)
- Human sacrifice (Leviticus 20:2-5)
- Sex with an animal (Exodus 22:19, Leviticus 20:16)
- Doing work on the Sabbath (Exodus 31:14, 35:2, Numbers 15:32-36)
- Incest (Leviticus 18:6-18, 20:11-12,14,17,19-21)
- Adultery (Leviticus 20:10; Deuteronomy 22:22)
- Homosexual acts (Leviticus 20:13)
- Prostitution by a priest's daughter (Leviticus 21:9)
- Blasphemy (Leviticus 24:14,16, 23)
- False prophecy (Deuteronomy 18:20)
- Perjury in capital cases (Deuteronomy 19:16-19)
- Refusing to obey a decision of a judge or priest (Deuteronomy 17:12)
- False claim of a woman's virginity at time of marriage (Deuteronomy 22:13-21)
- Sex between a woman pledged to be married and a man other than her betrothed (Deuteronomy 22:23-24)

The Ten Commandments say "Thou shalt not kill" (Exodus 20:13), but in the light of the previous verses, this is usually read as "You shall not murder".

Jesus: Ambiguous

Jesus approves of the Old Testament laws in principle, saying "until heaven and earth disappear, not the smallest letter, not the least stroke of a pen, will by any means disappear from the Law until everything is accomplished" [Bible / Matthew 5:18]. He explicitly upholds the death penalty in his dialog with the Pharisees: "For Moses said "[...] Whoever reviles father or mother must surely die.", but you say [...], thus making void the word of God. And many such things you do." [Bible / Mark 7:1–13].

At the same time, Jesus repeatedly stated that love is the principle that must guide all our actions (Matthew 5:43-48, Mark 12:28-34, Luke 10:25-28, Romans 13:9-10, Galatians 5:14) [ibid]. He also rejected the Old Testament principle of taking equal revenge for a wrong done (Matthew 5:38-41, Luke 9:52-56), saying that we are all sinners and do not have the right to pass judgment on one another (Matthew 7:1-5) [ibid].

In this spirit, Jesus saves the adulterous woman from being stoned to death, by saying "Let him who is without sin among you be the first to throw a stone at her" (John 8:10-11). It is not clear whether Jesus meant to abolish the death penalty with his sayings, or whether he mainly intended to expose the hypocrisy of the accusers.

New Testament: Death penalty is possible

The New Testament seems to take a distance from the harsh punishments of the Old Testament (John 1:16-17, Romans 8:1-3, 1 Corinthians 9:20-21). It warns against taking revenge for a wrong done (Romans 12:17-21, 1 Thessalonians 5:15, 1 Peter 3:9).

At the same time, the New Testament urges us to submit to the judgment of the authorities, saying in particular that the "authority does not bear the sword in vain" (Romans 13:1-5). Paul explicitly approves of the death penalty, saying "If I am guilty of doing anything deserving death, I do not refuse to die." (Acts 25:11).

Early Christianity: Death penalty shunned

A church order from Rome dated to around 200 AD forbids any Christian magistrate from carrying out a death sentence under pain of excommunication. It was also forbidden for any Christian to accuse a person of a crime if that accusation might result in the person being put to death [Wikipedia/Religion and capital punishment].

Catholicism: Death Penalty first OK, now not OK

In 1265, Thomas Aquinas supported the death penalty, writing "The life of certain pestiferous men is an impediment to the common good which is the concord of human society. Therefore, certain men must be removed by death from the society of men." [Thomas Aquinas: Summa Contra Gentiles, Book 3, Chapter 146, Sentence 27020].

In 1566, the Roman Catechism (Wikipedia/Roman Catechism) stated that "Another kind of lawful slaying belongs to the civil authorities, to whom is entrusted power of life and death, by the legal and judicious exercise of which they punish the guilty and protect the innocent." [Catechism of Trent: The Fifth Commandment, 1566].

In 1911, the Catholic Encyclopedia stated that "capital punishment is not contrary to the teaching of the Catholic Church" [Catholic Encyclopedia: Capital Punishment, 1911].

In 1952, Pope Pius XII explained that "it is reserved to the public power to deprive the condemned person of the enjoyment of life in expiation of his crime when, by his crime, he has already disposed himself of his right to live" [Pope Pius XII: The moral limits of medical research, 1952-09-14].

However, more and more countries turned against the death penalty: Venezuela made the start in 1863, and several Latin American countries followed. European countries also abolished the death penalty (Iceland in 1928, followed by Italy and Germany after the Second World War), among them the Vatican in 1969 (Wikipedia/Capital Punishment by Country). By 1995, 59 countries had abolished the death penalty.

In that year 1995, Pope John Paul II posited that "execution is only appropriate in cases of absolute necessity, in other words when it would not be possible otherwise to defend society" [Pope John Paul II: Evangelium Vitae, 1995-03-25]. The Catechism of the Catholic Church at the time mirrored this position, stating "Assuming that the guilty party's identity and responsibility have been fully determined, the traditional teaching of the Church does not exclude recourse to the death penalty if this is the only possible way of effectively defending human lives against the unjust aggressor. If, however, non-lethal means are sufficient to defend and protect people's safety from the aggressor, authority will limit itself to such means." [Catechism of the Catholic Church, Sentence 2267; as of 1996].

By 2015, nearly half of all countries (100) had abolished capital punishment. In that year, Pope Francis started to vocally oppose the death penalty, too, saying that "capital punishment is unacceptable, however serious the condemned's crime may have been. It is an offence to the inviolability of life and to the dignity of the human person which contradicts God's plan for man and for society and his merciful justice, and it fails to conform to any just purpose of punishment." [Pope Francis: Letter To The President Of The International Commission Against The Death Penalty, 2015-03-20].

In this light, the teaching of the Catholic Church was officially "changed" [Vatican News: Philippine Church officials welcome change in Church teaching on death penalty, 2018-08-08]. The Catechism of the Catholic Church was updated to say that "the Church teaches, in the light of the Gospel, that the death penalty is inadmissible because it is an attack on the inviolability and dignity of the person, and she works with determination for its abolition worldwide" [Catechism of the Catholic Church, Sentence 2267; as of 2018]. Today, "the Vatican fully supports global abolition of death penalty" at the United Nations [National Catholic Reporter: Vatican 'fully supports' global abolition of death penalty, 2015-03-12].

American Protestantisms: Death Penalty is upheld

The Southern Baptist Convention "support[s] the fair and equitable use of capital punishment by civil magistrates as a legitimate form of punishment for those guilty of murder or treasonous acts that result in death" [Southern Baptist Convention: On Capital Punishment, 2000].

In the Assemblies of God, the "Opinion on capital punishment is mixed. However, more people associated with the Assemblies of God probably favor capital punishment for certain types of crimes [...]." [Assemblies of God: Capital Punishment].

Protestantism: Against the death penalty

The Protestant Church of Germany says that "executions are a shame for mankind" [EKD: Hinrichtungen sind eine Schande für den Rechtsstaat, 2011].

Anglicanism: first for death penalty, now against

In 1562, Article 37 of the Thirty-Nine Articles states that "The Laws of the Realm may punish Christian men with death, for heinous and grievous offences." [Church of England: Articles of Religion].

Since 1988, however, the Church "speak[s] out against: [...] all governments who practice capital punishment" [Lambeth Conference 1988 / Resolution 33 / Sentence 2, 1988].

Orthodoxy: Against the Death Penalty

In 1989, the Orthodox Church in America, at its 9th All American Council in St. Louis passed resolutions condemning both abortion and capital punishment as unrighteous and evil [Orthodox Church in America: Parish Ministry Resources / Family Life / Volume II / Capital Punishment and the Gospel, 1996]. The other Orthodox churches have issued similar statements (incommunion: Orthodoxy and Capital Punishment, 2018-02-24).

Proofs for Christianity

The Gospels as proof

The Gospels are the 4 books of the New Testament that describe the life of Jesus → the Gospel of Matthew, Mark, Luke, and John. It is commonly assumed that these books were written by eye-witnesses, and hence we have a first-hand account of the resurrection by Jesus. This, however, is not true.

Written by anonymous authors

The common view holds that the gospels were written by the apostles Matthew, Mark, Luke, and John. However, none of the 4 Gospels specifies the author. They are all anonymous accounts. The tradition that the Gospels were written by the apostles was started only in 125 CE by the Bishop Papias. This means that the gospels are just texts written by people whom we do not know. There is no one to vouch for their correctness.

Not written by eye witnesses

Even if the authors are anonymous, we could still believe that they were eye-witnesses. Yet, there is no reason to assume that this would be the case – on the contrary. First, the Gospels were all written later than 60 CE. Thus, all four accounts were written more than 30 years after the events they describe. The Gospel of John was written even later, in the 2nd century after Jesus birth. This makes it less probable that the stories were written by eye-witnesses.

Furthermore, the books are not written in first person (“Then I saw how Jesus broke the bread”). Rather, they are written in third person, like a story (“Then, Jesus broke the bread”). In fact, none of the gospels pretends to be a testimony:

Luke

The Gospel of Luke explicitly says that it is not written by an eye-witness (Bible / Luke 1).

John

The Gospel of John says “This is the disciple who testifies of these things and who wrote of these things; and we know that his testimony is true.” (Bible / John 21:24). This means that the Gospel of John was not written by the original eye-witness.

Matthew

The Gospel of Matthew cannot be an eye-witness either: It tells us about the miraculous birth of Jesus, and about his miraculous resurrection. At the miraculous birth, none of the apostles or later followers was present. At the miraculous resurrection, none of the people who saw his birth were present. Thus, either way, the book contains at least some part that is not an eye-witness account – and we do not even know which one.

Mark

The Gospel of Mark could be an eye-witness account. However, it does not talk about Jesus’ birth. Furthermore, historical versions of the Gospel of Mark do not talk about the resurrection either. The chapter about the resurrection was added much later, in the 2nd century ([Wikipedia/Mark 16](#)). Thus, the only story that could be an eye witness account leaves out all the important parts.

Hence, we have no eye-witness account – neither of the miraculous birth of Jesus nor of his resurrection.

Remark: It is assumed that Chapter 21 of the Gospel of John was added later than the original writings. Thus, the original Gospel of John might have been a first-hand eye witness-account. However, it would be illogical to add a chapter that degrades the account from a first-hand eye witness account to a second-hand eye witness account. Thus, it is more likely that the Gospel of John is not a first-hand eye witness account and never was. Furthermore, once we admit that the text was edited, we do not know which part of it is an eye-witness account and which part is not.

Contradictory stories

The gospels contradict each other. There is not a single coherent sequence of events for the story of Jesus’ resurrection.

Who were the women who visited Jesus’ tomb?

Mary Magdalene and the other Mary, says Matthew (28:1); Mary Magdalene, the mother of James, and Salome, says Mark (16:1); Mary Magdalene, Joanna, Mary the mother of James, and other women, says Luke (24:10); or Mary Magdalene alone, says John (20:1).

Was the tomb open when they arrived?

No says Matthew (28:2), yes say Mark (16:4), Luke (24:2), and John (20:1).

Who was at the tomb when they arrived?

One angel according to Matthew (28:2-7), one young man according to Mark (16:5), two men according to Luke (24:4), and two angels according to John (20:12).

And so it goes on and on ([Dan Barker: Losing Faith In Faith, From Preacher To Atheist / Chapter 24, bottom](#)). Thus, the authors cannot all report true information. Some of them must be wrong. If they are wrong about these details, then there is no reason to assume that they are truthful about the resurrection.

Contradiction with history

The Gospel of Luke places Jesus' birth during "the days of Herod, the king of Judaea" (Bible / Luke 1:5), and during "the first census that took place while Quirinius was governor of Syria" (Bible / Luke 2:2). This is, by the way, the common Nativity Narrative heard in Church on Christmas. The problem is that Herod died 4 BCE, and Quirinius was governor of Syria from 6 CE on ([Wikipedia/Census of Quirinius](#)). It just doesn't square.

The Gospel of Matthew is not much better. It tells us that the devil took Jesus to a very high mountain and showed him all the kingdoms of the world (Bible / Matthew 4:8). However, at the time of Jesus, there were thriving kingdoms in China, India, South America, and Europe. It is not possible to see them all from a mountain, because the Earth is spherical. In a similar vein, Matthew tells us that, at the moment of Jesus' death, the earth shook and many dead people came out of the tombs and went into the holy city (Bible / Matthew 27:51-53). Had it really happened, such an event would for sure have left more traces in history and in historical writings than just 2 sentences in a single book. Thus, the Gospels contain statements that are outright wrong. Then, there is no reason to believe the other statements.

Not a historical account

Furthermore, the gospels of Mark, Luke, and Matthew share a part that is almost identical among them. This means that all writers except the first must have had access to at least one other gospel – or all of them must have had access to the same sources. At the same time, there are parts of the gospels that contradict each other. Now if the writers had access to each other's work or to a common source, and slightly contradict each other, and if they wanted to give a historical account, then one would expect that they explain why they copied over the work of their fellow writer on some issues, but deviated from him on other issues. But there are no such explications. This tells us that the writers did not intend to give a historical account. Therefore, most scholars assume today that the writers wished to pass a theological message rather than give a historical account.

The same is true for the stories of the Old Testament, as we shall see further down [↗](#).

Paul saw the resurrected Jesus!

Saint Paul lived at the time of Jesus, and was first an ardent enemy of the Christians. Later, he had a miraculous encounter with the resurrected Jesus, and changed his mind. He became one of the most fervent supporters of Christianity. Large parts of the New Testament were written by him. We can think that his testimony proves Jesus' resurrection.

The problem is that Paul never met Jesus before his crucifixion. Paul only met Jesus after the resurrection. During this encounter, Jesus just said that he is the Lord, and left. Thus, Paul cannot testify that the person he met was the one that was crucified. They may be different people. Besides, the encounter was not a physical encounter with a real person: Paul saw a light and heard a sound and a voice, but did not physically meet a person. Furthermore, Paul was not alone at the encounter. He was traveling with his companions. Yet, none of the companions saw the light. Now look at Paul's story like any judge in a courtroom would. Paul claims that he met a man who was known to be dead. None of Paul's companions saw this man [[GodIsImaginary.com/50](#)]. Would the judge believe Paul? Of course not! The judge would rightly conclude that Paul is saying nonsense.

The event may have been a vision, a dream, a hallucination, or just a lie – but clearly not a reliable proof. In fact, there is no reliable proof for the resurrection of Jesus. Not a single historical source independent of the Bible ever mentions that Jesus was resurrected [[GodIsImaginary.com/17](#)].

Why doesn't Jesus appear to everyone and prove that he is resurrected, just like he appeared to Paul? If Paul needed a personal visit from Jesus to know that Jesus was resurrected, then why wouldn't you?

By [GodIsImaginary.com/15](#)

Jesus died for us!

In the Christian belief system, Jesus died for our sins. This is, in the Christian view, more than enough of a reason to follow him ↗.

However, we have no reason to assume that Jesus died for our sins. According to the Bible, Jesus himself never claimed to have died for our sins. The idea was developed only later by Paul. Paul, however, never met Jesus ↗.

The Bible is the Word of God!

A common argument goes that the Bible is word of God, and that, therefore, it must be true ↗. Once it is true, the truth of Christianity follows.

Fictional story

Atheists see no reason to believe that the Bible would be the word of God. For example, the Bible talks of serpents that speak. Serpents cannot speak. Snakes (and reptiles in general) have neither the physical structure nor the brain power to speak. There simply are not enough neurons in the reptile brain to process language. [WhyWontGod-HealAmputees.com] Therefore, it is clear to atheists that the Bible is a fictional story. It talks of fantastic things that did not happen in reality. This is just like a Harry Potter book, the fairy tale of Cinderella ↗, the story of Gayatri ↗, or of Persephone ↗. They are all great stories, but we have no reason to think they are true.

Unknown authors

Even if we were willing to accept the talking serpents, there is the problem that we do not know who wrote the Bible. As we have seen ↗, we do not know who wrote the New Testament. We also do not know who wrote the Old Testament. Take the creation account: The only eye witnesses of the creation were Adam and Eve. However, they could not have written the book of Genesis, because it states that "Adam lived 930 years, and then he died" [Bible / Genesis 5:5]. A person cannot write about their own death. Thus, we conclude that the book of Genesis was not written by Adam. It was written by later authors, at least 900 years after the creation. Then there is no reason to assume that these authors got right what happened 900 years before they started writing, and after the death of the principal witness. In the same vein, people used to believe that the first 5 books of the Bible (which include the book of Genesis) were written by the Prophet Moses. However, one of these books says that "no one knows where Moses' grave is" [Bible / Deuteronomy 34:6]. This means that Moses cannot have written this set of books. This means that the creation story is just a story of which we do not know the author. There is no reason to believe a story of which we do not even know who wrote it.

People say that the Bible is inspired by God. However, we do not even know who wrote it. Then, how would we know that this person would be inspired by God?

Wrong data

Going further, there are good reasons to believe that the stories of the Old Testament are complete bunk. The book of Genesis (Bible / Genesis 1) tells us that the plants were made before the sun was made – which is just plain wrong ↗. Furthermore, the sun was allegedly made on the 4th day – which means that these 4 days cannot have passed, because there was no sun in the first place. The entire creation account of the Bible is just nonsense ↗ ↗.

The same holds for story of the Israelites in Egypt. This story tells us that hundreds of thousands of Israelites were held in slavery in Egypt, and that they were then led back home to Israel. This story has no historical foundation [Wikipedia/The Exodus / Historicity]. The figure of 600,000 adult males (Bible / Exodus 12:37) would imply a flight of 2 to 2.5 million people, when the total population of Egypt at the time was 3 to 4.5 million. Had such a catastrophic demographic outflow taken place, it would have been recorded in Egyptian writings [ibid]. Yet, it is not. The Bible is just wrong.

If I was God, at the end of the Bible, I would have leant in and gone "Oh, and tell them it's round!"

The Bible is metaphorical truth!

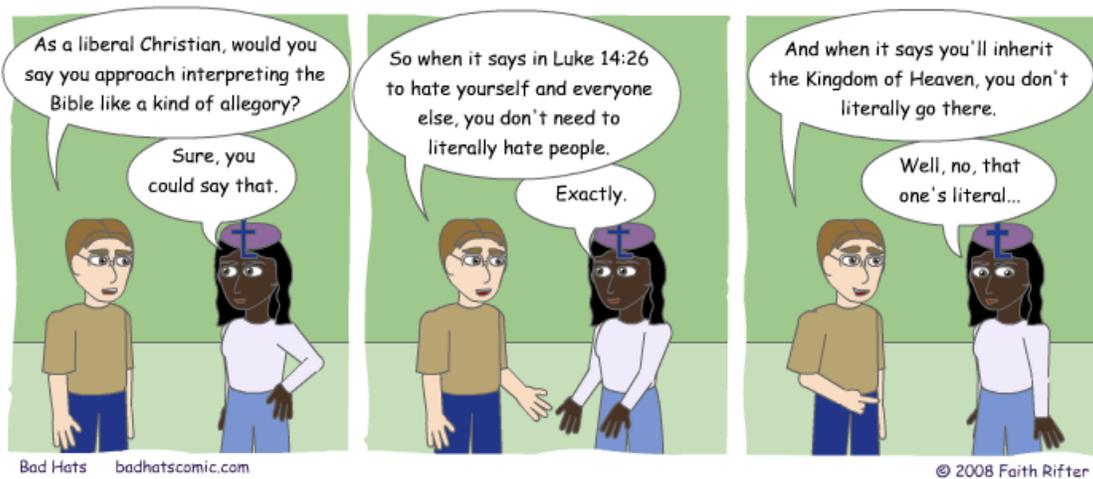
Adherents of liberal Christianity argue that many parts of the Bible are metaphorical ↗. In their view, the Earth was not literally created in 6 days, and Moses did not really part the waters with divine power. Thus, liberal Christians tend to see the Bible as a metaphorical rather than a factual account. This does away with many of the problems of the Bible ↗.

Surprisingly, these very same Christians exempt specific parts of the Bible from the metaphorical interpretation. They hold that the parts where God created the universe and where Jesus rose from the dead are still literally true. Atheists argue that such a choice is completely arbitrary. Why would some supernatural bits of the Bible be metaphorical, and others not? Once we abandon that the supernatural claim that the Earth was created in 6 days, we have no reason to cling on to the other supernatural claim, that Jesus rose from the dead.

If we agree that the entire Bible is metaphorical, then we have no reason to believe in Jesus or the abrahamic god at all. This is because our only reason to believe in the abrahamic god is the Bible (and its cousins). Remove it from the equation, and Christianity implodes.

I once had a fundamentalist evangelical Christian explain to me that when Lot's wife looked back, it was a metaphor for how she yearned for her old, sinful life. This is probably a correct interpretation. Now all I have to do is explain that the rest of the book was written in much the same manner.

By [Atheist Cartoons](#)



Jesus did miracles!

Christians argue that Jesus did many miracles. This proves, in their eyes, that Christianity is true.

Unfortunately, there is no evidence that Jesus did these miracles. Our only source for this claim is the Bible. The Bible also says that the plants were created before the sun (Bible / Genesis 1), which is wrong ↗. The Bible is thus not a very reliable source.

Furthermore, very few people in the Western world actually believe in miracles. For example, 1% of pregnant teenage girls in the US say they have had a virgin birth ([Reuters: Claims of virgin births in U.S. near 1 percent, 2013-12-17](#)). Still, for unknown reasons, nobody believes them. So then why should we believe in a virgin birth that was reported 2000 years ago? The same goes for other miracles. I can show you a picture of a man who hovers in the air (see the [Chapter on Proofs for God](#)). And still, you will not believe that this is a miracle. Much less would you believe me if I tell you my grandfather saw a man who hovered in the air. You would think this is just some nonsense story. Even less would you believe me if I tell you that my grandfather heard that there was a man who

hovered in the air. And if an ancestor of mine heard about the hovering man in ancient times, thousands of years ago, then you would believe me even less. And you would declare me crazy if I believed the story if it was not even told to an ancestor of mine, but just to some random person whom I don't even know ↗. And this is how it is with the miracles of Jesus. Even the contemporaries of Jesus did not believe in his miracles ↗

Is there any evidence that Jesus exists today? As you think about this simple question, you will realize that there is not. Everything else that you believe in has left behind some sort of evidence that proves its existence. But with Jesus there is nothing. There is no physical evidence of his existence.

By WhyWontGodHealAmputees.com/25

The Bible contains true prophecies!

One proof for the truth of the Bible that is often brought forward is the list of prophecies it makes. For example, the Old Testament says that the Messiah will be born from the descendants of David – and Jesus was indeed born from the descendants of David.

From an atheist perspective, both the Old Testament and the New Testament are fictional stories written by human authors ↗. In such a setting, it is easy to fulfill a prophecy: Just make your character do whatever a previous part of the story promised ↗. The Old Testament says that Jesus has to be born from the stem of David? Fine, write in your story that Jesus is born from the stem of David. Nobody is going to check the genealogy of a baby born out of wedlock in some remote Jewish village. In the same way, all other prophecies can be fulfilled. This, however, is no proof of divinity ↗.

How difficult would it be to improve the Bible?

Anyone in this room could improve this supposedly inerrant text scientifically, historically, ethically, spiritually... in moments.

By Chris Harrison

Jesus is love!

For Christians, Jesus is the ultimate symbol of love: a man who sacrifices himself for the good of mankind. Such a powerful symbol convinces them that Christianity is the religion to follow.

From an atheist point of view, things are a bit different: Jesus may indeed have been an exceptionally charitable and kind person. Many atheists will acknowledge the good works he did. Even if we are not really sure whether he did what the Bible says ↗, we can still appreciate the metaphor of a man who helps the poor. So far, atheists and Christians can actually agree.

Now, it is a long way from there to the existence of a God, the creation of the Earth by supernatural power, the belief in resurrection from the dead, and the obligation to not work on Sundays. Atheists see no connection from "There was a (possibly mythological) good man 2000 years ago" to "Gay people should not marry" ↗.

Was Jesus really love?

The idea that Jesus is love is not uncontroversial. Jesus' love finds an abrupt end if you do not believe in God: "Whoever believes and is baptized will be saved, but whoever does not believe will be condemned" [Bible / Mark 16:16, similar: John 3:18]. Jesus can eat with sinners of all kinds, but not with atheists. That is not exactly "love".

Furthermore, as GodIsImaginary.com/35 observes, Jesus did much worse than he could have done. At the very least, Jesus could have transcribed passages into the Bible that would have ended sexism, racism and slavery forever. In the same way, Jesus could have chosen women to be six of his apostles and made several speeches on the topic of women's equality. This would have been a great and courageous sign of love for his female disciples. Furthermore, if he really loved the Israelites, he could have taught them the basics of medicine, biology, and

physics. This would have been a really generous sharing of divine knowledge, which could have saved many many lives, and could have inspired a scientific approach to life. He didn't.

Jesus invented hell

Finally, one of Jesus' achievements was to introduce the concept of hell (Christopher Hitchens: God is not great / 210). Before Jesus, hell was only weakly alluded to (Bible / Daniel 12:2). Hell was thought to be of limited duration – at most 1 year ([Wikipedia/Gehenna](#)). Furthermore, there was no torture on sabbath days.

It was only Jesus who introduced the concept of eternal physical tortures (Bible / Matthew 5:22, 5:29, 5:30, 8:12; 18:8-9, 22:13, 25:41, 25:46; Mark 9:43-49; Lukas 16:19-31 ↗). He came up with the idea in the first place. This means that Jesus doesn't love his enemies at all. In fact, you don't even need to be an enemy – even those who would rather not "believe in" Jesus are condemned to eternal torture in a lake of fire [[GodIsImaginary.com/39](#)]. This is the exact opposite of love.

"Hello, my name is Jesus. I love you deeply. I have loved you since you were conceived in the womb and I will love you for all eternity. I died for you on the cross because I love you so much. I long to have a loving personal relationship with you. I will answer all of your prayers through my love. But if you do not get down on your knees and worship me, and if you do not EAT MY BODY and DRINK MY BLOOD, then I WILL INCINERATE YOU WITH UNIMAGINABLY TORTUOUS PAIN IN THE FIRES OF HELL FOR ALL ETERNITY BWAH HA HA HA HA HA!"

By [WhyWontGodHealAmputees.com/25](#)

Christian values

The Western culture and value system has inherited large parts from Christianity: The idea of humans as individuals, the concept of charity, and (maybe most importantly) the abolition of the retaliation law. These concepts have been picked up, developed, and propagated by early Christians. This could be seen as an argument to follow that religion.

Atheists do not share this perspective. First of all, Christianity has been associated in the past also with many values that we no longer share today. These include slavery ↗, the suppression of freedom of thought ↗, book censorship ↗, disdain for people of other life stances ↗, Biblical rituals ↗ ↗, weird sexual restrictions ↗, and ancient values in general ↗. Thus, even if we share some of the values of early Christianity, it is clear that we can no longer share all of them ↗. There is no reason to glorify a religion that has produced at least as many controversial values as good values.

Second, appreciation for some values does not mean that we would have to buy the entire package. We can, e.g., renounce the retaliation law without being obliged to believe that Jesus rose from the dead. In fact, it is only through analytical dissection of Christianity that humanity came to abolish the values that we no longer share today ↗. Atheists have taken this dissection a little further, and have dispensed not just with these ancient values, but also with the supernatural.

Withhold not correction from a child: for if thou strike him with the rod, he shall not die. Thou shalt beat him with the rod, and deliver his soul from hell. [Bible / Proverbs 23:13-14]

Why doesn't a book written by an omniscient being leave you with a sense of wonder and amazement? If you are reading a book written by the all-powerful, all-knowing, all-loving creator of the universe, wouldn't you expect to be stunned by the brilliance, the clarity and the wisdom of the author?

Instead, opening the Bible inevitably creates a feeling of dumbfoundment. Have you ever noticed that? Instead of brilliance, much of the Bible contains nonsense. Do these passages leave you with the impression that they were written by an all-powerful, all-knowing God? Or was this book written by primitive men? Try the experiment yourself and see what you find.

By [GodIsImaginary.com/5](#)

Christian Culture

Much of our Western Culture is based on ideas, literature, and artwork from Christians. This is seen as a strength of the Christian faith.

And yet, it is not so much a sign of strength of Christianity as it is a sign of the suppression of alternative forms of art. During much of Christianity's history, non-religious art was either unpopular or deprecated or both. Unbelievers were persecuted as heretics ↗. Thus, any contribution to society had to happen necessarily in the frame given by the religious authorities. Hence, in retrospect, any creativity appears to be based on Christian thought. But that does not mean that Christianity was the best source of inspiration.

On the contrary, Christianity just restricted the scope of creative contributions. For example, to a casual observer, most of the European artworks between the 8th century and the 16th century seem to be about Jesus on the cross. Atheists wonder why an entire continent restricted itself to a single scene for several centuries. All expressions of femininity were channeled onto the virgin Mary – what a loss!

This does not prevent atheists from appreciating the Christian contributions to our culture. It just defies the argument that Christianity would deserve adherence due to its cultural contributions.



Oh, how delightful Christian art is!
[Picture taken in the Renaissance exposition "Heures Italiennes" in Chantilly/France]

Stop talking about this "Christian Culture". Christianity has been a force against knowledge and culture for much of its existence. Our occidental culture is, in large parts, born from the opposition to this force.

By Arno Schmidt, paraphrased

God is there and loves us all!

In the Christian world view, God is there and loves us all – no matter whether atheists believe in him or not.

Atheists retort that this is actually not true. God asked us explicitly to kill the apostates (Bible / Deuteronomy 13:6-10; Leviticus 24:14-16 & 23; Deuteronomy 13:1) ↗. This is not exactly what atheists would call love. Even if this commandment has been abandoned since 1965 ↗, this is of little comfort since God has neither retracted the original commandment, nor issued an apology. Thus, the reproach still stands.

Anyway, God's love is not love in the human sense, because it has no effect whatsoever, as we have discussed in the [Chapter on the Abrahamic God](#). Finally, claiming that some fictional creature loves you does not pop that creature into existence ↗.

There are so many other arguments!

We treat other arguments for the God, which are not specific to Christianity, in the [Chapter on Proof for Gods](#). Arguments pertaining to the God of Gaps are treated in the [Chapter on the God of Gaps](#).

We discuss arguments for religion in general (such as charity, longevity, and White Weddings) in the [Chapter on the Benefits of Religion](#).

Christian Oddities

The Bible

benevolent, but causes harm; he is perfect, but his creation is messy; and he has committed extraordinary brutalities. We discuss these problems in the [Chapter on the Abrahamic God](#).

A just and merciful parent cannot condemn his children to eternal banishment. Can you suppose that God, so great, so good, so just, is less kind than you are?

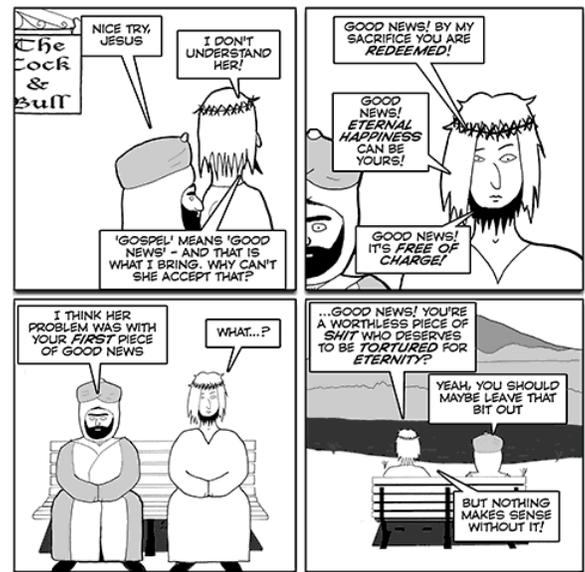
By the spirits in Allan Kardec's "Spirits' Book"

Original Sin

In Christianity, the "Original Sin" is humanity's state of sin, which resulted from the fact that Adam and Eve (the ancestors of humanity in Christian mythology) ate a fruit from a tree that God forbade them ↗. In a naive interpretation of things, Adam and Eve stole the fruit, and humanity then inherited their guilt. As the Bible explains: "By the one man's disobedience [=Adam's] the many were made sinners" [Bible / Romans 5:19]. However, it is not clear how guilt for a crime could be inherited. Therefore, dozens of other theories have been drawn up about what this "state of sin" could be: the general inclination to do sin, the inability to have true faith in God, the corruption of the Nature of every man, or of being a "condemned crowd" ([Wikipedia/Original Sin](#)).

From a scientific point of view, the story of Adam and Eve is a myth ([Chapter on the Universe](#)). It did not happen. The story was initially invented to explain the origin of the world, and to explain why humans are weak ↗. Then the theory of the original sin was developed. The word "sin" means "an offense against religious or moral law" [[Merriam Webster: sin](#)]. Thus, the concept was used to make people feel guilty: "There is no one righteous, not even one; [...All] have together become worthless; there is no one who does good, not even one" [Bible / Romans 3:10], and "all have sinned and fall short of the glory of God" [Bible / Romans 3:23-24]. Instilling guilt is a well-known pattern to bind people emotionally to a religion ↗.

Unfortunately, people realized that the idea of inherited sin makes no sense. Therefore, theologians started re-interpreting the word "sin". Suddenly, "sin" came to mean no longer an active offense, but "a state of weakness". Thus, it became a pumpkin word ↗. It was re-interpreted to mean something else, but it keeps its reproachful connotations. It keeps suggesting that humanity is guilty of something, even without having done anything. That, by itself, is wrong and manipulative in atheist eyes ↗.



[Jesus and Mo, 2013-09-04]

The Trinity

In 325 CE, the First Council of Nicaea decided that God was triune: a single being of three distinct beings ↗.

For an atheist, this is literally unbelievable: Something cannot be one and three at the same time. This is just nonsense. Atheists also suspect that Christians cannot really imagine the trinity either. They just say they do ↗. In the end, few people actually believe in the literal trinity. The concept is nonsensical. It was made up by the theologians – just like the rest of Christianity.

One may say with one's lips: "I believe that God is one, and also three" – but no one can believe it, because the words have no sense.

By Leo Tolstoy (Лев Николаевич Толстой)

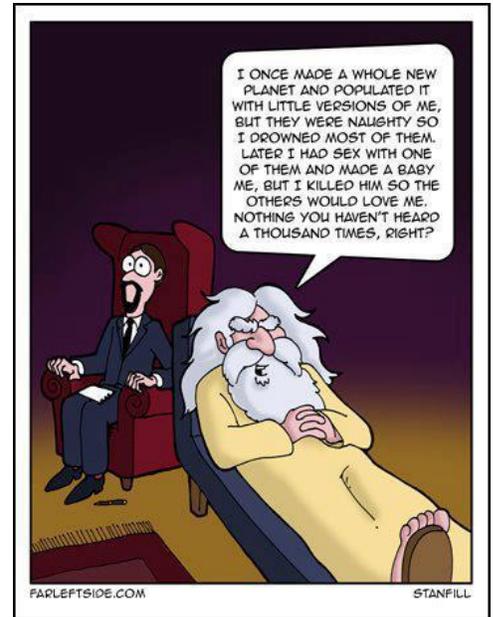
Remark: The trinity is a dogma that is shared by all major Christian denominations ↗. Other dogmata are local to one denomination. Catholicism is particularly rich in such dogmata. My favorite is the physical assumption of the Virgin Mary to Heaven. The dogma says that the mother of Jesus did not die, but that her body was physically raised to Heaven. Surprisingly, this dogma was not decided in the early days of the Church, when people had no clue about the universe, but in 1952. Just 50 years later, Heaven and Hell ceased to be physical places ↗. It is not reported what happened to Mary at this occasion.

Atonement

In Christianity, atonement is the idea that humans are reconciled to God through Christ's sacrificial death [Wikipedia/Atonement in Christianity]. Theologians have developed dozens of theories about how this might work (ibid). In many of these models, the basic idea is that Jesus' death cleared the Original Sin ↗.

No matter which interpretation we choose: to an atheist (and in particular to a Humanist ↗), the idea that an unrelated person has to suffer in order to clear some inherited sin is completely repulsive. Sin (in any common sense) cannot be cleared through suffering or death. If someone did harm, then it does not help at all if some other unrelated person is tortured. Anybody who draws comfort from such a thing is a sadist.

Thus, from an atheist point of view, all of this is just an attempt to make people thankful to Jesus: We first invent a problem (the Original Sin), and then present our favorite prophet as the solution to that problem. This is a well-known pattern to make people emotionally attached to a religion ↗.



[Stanfill]

*I don't even understand the connection with "died for your sins".
He died for your sin, well, how does one affect the other? "I hit myself in the foot with a shovel for your mortgage!"*

By Doug Stanhope

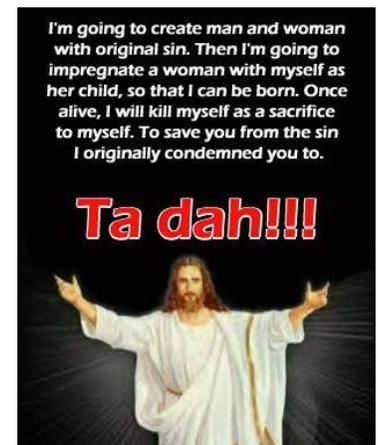
Self-Sacrifice

The story of killing someone in order to make up for the imagined sins of someone else is already pretty weird in itself ↗. This idea becomes even weirder when we consider the concept of trinity: God the Father and Jesus are one. Thus, God killed himself in order to make himself forgive. When Jesus laments "My God, my God, why have you forsaken me?" [Bible / Matthew 27:46], he basically says "Myself, myself, why have I forsaken me?" [GodIsImaginary.com/33]. This is completely absurd.

Furthermore, if God is so just and kind, why can't he just forgive without spilling his own blood?

Yes, sending myself down and having the humans crucify me – that will satisfy me. I feel much better now.

By GodIsImaginary.com/15



[anonymous]

Remark: As Christopher Hitchens remarks, there is a parallel between Abraham aiming to kill his son Isaac ↗ and God killing Jesus. In both cases, a father aims to kill his son in order to show love. In one case, a man wants to impress God. In the other, God wants to impress man.

Cafeteria Christianity (1)

Some Christians (not all) believe that we should follow the values of the Old Testament ↗. They cite verses from the Old Testament to prove, e.g., that homosexuality should be punished. Even liberal Christians use the Old Testament as a reference – e.g., when speaking of the 10 Commandments. The Bible also clearly tells us that “the word of our God stands forever” [Bible / Isaiah 40:8]. And Jesus agrees: “Do not think that I have come to abolish the Law or the Prophets; I have not come to abolish them but to fulfill them. I tell you the truth, until heaven and earth disappear, not the smallest letter, not the least stroke of a pen, will by any means disappear from the Law until everything is accomplished.” [Bible / Matthew 5:17-20].

And yet, the Old Testament contains a surprisingly large amount of nonsensical rules. Consider, e.g., Deuteronomy 22:28: It says that if a man rapes a woman, he has to pay money to the father of the woman, and gets to marry the woman. This is obviously an outrageous rule, which totally disregards the suffering, the self-determination, and even the existence of the victim as a human being with rights. For good reasons, this rule is no longer applied today. And for unknown reasons, this rule rarely appears in Christian discourse. It is just ignored. That is weird, because it would provide a very short path to the conclusion that the Bible cannot be the word of a benevolent god. But Christians never talk about this rule. Instead, they cherry-pick the rules they like from the Bible. This phenomenon is called “Cafeteria Christianity”. I think no-one described this better than an anonymous writer on the Internet, who replied to a Christian Conservative as follows:

Dear Dr. Laura,

Thank you for doing so much to educate people regarding God's Law. I have learned a great deal from your show, and I try to share that knowledge with as many people as I can. When someone tries to defend the homosexual lifestyle, for example, I simply remind him that Leviticus 18:22 clearly states it to be an abomination. End of debate.

I do need some advice from you, however, regarding some of the specific laws and how to best follow them.

- When I burn a bull on the altar as a sacrifice, I know it creates a pleasing odor for the Lord (Lev 1:9). The problem is my neighbors. They claim the odor is not pleasing to them. Should I smite them?*
- I would like to sell my daughter into slavery, as sanctioned in Exodus 21:7. In this day and age, what do you think would be a fair price for her?*
- I know that I am allowed no contact with a woman while she is in her period of menstrual uncleanness (Lev 15:19-24). The problem is, how do I tell? I have tried asking, but most women take offense.*
- Lev. 25:44 states that I may indeed possess slaves, both male and female, provided they are purchased from neighboring nations. A friend of mine claims that this applies to Mexicans, but not Canadians. Can you clarify? Why can't I own Canadians?*
- I have a neighbor who insists on working on the Sabbath. Exodus 35:2 clearly states he should be put to death. Am I morally obligated to kill him myself?*
- A friend of mine feels that even though eating shellfish is an Abomination (Lev 11:10), it is a lesser abomination than homosexuality. I don't agree. Can you settle this?*
- Lev 21:20 states that I may not approach the altar of God if I have a defect in my sight. I have to admit that I wear reading glasses. Does my vision have to be 20/20, or is there some wiggle room here?*
- Most of my male friends get their hair trimmed, including the hair around their temples, even though this is expressly forbidden by Lev 19:27. How should they die?*
- I know from Lev 11:6-8 that touching the skin of a dead pig makes me unclean, but may I still play football if I wear gloves?*
- My uncle has a farm. He violates Lev 19:19 by planting two different crops in the same field, as does his wife by wearing garments made of two different kinds of thread (cotton/polyester blend). He*



Leviticus 18:22 Thou shalt not lie with mankind, as with womankind: it is abomination.
Leviticus 19:28 Ye shall not make any cuttings in your flesh for the dead, nor print any marks upon you: I am the Lord.
[Found in: Atheist Cartoons]

also tends to curse and blaspheme a lot. Is it really necessary that we go to all the trouble of getting the whole town together to stone them? (Lev 24:10-16) Couldn't we just burn them to death at a private family affair like we do with people who sleep with their in-laws? (Lev. 20:14)

I know you have studied these things extensively, so I am confident you can help. Thank you again for reminding us that God's word is eternal and unchanging.

Your devoted disciple and adoring fan.

Remark: The Old Testament also teaches that all debts shall be forgiven after 7 days (Bible / Deuteronomy 15:1). Just in case this comes in handy for the reader.

Cafeteria Christianity (2)

We have seen that Christians routinely disregard instructions from the Old Testament ↗. Progressive Christians can still argue that the Old Testament was superseded by the New Testament ↗. However, even the laws of the New Testament are disregarded:

- I permit no woman to teach or to have authority over men; she is to keep silent. [Bible / 1 Timothy 2]
- Now as the church submits to Christ, so also wives should submit to their husbands in everything [Bible / Ephesians 5:24]
- Women should remain silent in the churches. They are not allowed to speak, but must be in submission, as the law says. 35 If they want to inquire about something, they should ask their own husbands at home; for it is disgraceful for a woman to speak in the church. [Bible / 1 Corinthians 14:34-35]

In spite of the fact that the Bible is supposed to be God's eternal Word [Bible / Isaiah 40:8], we completely ignore it:

- We make women the CEOs of major corporations.
- We elect women to high government offices.
- We appoint women as presidents of universities.
- We fill our schools with female teachers.
- We allow women to speak freely in church.

We do all of this in direct defiance of God's Law in the Bible [GodIsImaginary.com/30]. This shows that we all know too well that the Bible is nothing more than an ancient man-made collection of stories and rules.

It's almost as if the Bible was written by racist, sexist, homophobic, violent, sexually frustrated men, instead of a loving God. Weird.

By Ricky Gervais

Elijah

The Bible has a beautiful story about how the Prophet Elijah defeated the followers of the competitor god Baal:

Elijah said to them, "[...] Get two bulls for us. Let Baal's prophets choose one for themselves, and let them cut it into pieces and put it on the wood but not set fire to it. I will prepare the other bull and put it on the wood but not set fire to it. Then you call on the name of your god, and I will call on the name of the Lord. The god who answers by fire—he is God." [...]

They called on the name of Baal from morning till noon. "Baal, answer us!" they shouted. But there was no response; no one answered. And they danced around the altar they had made. At noon Elijah began to taunt them. "Shout louder!" he said. "Surely he is a god! Perhaps he is deep in thought, or busy, or traveling. Maybe he is sleeping and must be awakened." So they shouted louder and slashed themselves with swords and spears, as was their custom, until their blood flowed. Midday passed, and they continued their frantic prophesying until the time for the evening sacrifice. But there was no response, no one answered, no one paid attention.

Then Elijah said to all the people, "Come here to me." [...] He stepped forward and prayed: "Lord, [...] Answer me, Lord, answer me, so these people will know that you, Lord, are God, and that you are turning their hearts back again." Then the fire of the Lord fell and burned up the sacrifice, the wood, the stones and the soil. When all the people saw this, they fell prostrate and cried, "The Lord – he is God! The Lord – he is God!" Then Elijah commanded them, "Seize the prophets of Baal. Don't let anyone get away!" They seized them, and Elijah had them brought down to the Kishon Valley and slaughtered there. [Bible / 1 Kings 18]

This story shows that in the Christian belief system, it is permissible to ask for evidence for God. However, nowadays, there is no evidence for God. God does not do verifiable miracles upon demand. He does not even answer prayers ↗. This shows, by Elijah's argument, that the god does not exist. Following Elijah's example, we should therefore abandon the belief in him, and proceed to slaughter his prophets.

People argue that "You shall not test the Lord". They will also say that God has to remain "hidden". However, the Bible contains more stories of people who doubted the existence of God or the divinity of Jesus. In each case, God does not remain hidden at all, but provides a visible proof:

- Saint Paul was an ardent critic of Christians. Then Jesus appeared to him ↗, and he became a believer.
- The Doubting Thomas was an apostle who did not believe in Jesus' resurrection. He said: "Except I shall see in his hands the print of the nails, and put my finger into the print of the nails, and thrust my hand into his side, I will not believe." [Bible / John 20:24-29]. Jesus then let him examine the wholes in his hands, and Thomas believed.
- Saint Peter doubted that the man who walked on the water was really Jesus. He said: "Lord, if it's you, tell me to come to you on the water" [Bible / Matthew 14:28]. Jesus made him walk on the water, and all those present concluded that "Truly you are the Son of God" [Bible / Matthew 14:32].

Thus, even the contemporaries of Jesus doubted his miracles. Hence, atheists reason, we are also entitled to question his miracles. We are even more entitled to question his miracles, because we know of them only by second-hand reports of people who lived thousands of years ago. If the ancients did not believe without evidence, then neither should we.

The problem is that there is no evidence for Jesus' miracles. All we have are reports by people whom we do not know ↗. That would not have convinced the ancients, and much less should it convince us ↗ ↗.

Remark: Islam has the same concept of challenging believers of other religions: "And they say "None will enter Paradise except one who is a Jew or a Christian". That is merely their wishful thinking. Say "Produce your proof, if you should be truthful."" [Quran 2:111]. At the same time, there is no proof that Muslims would go to Heaven, either.

The Catholic Church

The Catholic Church is the largest Christian denomination ↗. Despite the popularity of Pope Francis, the Catholic Church has made a number moral mistakes in the recent past. These were considered so serious, that the UN Committee on Rights of the Child has issued a damning report (see my summary: [The UN Committee on Rights of the Child and the Holy See – UN-Holy](#)). The report criticizes in particular:

- an incompatibility between Catholic Canon Law and the UN Convention of Children's rights
- a social stigmatization of homosexuals
- a disregard for legal equality between genders, which is often used to justify discriminatory legislation
- sexual child abuse, where the Church has consistently placed the preservation of the reputation of the Church and the protection of the perpetrators above children's best interests. In the US alone, the church has spent 4 billion USD in settlements and judgements ([National Catholic Reporter: Costs of sex abuse crisis to US church underestimated, 2015-11-02](#)).
- the toleration of quasi-slavery of young girls in the Magdalene laundries of Ireland
- the promotion of corporal punishment of children



In memory of the women who were abused in the [Catholic Magdalene Laundries](#)
[Picture taken in Galway/Ireland]

- the obstruction of investigations of sexual abuse committed by members of the Catholic churches
- the obstruction of efforts in certain countries to extend the statute of limitation for child sexual abuse

These positions are in grave contradiction with the rights of the child. They are also in grave disagreement with the Human Rights [↗](#) or any harm-based moral framework [↗](#). Therefore, Humanists cannot agree on such policies. This disagreement extends to the present, because the Church did not abandon the above positions. On the contrary, in its reaction to the report, the Church "regrets to see [...] an attempt to interfere with Catholic Church teaching" [[Vatican Radio: Holy See responds to UN Committee on Rights of the Child, 2014-02-05](#)]. This divergence has a long history: The Catholic Church's initial response to the[...] "Declaration of the Rights of Man" [...] was complete rejection [[Australian Catholic Bishops Conference: From Rejection to Proclamation – A Brief Overview of the Development of the Catholic Church's Thinking on Human Rights, 2002](#)]. Pope Gregory XVI opposed liberty of conscience, freedom to publish, and the separation of Church and State ([Pope Gregory XVI: Mirari Vos, 1832](#)). This position has changed in the 20th century. Pope Francis praises the Human Rights ([Vatican News: Pope to Diplomatic Corps: Uphold human rights, defend family, 2018-01-08](#)). However, the Vatican is the only European country that has not signed the International Covenant on Civil and Political Rights ([Wikipedia/ICCPR](#)). Thus, Humanists and the Catholic Church continue to be at disagreement [↗](#).

Papal Infallibility

The First Vatican Council defined that "the Roman Pontiff, when he speaks ex cathedra [...] operates with [...] infallibility [...] and so such definitions of the Roman Pontiff from himself, but not from the consensus of the Church, are unalterable." [[First Vatican Council, 1870](#)]. This infallibility has been much criticized. However, it is only natural that the pope is infallible when he speaks in matters of faith, because he defines the faith. It is a bit like when the French scientists defined how heavy a kilogram is – they cannot err because they defined it. Furthermore, the infallibility of the pope applies only when the pope speaks "ex cathedra". This notion is not explicitly defined, but the consensus is that it applies only when the pope explicitly evokes divine authority. This has so far happened only two times ([Wikipedia/DE/Kathedra](#)).

However, in the Catholic belief system, the Church still has the highest moral authority. Priests can deliver absolution for sins. When they do so, they speak in the name of Jesus Christ, i.e., in the name of God himself ([Wikipedia/Absolution](#)). The formula is "ego te absolvo a peccatis tuis in nomine Patris, et Filii, et Spiritus Sancti" – "I absolve you from your sins in the name of the Father, and of the Son, and of the Holy Spirit". This is not a request to God. It is a declaration by the priest in the name of God. This is based on a Bible verse, where Jesus told his disciples: If you forgive anyone's sins, their sins are forgiven [[Bible / John 20:23](#)]. The pope has even more divine power: He is the "guardian of [Jesus'] entire flock in His own place", and the "Vicar of Christ [, a title] which he bears [...] with vicarial power derived from Him" [[Catholic Encyclopedia: Vicar of Christ, 1913](#)]. More succinctly, the pope "hold[s] upon this earth the place of God Almighty" [[Pope Leo XIII: Praeclara Gratulationis Publicae, 1894](#)]. Thus, the priests, and even more so the pope, can speak in the name of God himself.

If this authority decides (or ever decided) something that is in grave contradiction with the Human Rights, then God would surely have withdrawn the right to speak in his name from this authority. He did not. This could mean that God does not like the Human Rights. More likely, however, it means that the Church just claims the ability to speak in God's name. That is easy to claim, because nobody can check it [↗](#). This means that the Pope is just one more person who wrongly claims divine powers [↗↗↗↗](#).

More succinctly, one cannot uphold the Human Rights on the one hand, and believe of the Catholic Church as a divinely inspired institution on the other.

Amoris Lætitia

There are other reasons to doubt that the Catholic Church is in any way connected to God: It was common practice that divorced people could not receive the Eucharist. This was re-affirmed in "The Church reaffirms her practice, which is based upon Sacred Scripture, of not admitting to Eucharistic Communion divorced persons who have remarried. [...] Reconciliation [...], which would open the way to the Eucharist, can only be granted to those who [...] take on themselves the duty to live in complete continence, that is, by abstinence from the acts proper to married couples." [[Pope John Paul II: Familiaris Consortio, 1981](#)].

However, in 2016, Pope Francis published his "Amoris lætitia" ([Wikipedia/Amoris laetitia](#)), which seems to suggest that divorced people may receive the Eucharistic Communion in certain cases without the requirement of

abstinence. The Vatican's own newspaper *Osservatore Romano* affirms this interpretation ("Una persona separata o divorziata che vive una nuova unione arriva [...] a riconoscere e credere di essere in pace con Dio, non le potrà essere impedito di accostarsi ai sacramenti della riconciliazione e dell'eucaristia (cfr. *Amoris laetitia*, nota 336 e 351). [...] Non è da escludere che queste persone possono essere ritenute idonee per essere padrini e madrine") [*Osservatore Romano*, 2017-01-14 / page 7]. See [Catholic World Report: A Malta Laetitia, 2017-01-14](#) or [The Economist: Is the pope Catholic?, 2017-03-18](#) for a discussion.

This has led to an open discussion among clerics about whether the communion for divorced and re-married people would be allowed or not. 45 clerics asked the pope in an open letter to "repudiate" what they see as "erroneous propositions" in *Amoris laetitia* ([National Catholic Register: Catholic scholars appeal to Pope Francis to repudiate errors in Amoris Laetitia, 2016-07-11](#)). Other bishops, scholars, cardinals, and dioceses have offered their own interpretations, ranging from outrage about the *Amoris laetitia* to guidelines of how to apply the letter ([Wikipedia/Amoris laetitia](#)).

Now think about this for a moment: If the pope were really guided by God, would he publish a document that gives rise to so much dispute? Would he not, by divine guidance, be able to formulate the document in such a way that it is clear and does not require guidelines? Vice versa, if the critics of the document really believed that the pope were guided by God, would they dare criticising the document as "erroneous"? And, if any party were guided by God, why were the previous rules so strict, and are now considered to be relaxed? Or, if these people believed in the power of prayer, why did they not ask God directly to sort it out?

The obvious answer is that neither party in this process is guided by anything divine. The document and the ensuing criticism are the results of ongoing discussion in the Church of how to deal with the reality of divorced couples. What drives this discussion is the desire to remain attractive to the adherents in a modern world, to reconcile the previous position with the future positions, and to support divorced couples without antagonising the conservative circles of the Church. All of this is politics. The result of this discussion (no matter what it is) will be in no way divine. And yet, the result will certainly be sold as the will of God.

Remark: At the time of this writing, the celibacy for priests in the Catholic Church is also put under consideration ([Die Welt: Papst Franziskus denkt über verheiratete Priester nach, 2017-03-11](#)).

Prayer

Charismatic Christians believes that God continues to work miracles. This belief is based on Bible verses that promise God's response to prayer (see above ↗).

Unfortunately, prayer works only for things that can happen by coincidence anyway, such as winning a match, finding the keys, or recovering from an illness. As soon as we move on to concrete changes that cannot happen spontaneously, prayer does not work ↗. Prayer will never restore the limb of an amputee ([WhyWontGodHealAmputees.com](#)). Prayer will never alleviate the world's hunger – even if millions of people pray for this every day.

Marshall Brain illustrates this by the following story: There is a Christian housewife in Pasadena who firmly believes that God answered her prayer this morning to remove the mustard stain from her favorite blouse. She prayed to God to help remove the stain, and after she washed it the stain was gone. Praise Jesus! [Now,] if God is removing the stain, then why doesn't our housewife pray for poverty to dissappear too? Why doesn't she watch tomorrow as the world magically transforms itself into a poverty-free utopia, in the same way that her blouse became mustard-free? [[GodIsImaginary.com/44](#)]

Charismatic Christians come up with a large number of rationalizations why the prayer did not work: It is not his will. It is not part of his plan. This prayer is "too big". This prayer is "too obvious". The Lord works in mysterious ways. It will be answered three years from now, not today. You are not sincere enough. God will eventually inspire scientists to erase all forms of poverty, etc. [[WhyWontGodHealAmputees.com/11](#)]. Christians are experts at creating excuses like this. They are experts because they have experienced over and over again that prayers just do not work.

To see this, let us pray to any other god. Let us pray, e.g., to Vishnu. If we pray to Vishnu, then some of the things we ask for will just happen by coincidence. These prayers are "answered". Other things will just not happen. Then it's not Vishnu's will. Thus, Vishnu has the same powers as the Christian God. In fact, the probability of something happening is exactly the same – no matter whether we pray to God, to Vishnu, or even to a jug of milk ([GodIs-](#)

Imaginary.com/41). The prayer to a milk jug is as effective as the prayer to God: both have no effect whatsoever on the real world (Video at WhyWontGodHealAmputees.com).

And we all know that prayer does not work. If prayer really worked, we would not need hospitals. We would not need health insurance. We would not need seat belts, glasses, or helmets. And yet, even Charismatic Christians use all of these. This shows that they do not believe in their own stories either.

We thus find ourselves confronted with a claim that is not true ("prayer works"), and with people who say they believe in it, but who act in every way as if they did not believe in it. These people are contradicting themselves. Everybody knows that prayers do not work. And, according to atheists, prayers do not work because there is no one who listens. Wer discuss this in detail in the [Chapter on Proofs for Gods](#).

The man who prays is the one who thinks that god has arranged matters all wrong, but who also thinks that he can instruct God how to put them right.

By Christopher Hitchens

Hypocrisy

In Christianity, a person without sin goes to Heaven after death. In particular, dead infants go to Heaven, because they cannot really sin.

And yet, when an infant dies, believers do not rush to congratulate the parents upon this successful transition to paradise. They do not celebrate infant deaths as the fastest means to bring a person to eternal bliss. The parents do not rejoice for their child either. They should be happy that the child is spared earthly suffering, and goes directly to Heaven, where they themselves will later join. Ever since Catholicism, Orthodoxy, and Lutheranism abolished physical suffering in hell ↗, this joy should extend to any death, not just infant deaths. Whenever someone is dying, believers should queue up to congratulate that person. People should rejoice that one of their lot "made it". Yet, this does not happen.

There are some rare cases where the death of a person is celebrated: Some Islamists blow themselves up in the expectation that they will reach paradise. Such behavior usually causes consternation. People cannot understand how someone can be so sure of Heaven that they are ready to kill themselves in order to get there. And yet, if the Christian belief promises Heaven for good deeds, and the Islamist belief promises Heaven for killing infidels, then the Islamists' behavior is only logical. Nevertheless, people are unable to understand it.

At least in Western culture, this conundrum has a simple answer: People fully well understand that Heaven is just a pious wish. They know that it's just a story that we tell each other in order to allay our fear of death. Atheists conclude that even Christians do not believe in their stories ↗.

Historical Diversity

One of the interesting things about Christianity is the diversity of beliefs. Over time, numerous convictions were first upheld, and then abandoned: Slavery was once universally approved, but is now universally shunned ↗. Witches were once persecuted and killed, and nowadays nobody talks about them ↗. Heresy was once severely punished, and is now a non-issue ↗. All of this shows, in atheist eyes, that there was no divine guidance whatsoever. The Christian authorities were straying in the dark just like everyone else was straying in the dark – even a bit longer than everyone else ↗.

Take slavery: Atheists do not understand how a religion that once approved of slavery can claim divine moral authority today. The institutions obviously made a grave moral mistake in supporting slavery – a mistake that most of them explicitly regret today ↗. This means that these institutions did not act in divine guidance. They were

SPIEGEL: Mit Verlaub, die Auferstehung ist doch ein naiver Kinderglaube.

Bedford-Strohm: Wer durchs Feuer der kantischen Philosophie gegangen ist, weiß: Als Mensch können wir Gott nicht erkennen, wie er ist, sondern ihn nur mit unseren menschlichen Kategorien beschreiben. Darum ist es philosophisch absolut nachvollziehbar zu sagen, wir können Gott nicht herleiten. Was wir aber können, ist Gottes Wort zu vertrauen. Das ist der angemessene Zugang.

SPIEGEL: Es geht nicht nur um Philosophie. Ihr Glaube hält den exakten Naturwissenschaften schon lange nicht mehr stand.

Spiegel: With all respect, the resurrection is a naive child belief. [Picture taken from Der Spiegel, 2017-04-15]

wrong – just like everybody else. But they were not just wrong, they also claimed to speak in the name of God [↗](#). That makes them worse than everyone else.

If the Bible got that one moral question wrong on which we all agree, that slavery is harmful, then why should we trust it on all the other questions?

By anonymous

Remark: Christianity is trapped: Either it changes its opinion concerning slavery, heresy, and witches – but then it cannot claim eternal moral values. Or it does not change its opinion – and then it would be incompatible with today's Western values. Either way, Christianity loses out. One may argue that, at least, Christianity chose the right way of losing out, namely that of changing its tenets. Many branches of Islam, in contrast, still punish heresy by death [↗](#).

Contemporary Diversity

Christianity has shown a remarkable diversity of opinions over time [↗](#). But even at the current point of time, Christianity is as diverse as it can get. There are hundreds of denominations [↗](#), and each of them holds a slightly different view on a number of topics: Shall we execute a murderer or not? Can God work miracles today or not? [↗](#) Is contraception allowed or not? [↗](#) Is hell a physical place or not? [↗](#) Can non-Christians go to Heaven or not? [↗](#) Is abortion allowed in some circumstances or not? [↗](#) Shall women have the same rights as men or not? [↗](#)

Atheists reason that if people had a connection to God, they could just pray to him and ask for an answer to these questions. This way, everyone should have the same beliefs. However, this is not what happens. Everyone believes that God wants something different, and every one believes that God wants exactly what he wants. To an atheist, this just shows that everyone imagines his own god in his own head. God exists only in the believers' minds.

An Atheist view on Christianity

Christianity for Atheists

From an atheist point of view, Christianity is a religion, i.e., a set of beliefs. We have seen these beliefs in the introduction of this chapter [↗](#). Over time, these beliefs have been developed into an array of tenets, with a wide variety both across time [↗](#) and across different denominations [↗](#). The proofs that Christians bring forward for their beliefs do not convince atheists, as we have seen in detail [↗](#). On the contrary, atheists find Christian beliefs unconvincing, and we have seen a number of reasons [↗](#).

For an atheist, the Christian God remains a fictional character [↗](#). He appears only in a book, and has never been seen outside this book. We will now discuss how atheists see this book – which is the Bible, the holy scripture of Christianity.

The Old Testament

The Old Testament is a collection of stories. We do not know who wrote these stories [↗](#). We just know that one of the characters in these stories is the abrahamic god. As we have discussed in the [Chapter on Gods](#), atheists hold that the abrahamic god is a fictional character. He appears in the stories of the Old Testament much like the good fairy appears in the story of Cinderella. Both are human inventions. In the Old Testament, God is a rather revengeful and brutal character. This is most likely because the authors lived in more brutal times than ours, and hence they could not imagine their god in any other way. Later, in the New Testament, God becomes a loving and kind character. We discuss this evolution in detail in the [Chapter on the Abrahamic God](#).

The stories of the Old Testament mix historical content with myths and parables [↗](#). Some of the stories were borrowed from other religions. For example, consider the story of Moses – a prophet who led the Jews out of slavery

in Egypt. As a baby, Moses was abandoned, and placed in a basket on the river. This story was most likely taken from the legend of Sargon of Akkad ([Wikipedia/Sargon of Akkad](#)). He was the first ruler of the Akkadian Empire, and lived 2300 BCE. Legend has it that he was also abandoned as a baby and placed in a basket on a river. It is thus possible that the writers of the Old Testament picked up this idea, and applied it to their own figure. That said, the story that Moses led the Jews out of Egypt most likely never happened in reality. The Jews were never slaves in Egypt, as we have seen ↗.

The Old Testament also contains stories about the origin of the universe ↗. According to the Old Testament, God created the universe, the Earth, and people. From an atheist point of view, these stories are pre-scientific attempts to explain nature. They have little in common with what we know about the universe today ↗.

The Old Testament also contains laws ↗ and rites ↗. As we have seen ↗ and in the [Chapter on Criticism of Religion](#), these laws are often incompatible with modern Western values. At the time of their writing, however, they had a fundamental impact: They helped forge the Jewish identity ↗. In around 600 BCE, the Jews lived in exile, because they were chased out of Jerusalem by the Babylonians ↗. In this difficult time, the stories, values, rites, and etiological parables of the book gave the Jewish people a common identity ↗ ↗. This common identity was consolidated into the religion of Judaism. Judaism later gave rise to Christianity, Islam, the Bahai Faith, and Spiritualism.

The Gospels

The New Testament starts with the so-called Gospels. These are 4 different accounts of Jesus' life. Jesus was a Jewish preacher, who lived around 4 BCE to 30 CE in what is today Israel. Quite possibly, he was a real person.

It was commonly assumed that the gospels were written by the companions of Jesus. As we have seen, this is not true ↗. The stories were written by anonymous writers. They were written down decades after Jesus died ↗. During these years, the stories were kept alive by word of mouth. Stories that travel by word of mouth are often enhanced and mystified as they are passed on. We have seen several examples of this in the [Chapter on the Founding of Religion](#). The gospels are most likely no exception, and so it comes that the gospels ascribe many miraculous things to the Jesus character.



Isis and Mary
[Picture taken by anonymous]

The first of these miraculous things is that Jesus does not have a human father. He was born from a human mother (Mary) and God. From an atheist point of view, this story is made-up. The authors of the New Testament (or some intermediate story teller) just invented the story ↗. The reason for inventing such a story was most likely that many religious leaders at the time were considered half-gods. The Egyptian pharaohs, the Roman emperors, and the Greek kings were all born from gods ↗. So it appeared plausible that Jesus should be born from a god as well. As for Mary herself: She seemed to be unaware of the supernatural birth. The Bible tells us that she has no idea what Jesus talks about when he goes to the temple and says "I am in the house of my father" (Bible / Luke 2:41-52). Had she really been visited by the Holy Spirit, she would for sure have remembered that.

The Gospels go on to tell us that Jesus then became a preacher. In this role, he performed many miracles: He walked on water and healed the ill. Again, from an atheist point of view, these miracles never happened ↗. They were just added to the story by the people who passed it on ↗. This view point is shared today by mainstream Christianity in Western Europe, as we have seen ↗.

Finally, the Gospels tell us that Jesus was crucified by the Romans. If this really happened, it must have been devastating for his followers. Hence the myth of his resurrection was born: The Gospels tell us that Jesus rose from the dead, and walked the Earth for several more days, before ascending to Heaven. This story allowed Jesus' followers to turn the necessity into a virtue: Jesus had to die so that he could show that he wins over death. From an atheist point of view, this story is, of course, made up. People cannot survive their death. We have seen that, indeed, there exist no first-hand testimonies of the resurrection ↗.

I think basing an entire life philosophy on the testimony of a pregnant teenager who really stuck to her story is pretty weird in itself.

By Rick Thorne on Quora

Inspiration for the Gospels

The main message of the Gospels is that God is a loving god. We have already discussed in the [Chapter on the Abrahamic God](#) that this image of God does not fit easily with the revengeful god of the Old Testament ↗. To bridge the gap between the two testaments, the writers of the New Testament linked their stories to those of the Old Testament: Whenever the Old Testament made a prophecy, the writers made sure that this prophecy happened indeed in their stories of the New Testament ↗ ↗. This way, they could legitimize the rise of Jesus on the basis of the old stories. Jesus is presented as the Messiah announced in the Old Testament.

The writers of the New Testament also borrowed ideas from other tales from the region:

- The idea of eating Jesus' flesh and drinking his blood (Bible / John 6:56; 1 Corinthians 11:24), i.e., eating a god, was an ancient practice called theophagy ([Wikipedia/Theophagy](#)). One example is the Greek god Dionysus. Grain and wine were substitutes for his body and consumed by his worshipers as part of their religious rites. This idea was then ascribed to Jesus as well.
- The idea of Jesus being born from a divine father has many parallels in ancient mythologies. Egyptian pharaohs, Roman emperors, and Greek kings at the time were all considered half-gods ([Wikipedia/List of people who have been considered deities](#)). The Greek god Dionysus, likewise, was born from a divine father (Zeus) and a human mother (Semele). Hercules was conceived by the union of the god Zeus and the human Alcmena, and Pan by the god Hermes with a shepherdess. In Roman mythology, Ion was conceived by the god Apollo and Creusa, Romulus by the god Mars and Aemilia, Asclepius by the god Apollo and Coronis, Perseus from the god Zeus and a woman, and Helen by Zeus and Leda. In Egyptian mythology, Hatshepsut was conceived when the god Amun laid a symbol of life on Queen Ahmose's nose ([Wikipedia/Miraculous births](#)). Thus, it was probably no question that Jesus should have the same divine origins.
- The idea of resurrection was so popular that there is an entire category of gods who do these things ([Wikipedia/Dying-and-rising god](#)). Examples are Baal, Melqart, Adonis, Eshmun, Osiris, Dumuzi, Tammuz, and Dionysus. The idea of rising after 3 days, in particular, has several parallels. The Egyptian god Osiris died, was mourned, and then rose on the third day.

	Horus	Attis	Krishna	Dionysus	Mithra	Jesus
Born on 25 th Dec	X	X		X	X	X
Virgin Birth	X	X	X	X	X	X
Sign – Star in the East	X		X			X
Adorned by 3 Kings	X					X
Teacher at age 12	X				X	X
Started Ministry at age 30	X					X
Twelve disciples	X				X	X
Travelled with disciples performing miracles	X		X	X	X	X
Known as e.g. The Truth, The Light, God's Shepherd	X			X	X	X
Betrayed	X					X
Crucified	X	X				X
Buried for 3 days	X	X			X	X
Resurrected	X	X	X	X	X	X

Possible role models for the Jesus character
[anonymous]

The New Testament beyond the Gospels

After the Gospels, the New Testament talks mainly about a person called Saint Paul. Initially, Paul was an ardent enemy of the Christians. The New Testament tells us that, after Jesus' death, Paul was traveling on a long desert road. On that road, he suddenly met Jesus ↗. This encounter changed his life, and he became a proponent of Christianity. This story has parallels to the story of Aristeas of Proconnesus: Aristeas was a semi-legendary Greek poet. When he died, the report of the death had just spread through the town, when a certain Cyzicenean, lately arrived from Artaca, contradicted the rumour, affirming that he had met Aristeas on his road to Cyzicus, and had spoken with him. This man, therefore, strenuously denied the rumor; the relations, however, proceeded to the fuller's shop with all things necessary for the funeral, intending to carry the body away. But on the shop being opened, no Aristeas was found, either dead or alive. [[Wikipedia/Aristeas of Proconnesus](#)] These elements can be found in the stories of the New Testament as well.

Paul wrote the largest part of the New Testament himself. He was the one who came up with the idea that Jesus died for our sins ↗. He also made circumcision optional (Bible / 1 Corinthians 7:19–7:19; Philippians 3:2–3:2). Finally, he allowed Christians to consume pork (one of the advantages of Christianity over Judaism and Islam).

Besides Paul, other people also wrote stories and letters for the New Testament. This led to a large number of books, which were partially perceived as contradictory. People made dozens of attempts to decide which books should be the true books. For centuries, they could not agree whether the Book of Revelation was part of God's word or not. The decision was finally made 1500 years later – not by God, but by the Council of Trent ([Wikipedia/Development of the New Testament](#)).

And then, one Thursday, nearly two thousand years after one man had been nailed to a tree for saying how great it would be to be nice to people for a change, a girl sitting on her own in a small café in Rickmansworth suddenly realized what it was that had been going wrong all this time, and she finally knew how the world could be made a good and happy place. This time it was right, it would work, and no one would have to get nailed to anything.

By Douglas Adams

An atheist view on the Bible

We have seen that the Bible is a collection of stories ↗ ↗ ↗ ↗. These stories mix truth with claims and fictional content ↗. In this way, they codify the beliefs, the understanding of the world, and the value system of the respective writers. The writers did certainly not collect these stories with a bad intention: they may have seriously believed in these stories, or they may have intended the stories to be told as tales. In this sense, they can still inspire people today. And yet, from a factual point of view, there is no reason to believe in them.

Chapter on Criticism of Religion

Introduction

This chapter criticises the general effects of religion on people and society as a whole. The chapter consists of the following sections:

- **Intellectual Dishonesty:** Discusses the claims of today's religions.
- **Moral Values:** Criticises the ethical values of today's religions or their scripture.
- **Social Effects:** Critically analyses the effects of religion on society.

Religion

We shall not make the mistake to say "religion" and mean only "Christianity" (as, unfortunately, many of my comrades-in-arms have). Rather, we want to study the effects of religions in general ↗. This is a difficult endeavor, because there are so many different religions ↗. Yet, there are a few things that all major religions share by definition ↗.

1. They make supernatural statements. Otherwise they're not a religion.
2. They are sufficiently old to be considered a religion. Otherwise, they would be a new religious movement ↗. Since religions are by definition old, their moral framework typically predates our current moral values ↗. In the same way, their view of the world predates ours.
3. They have survived until today, which makes them a religion and not a mythology ↗. Since the religion has survived until today, it has most likely used some of the religious survival memes that we have discussed before ↗.

These commonalities allow us to identify and criticize traits that most major religions share.

We will look at these traits from a Humanist point of view ↗, i.e., from the perspective of someone who defends equal rights for men and women, supports the freedom of religion, subscribes to a liberal moral framework ↗, believes in science and logic, and is generally interested in the well-being of people and society.

References

In cases where the present chapter does not give the references for its claims, the reader will find them in the [Chapter on Memes](#). The reader is also reminded that the details of all major religions are discussed in the [Chapter on Religions: Hinduism ↗, Spiritualism ↗, Buddhism ↗, Judaism ↗, Jainism ↗, Confucianism ↗, Islam ↗, Taoism ↗, Christianity ↗, the Bahai Faith ↗, Sikhism ↗, and Shintoism ↗](#). The denominations of Christianity (Orthodoxy, Protestantism, and Catholicism) are discussed in the [Chapter on Christianity](#). The claims about Islam are referenced in the [Chapter on Islam](#) (not available here for security reasons). The terminology for talking about religion in general is defined in the [Chapter on Religion](#).

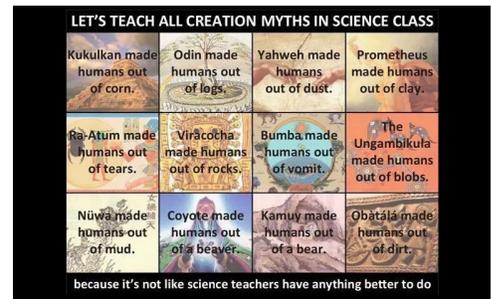
Intellectual Dishonesty

Medieval Notion of Truth

By definition, religions make supernatural statements ↗. These typically concern gods, spirits, supra-systems, or the afterlife ↗. Such statements are presented to be as true as observed facts. Religions do not distinguish between "This is a fact" and "This is a supernatural belief". We may argue that Liberal Christians are an exception to this rule, because they take a very light view on religious dogmata ↗. Yet, even liberal Christians will say "There

is a god" with the same seriousness as "The Earth is spherical". They consider both statements equally true. Adherents of all major religions will explain the facts of life (such as the genesis of the universe, or the good and bad events of life) by reference to supernatural will – with the same seriousness as they will explain other things by scientific theories.

In reality, there is a fundamental difference between supernatural statements and scientific statements ↗. Scientific statements are based on evidence in the form of validated theories ↗, and supernatural and magical statements are not. They are just claims.



[Found in: Atheist Cartoons]

Religion blurs the difference between these two types of statements. It teaches people to trust in tales that have been collected thousands of years ago as if they had the same status as scientific discoveries. It makes no distinction between empirical study and oral tradition. Thereby, religions convey a medieval, mystical, pre-scientific concept of truth. Religion says that it's OK to believe in unverified things, in unverifiable things, in unfalsifiable things, or in stories whose only voucher for truth is tradition – as long as it's their own. We may argue that we all believe in things that are not verified ↗. However, religion goes a step further by saying: It is OK to change your life entirely for reasons that cannot be verified, and that cannot even be falsified. That is an order of magnitude bolder. For this to work, religions have to downplay the need for evidence. They have to say that evidence is not always required. The problem is that, by removing evidence from the equation, religion has robbed us of something way more fundamental: The means to distinguish true from false ↗.

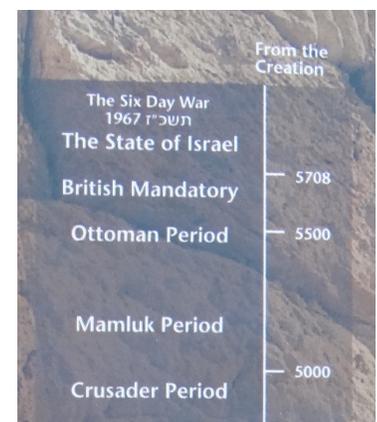
This has very palatable consequences. If evidence is no longer needed to believe, then there is no argument that can be brought forward against superstitions, lucky charms, homeopathy, quacksters, conspiracy theorists, cult leaders, faith healers, and all other types of charlatans who play with the gullibility of people. By steering people away from evidence-based thinking, religion postpones the day when Indian villagers cease to trust quacks and fakirs [Christopher Hitchens: God is not great, p. 176]. The same is true for fraudulent religions: Scientology makes millions from gullible adherents ↗. Televangelists, likewise, prey on the good-naturedness of the believers ↗. No religion can argue against the nonsense of these religions, because this would expose their own nonsense. Consider, e.g., the practice of table-turning ↗: all the Catholic Church can do is warning the faithful against the "magical practices" [Catechism of the Catholic Church / 3 / 2 / 1 / 2117]. The Church cannot say that the practices are nonsense, because this would put into question its own practices. These teachings find their ways into the education of children ↗ ↗ ↗.

Worse, once evidence is removed as a criterion, we have no argument against religious fanatics, hate preachers, and terrorist demagogues. By abandoning evidence as a way to distinguish true from false, we give these people free reign to live and teach their fanaticism. We teach people that faith needs no proof, evidence or justification, and then watch them believe the wrong thing [Richard Dawkins: The God Delusion, p. 426].

Remark: The German language has a word for this: "Volksverblödung" – the dumbing down of society. It leads to all kinds of weird argumentations that are not just wrong, but outright inadmissible in logical discourse ↗ ↗ ↗ ↗ ↗.

False claims

Religions blur the difference between truth and falsehood ↗. But they do not just blur the difference, they also make outright false statements. The most prominent example is maybe the young Earth theory upheld in some interpretations of Christianity, Islam, and Judaism. It holds that the Earth is just a few thousand years old ↗ (see picture on the right). Other examples are claims of magic, such as a god creating life (in the abrahamic religions and Hinduism), a person walking on the water (in Christianity), a virgin birth (in Christianity and Islam), a man walking faster than another man running (Buddhism, (Wikipedia/Angulimala)), or some gods giving birth to a human. Even liberal Christians will recite the Nativity story as if it were true – while it is historically false ↗. In addition, some religions claim contemporary miracles: a weeping statue of Mary (Christianity), a prophet miraculously surviving an execution (Bahai Faith), people



being healed miraculously, or people levitating (Hinduism). These claims serve the purpose of knitting the religious society together ↗.

A leaflet in Jerusalem/Israel, dating the creation of the Earth to roughly 4000 BCE.

From a scientific point of view, of course, all of these claims are nonsense. God did not create life. Evolution did. Miracles do not happen. They are just stories ↗. Faith Healing does not work, it's all just fraud and hear-say ↗. Moses did not part the waters. That's just a mythical story ↗. People cannot levitate, and they don't survive when they are killed.

In all of these cases, the religions claim something that is outright wrong. They assuage us by saying that these claims are exceptional isolated cases; by saying that we should not criticize them because they are an element of faith; or by claiming that we cannot know the truth, and should hence give the benefit of doubt. That is wrong. We do know. These miraculous things go against the laws of nature. This is by definition, because a miracle is what goes against the laws of nature. However, things do not go against the laws of nature. Therefore, the miracles did not happen. The laws of nature have a much better track record of speaking the truth than any religion ↗.

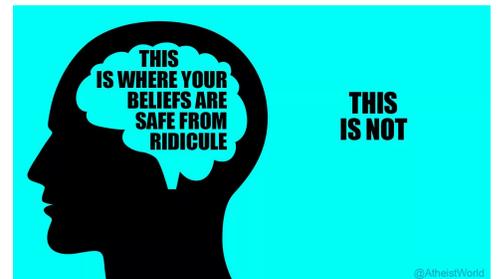
Thus, anybody who claims these things, and in particular who teaches them to children ↗ ↗ ↗, speaks a falsehood.

*You are completely entitled to opinions that are not supported by evidence.
But the moment you spread that opinion as fact, you are a liar.
And if you spread it as a fact knowing that it is not supported by evidence, you are both a liar and a fraud.*

By "Occam's barber"

Opposition to criticism

Religions claim divine authority. This means also that they cannot change in response to criticism. In fact, some major religions actively prohibit criticism ↗, with some variants even demanding the death penalty for critics ↗. This is surprising: If religions were really interested in the truth, then they should invite proposals for improvement. If the religions were true, then they could withstand all criticism just by the force of their truth. Yet, they cannot. They have to shun criticism and excommunicate or execute the doubters in order to survive. This is, in itself, an admittance of failure in atheist eyes.



[Atheist World]

This resilience to criticism has a very practical consequence. It gives these religions free reign in their most harmful thrusts: their quest to produce as many children as possible ↗, their subordination of women ↗, or their discrimination against other faiths ↗. By silencing the critics, these religions can pursue their harmful ways without opposition.

We can argue that such reasoning applies only to the most harmful flavors of today's religions. Yet, even the moderate interpretations of a religion contribute. This is because even the moderate flavors posit that faith shall not be criticized. They have created an aura of untouchability around religious issues. "Faith has to be respected", the saying goes. If the faith is not respected, adherents react with anger or offense. This aura of untouchability then extends directly to the other more harmful flavors of religion. For example, Christianity cannot criticize that Judaism circumcises infants, because Christianity has to defend the idea that faith has to be respected. In Germany, Christian leaders have come to the support of their Jewish brethren in this matter (Zwangsbeschneidung.de). Likewise, Christianity cannot criticize that Islam gives less rights to women ↗, because if it did, it would have to accept criticism of its own treatment of women.

Thus, by positing that faith cannot be criticized, the moderate flavors of religion de facto protect the more harmful variants. Islam in particular has created a mixture of fear, calls for respect, threat, and euphemisms to stifle any criticism of it – both in Muslim lands and in the West ↗.

*Take truth as the authority
not the authority as truth.*

Unfalsifiable statements

By definition, religion uses unfalsifiable statements ↗. These are statements that cannot be proven false – even hypothetically. Take for example the existence of a god, of spirits, of Heaven, or of the Tao. There is no way to prove that these supernatural entities do not exist. God does not answer when we pray to him? That's because he decided to not grant your wish! We have never heard anybody showing us evidence about life after death? That's because Heaven is outside our perception! None of the gods or spirits has ever shown up? That's because they are invisible! ↗ Other examples are abstract statements such as "Life has a meaning" or "There is something greater than us". These statements can never be proven wrong either.

This unfalsifiability has three consequences. First, these statements are devoid of meaning ↗. They do not make any prediction about the real world. From knowing that there is a god, we know nothing more about what will happen tomorrow than the unbeliever. This is because, if the statement told us anything concrete about tomorrow, we could see tomorrow whether the statement is false – and thus the statement would become falsifiable. This lack of meaning explains why religious people are in the dark about the future just like unbelievers are in the dark about the future ↗.

The second consequence of the unfalsifiability is more disturbing: Since the belief cannot be falsified, it is not possible to show that it is wrong – even hypothetically. This means that the believer has chosen a belief that prevents him from changing his mind. A believer cannot change his opinion by logical argument, and hence one cannot discuss his faith with him. He has given up searching. He is locked in on his viewpoint. This leads to a conviction that is beyond reason. The first consequence of such conviction is usually that the believer is unable to conceive the thought that he may be wrong. He is also unable to understand that his interpretation of the faith is not the only possible one ↗. Beyond that, the believer's convictions can range from the benign to the most abstruse and dangerous viewpoints ↗.

The third consequence of unfalsifiability is that anybody can come up with any other unfalsifiable belief. For example, if you claim that there is a god, I can claim that there are two gods. You cannot prove me wrong. For whatever argument that you bring forward for your god, I can always say that my gods are intentionally misleading you into your false belief, and that you just cannot notice it. You will say the same about me. We are each convinced to death that our respective own view is the only right one – but none of us can prove the other wrong ↗. In such a setting, legitimacy cannot come from arguments or reasoning. Hence, legitimacy has to come from somewhere else. It comes from amassing large numbers of adherents, from silencing critics ↗, and occasionally from violence. And indeed, religions lend their force to over half of today's military conflicts, as we shall see later ↗.

The solution, of course, is to disqualify unfalsifiable statements from discourse. It does not make sense to argue about unfalsifiable statements, just like it makes no sense to argue about statements such as "Colorless green ideas sleep furiously". Such statements just carry no meaning ↗. Religions, however, cannot identify unfalsifiability as the culprit. If they did, they would immediately catapult themselves into senselessness. Hence, religions are bound to argue by non-logical means.

In fact men will fight for a superstition quite as quickly as for a living truth – often more so, since a superstition is so intangible you cannot get at it to refute it.

By Hypathia of Alexandria

Knowing what God wants

Most major religions fall into several denominations ↗ or interpretations ↗. Usually, adherents of one interpretation claim that their interpretation of the religion is "What God really wants", while all others are derivatives thereof. This happens not just across the heavily antagonized denominations of Islam ↗, but also in the other religions. Moderates will say that the more conservative interpretations of their religion take the holy scriptures too literally, and are therefore not what their god(s) really want. Vice versa, conservatives argue that the more liberal

interpretations of their religion are modernized deviations from what the god(s) said originally. Some people even believe that God personally told them what is the right thing to do – in a dream or in prayer. They then take a decision because “God told them so”.

In all of these cases, people claim to know what the supernatural really wants ↗ ↗ ↗ ↗. From an atheist point of view, of course, the adherent’s interpretation of his religion is purely his own opinion. It is the result of whatever he was told as a child plus his own predilections. But the adherent believes that this mixture is what God wants. Thus, the believer in effect raises his own conviction to the level of the divine. Believers may complain that atheists know no higher authority than man ↗. But believers go a step further: They claim that their own interpretation of their faith is even above that of man.

The believer, of course, is unable to see this. For him or her, their belief is the will of God, and not their own. He or she is unable to conceive the thought that other people may have the same strong conviction about an entirely different interpretation of the faith.

Such a position is a problem because it gives these people a conviction that cannot be overturned by rational arguments. No moral obligation, no scientific proof, and no logical argument can override what God himself told the believer. The unfalsifiability of the belief protects it from counter-arguments ↗. This is dangerous because it gives people unshakeable confidence in their own righteousness [Richard Dawkins]. Some believers hold that God wants them to circumcise their daughters, others that God wants women to be obedient to men, or and again others that unbelievers deserve death. Indeed, large populations of Muslims circumcise young girls because they believe that this is desired by their God ↗. Islamists fly a plane into a skyscraper in the cocksure conviction that this is the will of their God. Westerners are always surprised when some Muslims uphold that the Charlie Hebdo journalists deserved their death, that apostates have to be killed, or that wives have to submit sexually to their husbands ↗. But yes, this is God’s will in their eyes. But this type of reasoning is not restricted to Islam: In 2004, a Christian woman killed her sons because “God told her so” ↗.

Now we may say that in the Western world, claims of “what God really wants” are harmless. The Western God says things such as “buy the red shoes instead of the blue ones”, or “all people shall live in peace”. But even this is not just well-meaning harmlessness. It is a dangerous way of thinking because it approves of the principle to argue with God’s will in the first place. Thereby, it approves of the way that religious extremists and terrorists argue. It tells the terrorist: “It is OK that you want to follow God’s will, but you are actually getting him wrong. I know what he really wants.” This is, co-incidentally, the same argument that the terrorists use. They also believe that they know what God really wants. Thus, by claiming that religious extremists do not practice “God’s will”, we actually lend support to their argument.

As a concrete example, a friend of mine told me that he is against the death penalty, because taking life is something that only God should do. That sounds alright. But if you accept this, how do argue against some conservative fellow who argues that wives should obey their husbands, because this is what God wants? Once you accept the one, you have to accept the other. In this way, religion makes us vulnerable to all kinds of fanatics that free-ride on the vehicle that religion created in the first place: the idea of arguing with God’s will.

So many idiots speak in God’s name. If God were real, he would speak for himself. The fact that God does not speak, and that he allows any lunatic who comes along to speak “in his name”, shows us that God is imaginary.

By GodIsImaginary.com / 49

False claims of power

Some religions offer a method to ask the gods or spirits for a wish. These methods can be prayers, blessings, rituals, or intercessions ↗ ↗. If believers practice such a method, they believe that the method will somehow change the future. Many people argue that prayer is merely a request, not a commandment to the gods, and hence they do not expect the prayer to have a direct impact on reality. However, the very fact of asking the gods for something implies the expectation that something will happen in return – or at least increase the probability of it happening. It does not make sense to ask for something while knowing that this will definitely not have an effect. Why would people pray “Please God, help the victims of the hurricane disaster”, if they were convinced that this does not change anything? They do believe that their prayer changes something.

The problem is that it doesn't. Prayer has absolutely no effect on the real world, apart from psychological effects ↗ ↗ ↗. Thus, claiming that prayer has any effect on the world is a lie. It is used to keep people in a religion, and to lure them into a belief system, a moral framework, and a world view. Yet, it promises people a power that it does not have.

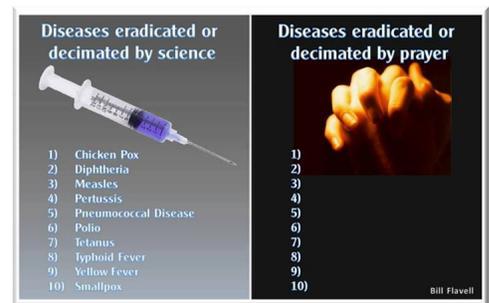
The situation is worse when this claim is made by an official of the religion: a priest who claims to protect a house by blessing it; a faith healer who asks the gods to heal an illness; or a shaman who claims he can increase fertility. In all of these cases, the official wrongly assumes a power that he does not have. This wrong power gives him an authoritative position in society. Thus, he uses a lie to secure his social status. Furthermore, this act is part of his job. For this job, he gets paid – either by the religious organization or by donations, but in all cases ultimately from the believers. This means that he uses a lie to make a living ↗.

The situation is even worse when the gullibility of the adherents is abused at large scale for profit. Televangelists, for example, suggest that God will help those who send money to the televangelist as a "sacrifice" ↗. Such preachings are not just factually wrong, they may actually lead people into bankruptcy.

Those who offer false consolation are false friends.

By Richard Dawkins in his book "The God Delusion"

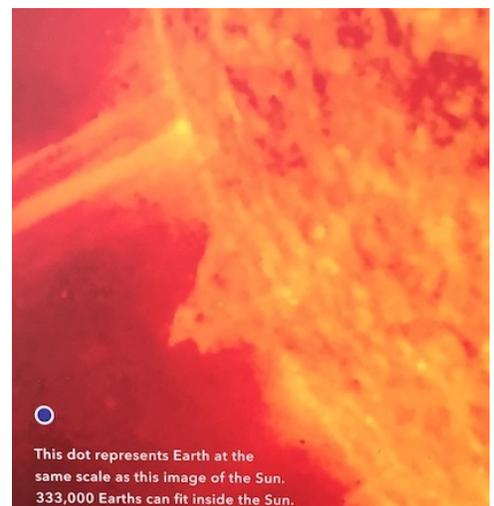
Remark: We can argue that prayer is merely an act of commemoration. People do not ask God to help the victims of the hurricane disaster, they just use it as a ritual to raise awareness for the plight of these victims. Yet, if that were the case, people would just call this act "commemoration". They don't. They say "Lord, we ask you". They use words that imply a request: "To pray" originally meant "to ask earnestly". It derives from Latin "precare", which means "to entreat". In Italian, "pregare" means both to pray and to ask. The same is true of the French word "prier". In German, "beten" (to pray) shares the root with "bitten" (to request). Prayer has always been not a commemoration, but a request. Saying that a prayer is mainly a commemoration is the kind of linguistic acrobatics that is in itself manipulative ↗.



Pretentiousness

Religions typically provide answers to the most fundamental questions of humanity: where do I come from, where do I go, and what is morally right? While thousands of people have dedicated their lives to finding the answers to these conundrums, religions claim they already have the ultimate answers to all of them – but without providing any evidence. That is pretentious. Examples are:

- Over millennia, humankind has developed thousands of legal and moral systems, written hundreds of philosophical treatises, developed millions of laws, permitted and then abolished slavery, shunned and then endorsed women's rights, invented and then prohibited smoking – and it is still changing its laws every few months ↗. And yet, the believer thinks that his current interpretation of his religion is the eternal and unchanged answer to all these struggles. Some believers use this imaginary authority to tell others what they have to do. At the same time, believers of all eras and all cultures were always convinced that their respective interpretation would be the eternal truth, and yet these truths were all different ↗.



And no, your planet is not the center of the universe.

[Picture taken in the Chicago Planetarium.]

- For around 200 years, scientists have been seeking for the beginning of the universe. They have discovered atoms, quarks, and the theory of relativity, and they have given us X-rays, the GPS, radio, and aluminium on the way. They have not, however, discovered what happened before the big bang ↗. Here, the believer steps in: She thinks that she can answer what thousands of experts cannot answer. Her theory of the origin of the world was developed by people from the Bronze-age, who thought that the Sun orbits around the Earth. Her theory has no verifiable evidence to support it, and it has given mankind no X-rays, no airplanes, no medical cures, and in fact no scientific result at all. However, the believer still thinks her theory can answer what science cannot answer. This is absurd, for several reasons. First, science has proven religious theories wrong over and over again in history ↗. Second, a person who has never studied astronomy, cosmology, physics, chemistry, biology, or geology and who has never read any of the tens of thousands of peer-reviewed scientific papers describing the evidence for (1) the Big Bang Theory (2) the theory of abiogenesis and (3) the theory of evolution, and who doesn't even know that these are three entirely separate theories, and that none of them has anything to do with atheism, is simply not qualified to describe and evaluate these three fields of science [anonymous].
- We all struggle to lead our daily lives. Religion comes and tells us things like "Love your neighbor", "Forgive sins", "Cherish the good things you have", or "Work to achieve goals". Adherents praise these tenets as grandiose insights of great spiritual depth. They are not. They are just common sense instructions, which all societies have developed over time. They are what Daniel Dennett calls "deepity": they have the patina of profundity, but are finally either trivial or nonsense. Religions rarely have anything ground-breaking to say about real life. You cannot solve a problem by going to the church. The aura of spiritual depth that religions claim for themselves is just a variant of the Emperor's New Cloths ↗: it works because everyone claims it works, and is afraid to admit that for him it doesn't.
- Science has not yet fully understood the workings of the human mind. And yet, the believer considers it obvious that there is some spiritual substance in us, known as the soul. What is more, the believer knows with complete certainty that this soul will live on after the death of the body. Some believers are so sure of their belief that they tell other people that they have high chances to go to hell, or that their loved ones are safe in paradise, or that they will be reborn in a different world. And yet, despite being so sure about the life after death, these believers thank their god whenever the chance to this transition is avoided ↗.
- Some believers hold that their religion is the only way to give sense to life. They maintain that "the sense of life" can only be given by belief in their god(s), and that, hence, atheists cannot have a purposeful life. This is not just false ↗, but also an arrogant hijacking of the term "Sense of life" (Godless Mom: 7 Ways Christianity Teaches Arrogance, 2016-12-21).
- Some believers think that they can be in personal contact with the being(s) who created and maintain the universe. They believe that they can communicate with the creator of the world, and that he takes the time to help them find their car keys. And yet, in the very same minute the believer finds her car keys, the supernatural being lets hundreds of children starve to death, despite their prayers. Thus, the believer assumes that she is important enough to be helped in person by the highest being, while millions of others are not. As WhyWontGod-HealAmputees.com opinions: For a believer to talk about his or her blessings in a huge natural disaster like the Katrina Hurricane is to implicitly ignore the damage and suffering that are plainly visible for all to see. For anyone to believe that God personally helped her while at the same time wreaking havoc on millions of others is a supreme arrogance.

Bible Verses That Can

Get needed rest.

"Better is a handful of rest than two handfuls of hard work and chasing after the wind."—Ecclesiastes 4:6.

Researchers report that after a traumatic experience, "a lack of quality sleep . . . can exacerbate your trauma symptoms and make it harder to maintain your emotional balance." Therefore, it is wise to get sufficient rest.

Brilliant! I am glad it's written in the Bible!
[Picture taken from Jehovah's Witnesses: Watchtower 2/2019]

All of these attitudes are pretentious, in sense that they claim to know something with absolute certainty without any verifiable evidence. Thereby, they belittle the efforts of all those people who really try to find the answers.

*You don't know what you don't know,
but you already claim to have the answer.*

Remark: I used to consider religions the source of spiritual depth. One day, a friend of mine (A.B.) told me that she is an atheist, and that she found that the churches had only platitudes to preach. It was at that moment that I realized that the "spiritual

depth" that Christianity claims for itself is just a variant of the Emperor's New Cloths.

Weirdness

Different religions have different beliefs. Usually, the beliefs of one religion appear strange or funny to believers of another religion. To illustrate this, we list here some curious beliefs. The reader is invited to guess whether I made up the beliefs, or whether they are really part of a religion.



An elevator in Jerusalem/Israel.

- Adherents of this particular religion marry only within their faith. Since their faith comprises only 4 families, each marriage has to be approved by a geneticist in order to avoid genetic disorders. True or false?
True. Samaritans (who were mentioned in the Bible in the parable of the good Samaritan) number only a few hundred, and consist of only 4 families. Since they marry only among themselves, genetic disorders are a danger ([Wikipedia/Samaritans](#)).
- Adherents believe that they have to kill voyagers and steal their possessions in order to worship their god.
True. The Thugs were a religious minority in India that worshipped their goddess Kali in this way ([Wikipedia/Thugs](#)). The English word "thug" derives from this movement ([Wiktionary / thug / etymology](#)). The Thugs were eradicated by the British, with little respect for their religious freedom.
- Adherents believe that certain "dirty tasks" can be carried out only by certain "dirty people". One of these "dirty tasks" is cutting the umbilical cord of a newborn. If no "dirty person" is around when a baby is born, adherents prefer to see mother and child die rather than to cut the cord themselves. True or false?
True. In Hinduism, cutting the umbilical cord can only be performed by a member of the "Untouchable Caste". Other people will not cut the cord, even if the life of the mother and the baby is in danger.
- Adherents believe that a man has to suck the penis of a baby boy.
True. Judaism knows the ritual of "metzitzah b'peh", in which the man who circumcised the penis of the baby sucks out blood from the wound ([Wikipedia/Metzitzah B'Peh](#)). Sadly, this touching ritual has become less popular in recent times.
- Adherents believe that a certain specific ritual can protect them against throat illnesses.
True. Catholicism knows the "Blessing of the throats", which asks God to deliver the recipient from every disease of the throat ([Wikipedia/Blessing of the throats](#)).
- Adherents believe that their underwear is the most sacred of all things in the world. This is because the underwear provides protection against temptation and evil. True or false?
True. The Latter Day Saint movement (also known as the Mormons) requires wearing a certain type of underwear. This underwear has spiritual purposes, and protects against temptation and evil. Hence, Church President Joseph F. Smith taught that the garment was to be held as "the most sacred of all things in the world, next to their own virtue, next to their own purity of life" ([Wikipedia/Temple Garment](#)).
- Adherents believe that their savior will return during the lifetime of those who have met him. Since the savior has disappeared some hundred years ago, and has not reappeared since, adherents conclude that there must be a person who met the savior, and who is still alive – wandering around incessantly until the savior finally comes back.
True. Christianity invented the Wandering Jew for this reason ([Wikipedia/Wandering Jew](#)).
- Adherents believe that the savior will come by airplane. To welcome the savior, they have created a special landing place, they dress up as airport assistants, they talk into wooden walky-talky imitations, and keep waiting for the savior to land. True or false?
True. In so-called cargo cults, indigenous populations believe that a savior, called John Frum, will come by plane and bring them goods. To facilitate his arrival, they imitate Western air traffic procedures with wooden tools ([Wikipedia/Cargo cult](#)). When asked why they have been doing this for 20 years when John Frum has never come, leaders replied: Christians have been waiting for Jesus to return for 2000 years, and he has never come. 20 years are short in comparison ([Richard Dawkins: The God Delusion / Chapter 5](#)).
- Adherents believe that men are a temptation to women. Therefore, men have to hide their body, and veil their hair. This way, women are not tempted by them. True or false?
True, if you swap men and women. In most current mainstream interpretations of Islam, women are required to veil their hair, in order not to excite men ↗.
- Adherents believe that the Earth will be destroyed soon. Therefore, they actively prepare for the end of the world. True or false?
True. The mainstream interpretation of Christianity has been teaching for the last 2000 years that the end of the world is near ([Wikipedia/Christian Eschatology](#)). Jesus himself hinted that the end of the world will come in the next few years after his death. Christians have been predicting precise dates for the end of the world ever since Jesus' death ([Wikipedia/List of dates predicted for apocalyptic events](#)). 15% of the world population believe that the world will end during their lifetime, and 10% believed it would happen in 2012 ([Reuters: One in seven thinks end of world is coming: poll, 2012-05-01](#)). 41% of Americans believe Jesus will return before 2050 ([Pew Research: Jesus Christ's Return to Earth, 2010-07-14](#)).
- Adherents believe that the world will end in 1914. True or false?

True. Jehova's witnesses found evidence in the Bible that the world will end in 1914. When it did not, they updated their prediction 1918, and later to 1925. They have currently abandoned these beliefs – possibly because they were false ([Wikipedia/ Eschaltology of Jehova's Witnesses](#)).

- Adherents believe that their genitals are retracting and will disappear. Women believe that their nipples will disappear, while men believe that their penis will disappear. True or false?

True. Koro is a culture-specific syndrome in which an individual has an overpowering belief that his or her genitals (e.g., penis or female nipples) are retracting and will disappear, despite the lack of any true longstanding changes to the genitals ([Wikipedia/Koro](#)).

- This particular church believes that gluten is essential to transform bread into their savior. True or false?

True. The Catholic Church holds that the altar bread physically transforms into the body of Jesus during Eucharisty. This does not work with gluten-free bread ([New York Times: Vatican Refuses to Go Gluten Free at Communion, 2017-07-10](#)).

- Adherents believe that an extraterrestrial dictator brought billions of his people to Earth, stacked them around volcanoes and killed them using hydrogen bombs. The essences of these people form around people in modern times, causing them spiritual harm. True or false?

True. This is Scientology, with several hundred thousand adherents ([Wikipedia/Xenu](#)).

- Adherents believe that they can be relieved from their sins if they listen to a certain radio emission. Since 1985, it is also possible to achieve relief from sins by watching a certain television program. Since 1995, relief can also be achieved over the Internet. True or false?

True. In Roman Catholicism, a denomination of Christianity, relief from sins is granted to all those who listen to the sermon "Urbi et Orbi" by the pope. The effect of the sermon can also be achieved by listening to transmissions via the radio, television, or the internet ([Wikipedia/Abläss](#)).

- Adherents believe that God wants them to cut off a certain part of their body. Therefore, they perform rituals where they amputate body-parts of children. The ritual is performed without anesthetics. True or false?

True. In Islam and Judaism, adherents believe that they have to cut off the foreskin of a young boy's penis. This ritual is usually performed without anesthetization ([Wikipedia/Religious circumcision](#)).

- Adherents believe that, at certain times during the year, they are not allowed to eat or drink while the sun shines. Therefore, they get up at night before the sun rises in order to eat. Then they go to sleep again. True or false?

True. In Islam, adherents are not allowed to eat or drink during day-time during the month of Ramadan ([Wikipedia/Ramadan](#)). The same is true for the Bahais, who observe a 19 day fast ([Wikipedia/19 day fast](#)).

- Adherents believe that copying of information (in particular the sharing of computer files) is a sacred activity. They also believe that in the beginning of the universe, there was a single bit, which was then copied over and over again to give rise to the universe. True or false?

True. The Missionary Church of Kopimism is registered as a religion in Sweden. CTRL+C and CTRL+V, the common computer shortcut keys for "Copy" and "Paste", are considered sacred symbols ([Wikipedia/Kopimism](#)).

- Adherents believe that they are not allowed to heat food during certain days. Therefore, there are special microwaves, which are switched on the night before, and which keep the food warm the entire night, so that adherents can eat warm food the next day without heating it. True or false?

True. In Judaism, adherents are not allowed to operate any devices on Saturday. To cater to these people, there all kinds of appliances that simulate normal functionality, but can be operated without pressing a button ([Wikipedia/Electricity on Shabbat in Jewish law](#)). For the same reason, orthodox Jews make stacks of toilet paper the day before Shabbat, because they are not allowed to rip off the paper on Shabat (Y. N. Harari: 21 lessons for the 21st century).

- Adherents hold weekly ceremonies. During these ceremonies, adherents believe that they eat a human. True or false?

True. In Roman Catholicism and Orthodox Christianity, the bread that adherents eat during mass is believed to transform literally into the flesh of Jesus. In Protestant Christianity, the bread is only a symbol of Jesus' flesh ([Wikipedia/Transubstantiation](#)).

- Adherents believe that God is a single being. At the same time, God consists of 4 separate entities. True or false?

True, if you replace 4 by 3. In Christianity, God is 1 and 3 at the same time [↗](#).

- Adherents believe that they are not allowed to eat dairy products and meat together. Therefore, they cannot eat pizza that has meat on it. Restaurants have to separate meat and milk completely. For example, a restaurant cannot offer meat dishes and ice cream, because ice cream contains milk. You have to go to another restaurant to eat ice cream for desert. True or false?

True. In Judaism, there is a saying that you should not boil a calf in its mother's milk. This is extrapolated to prohibit the coexistence of meat and milk in general in restaurants ([Wikipedia/Milk and meat in Jewish law](#)).

- Adherents believe that men can marry people of other faiths, while women cannot; that women have to be obedient to their husbands; and that husbands can chastise their wives if they are not. At the same time, adherents believe that their religion respects the rights of women. True or false?

True. In Islam, women are not allowed to marry Christians, while men are; women are expected to be obedient to their husbands; and women can be beaten (lightly) as a last resort if they are not obedient [↗](#). Still, many liberal-minded Muslims believe that men and women have equal rights in Islam, and that Islam is the precursor to modern Human Rights ([Web Search](#)).

- Adherents believe that they have to throw their babies from a 10 meter balcony. This procedure is believed to bring good luck, health, and prosperity. True or false?

True. Hindu priests in the Indian state of Karnataka regularly perform this ritual ([Daily Mail / Baby tossing ritual Karnataka, 2012-04-08](#)) ([Prince@Listverse: 10 bizarre Indian Rituals, 2012-12-04](#)).

- Adherents believe that they receive mercy from a certain deity, if they crawl on their knees in the street. For this purpose, a "crawl lane" (similar to a bike lane) has been put in place, and people crawl on this lane in their thousands. True or false?
True. This is the pilgrimage of Orthodox Christians on the Greek Island of Tinos ([Wikipedia/Tinos](#)). See pictures on [Google](#).
- Adherents believe that an illiterate man who married a 6-year old girl would be the ideal role model to follow. True or false?
True. In Islam, the Prophet Mohammed is regarded as the ideal human [↗](#). He was illiterate and married his second wife, Aisha, when she was 6 years old ([Wikipedia/Muhammad](#)).
- Adherents follow the philosophy of the Jedis, the extraterrestrial beings from the television series "Star Wars". True or false?
I don't know. There is indeed such a religion, Jediism, but I could not figure out whether people really take it seriously ([Wikipedia/Jediism](#)).
- Adherents believe that evil demons are afraid of white chickens. Therefore, they kill a white chicken and use it to chase away demons from a possessed person. True or false?
True. Hinduism knows several forms of exorcism, and this is one of them ([Prince@Listverse: 10 bizarre Indian Rituals, 2012-12-04](#)). See [Wikipedia / Exorcism](#) for more examples.
- Adherents believe bread cannot be owned on one day of the year. Since the state owns the bread factories, the state sells the bread in these factories symbolically to a hotel manager for 5000 USD, and then buys it back the next day. True or false?
True. In Judaism, some types of bread may not be owned on the Passover holiday. Since the State of Israel owns state bread companies, the prison service, and the country's stock of emergency supplies, the bread is sold every year to Mr. Jaaber Hussein, a hotel manager residing in Abu Ghosh. The next day, the state buys it back. [[Wikipedia/Chametz / Mechirah practices](#)].
- Adherents believe that people who died need physical items such as money or cars in their afterlife. To transfer these items to the dead after the funeral, paper replicas of these items are burned. The items include paper televisions, computers, and mobile phones for technological comfort, and Viagra, call-girls, and condoms for physical comfort. True or false?
True. Asian religious traditions incorporate this belief. The paper replicas are called "joss papers" ([Wikipedia/Joss paper](#)). The items are detailed in news articles ([Metro: Paper viagra burned for afterlife sex, 2007-03-22](#); [NY Sun: Viagra For the Dead, 2007-03-22](#)).
- Adherents believe that they should not come in contact with images of women. Therefore, they have specially configured smart phones that censor such content. To enforce its usage in the community, the devices have their own group of phone numbers and a distinctive ringtone. Members who circumvent this restriction and use the service WhatsApp will have their children expelled from school. True or false?
True. Haredi Jews have such a special "kosher connection" smartphones. This became necessary because while the Rabbis banned television sets and Internet connections, they could not ban computers and mobile phones ([The Economist: Digital Temptations, 2015-09-05](#)).

To an atheist, all of these beliefs are weird. Religion makes people believe things that would otherwise be considered completely absurd.

The easy confidence with which I can tell another man's faith is a folly tells me that my own is, too.

By Mark Twain

Verbal Acrobatics

By definition, religions are old [↗](#). Thus, their value system and world view often do not correspond to the modern view any more. At the same time, a religion can hardly afford to change its mind, because this would discredit it in the public eye [↗](#). Hence, religions have come up with all kinds of verbal acrobatics to re-interpret their dogmata:

Christianity:

This religion adapts to the current mainstream by artfully cherry-picking Bible verses. Slavery [↗](#) was first allowed in Christianity, based on Bible verses [↗](#). Now it is shunned — also based on Bible verses. Abortion was first allowed, based on Bible verses, and now it is shunned, based on other Bible verses [↗](#). More examples are discussed in the [Chapter on Christianity](#). There is an entire Wikipedia article on different allusions to homosexuality in the Bible and what they could potentially have meant, arriving either at the conclusion that homosexuality is allowed or that it is not ([Wikipedia/Homosexuality in the NT](#)). An equally impressive example is the interpretation of the Bible in matters of death penalty, which can also go either way [↗](#).

Islam:

This religion has developed an amazing tradition of interpretation and re-interpretation, in which theological justification has been found for nearly every possible viewpoint ↗ ↗ ↗ ↗ ↗ ↗. We take here only one example, slavery ↗. The Quran does not prescribe a punishment for taking slaves ↗. The Reliance of the Traveller (the most well-known Sharia, which has been approved by the Al Azhar University in Cairo) makes children captured in war slaves, and annuls slave women's marriages ([Sharia / o9.13](#)). Until the 19th century, the Muslim world was actively involved in slave trade, and held millions of them ([Wikipedia/Slavery in the Muslim world](#)). It was considered the right and duty of the faithful to plunder and enslave the unbelievers ([Wikipedia/1st Barbary War](#)). However, in 1833, Britain abolished slavery, followed by most Western countries, and, later, the Muslim world (Saudi Arabia in 1962). Since then, Islam started concentrating more on the Quranic verses that laud manumission of slaves. The argument goes that, since God rewards the freeing of a slave, God implicitly wanted to abolish slavery altogether (and was just too shy to say it). Suddenly "No scholar of Islam disputes that one of Islam's aims is to abolish slavery" [[Letter to the IS / 12](#)]. Also, unbeknownst to generations of late Muslims, "the Shariah has worked tirelessly to undo [slavery]" [ibid].

Hinduism:

In India, the caste system has a long history, reaching back to 1500 BCE in different variations ([Wikipedia/Caste system in India](#)). The Laws of Manu, an early Hindu text of disputed authenticity, presents the caste system as the natural order of things ([Laws of Manu / 1 / 87-91](#), [Laws of Manu / 3 / 13](#)). And yet, today, scholars have found "through deep study of ancient religious literature, [that] all such practices were contrary to true religion" ↗.

Thus, the adherents of these religions now believe in a completely different interpretation than what their ancestors believed in. Interestingly, adherents cannot arrive at this new interpretation purely by studying the religious sources. Otherwise people would have arrived at the current interpretation much earlier. Rather, people believe in a mixture of sources and interpretations that the church, the priests, the current leaders, or society gives them ↗.

The problem is not that the values change. Most values change ↗. The problem is that believers and religious teachers defend their belief as absolute and eternal truth. They claim that it is obvious and crystal clear that what they believe today is the true will of their deity. And yet, the eternal truth that they believe in today is completely different from the eternal truth that their predecessors believed in a hundred years ago. Thus, their claim that their truth is eternal or clear is just wrong.

As a corollary, what is taught today as eternal truth may be wrong some decades down the road.

Believe those who are seeking the truth. Doubt those who find it.

By André Gide

Pumpkin words

A pumpkin word is a word that is used in its usual meaning, but then emptied of that meaning when it comes to nailing it down ↗. Pumpkin words are a particular type of the verbal acrobatics that religions employ to square ancient concepts with modern values and science ↗.

Christianity

Christianity holds that "God loves us". However, this god does not do anything when we suffer, even though he could ↗. Thus, the "love" has no consequence whatsoever. It is an empty word ↗, disemboweled of its usual meaning.

Hinduism

In the mainstream interpretations of Hinduism, people are reborn in a state that reflects their previous good or bad deeds. In this view, people who are born into suffering deserve their suffering ↗. This idea is highly revolting to modern people. Hence, a common contemporary interpretation is that these people still "deserve" the suffering, but that we should still help them. This is contradictory: If someone deserves a penalty, then we should actually not help them. For example, we should not go and liberate prisoners from their cell, because they are in prison for a reason. Hinduism breaks this understanding of the word: By declaring that we should help those who suffer even though they "deserve" their suffering, we have in effect robbed the word "to deserve" of its meaning.

There is no difference between those who deserve a suffering and those who don't. We have created an empty word.

Catholicism

Since 1999, the eternal fire of hell is no longer really a fire. It does not actually hurt the condemned. It just burns away the sins ↗.

Orthodox Christianity

As in Catholicism, the fire of hell is no longer a physical fire in Orthodox Christianity. It has been re-interpreted to be a side-effect of God's love: It is the presence of God's splendid glory and love that is the scourge of those who reject its radiant power and light [Orthodox Church of America: The Orthodox Faith / Volume IV - Spirituality / The Kingdom of Heaven / Heaven and Hell].

Judaism

The Bible explains that the Jews are God's "treasured people from all the nations" [Bible / Deuteronomy 14:2, Exodus 19:5], and that God chose the Jews "because the Lord loved [them]" [Bible / Deuteronomy 7:7-8]. Now this assumed focus of God's love did not go down well with other adherents of that god. Hence, the term "chosen people" has been watered down to mean "people with a specific mission". Some go on to state that "every people – and indeed, in a more limited way, every individual – is "chosen" or destined for some distinct purpose in advancing the designs of Providence." (Wikipedia/Jews as the chosen people). If everyone in the entire world population is "chosen", then the word does not mean anything.

Islam

Islam says it "respects women". At the same time, a women's word counts half of that of a man in court (Quran / 2:282), women have to be obedient to their husbands (Quran / 4:34, 2:228), and women can be beaten if they are not (Quran / 4:34). How is that "respect"? It is just an empty word ↗, used to cover up the blatant misogyny of the Quran.

Most religions

Most religions (although not all) propose methods to influence one's fate. These methods can be prayers, blessings, rituals, or intercessions ↗ ↗. We have already discussed that these methods amount to false claims of power, because they do not work ↗. Now the fact that they do not work is often artfully hidden under pumpkin words: "God answers your prayers" would literally mean that the god performs some action in return to your prayer. However, since no action whatsoever happens in return to a prayer, it has come to mean "whatever happens anyway after the prayer will be considered the answer of God". The word "to answer" has thus been voided of its meaning. In a similar way, sentences such as "Heaven protects you" or "This god protects you" would literally mean that you are safe from harm. But you are not. The words have been hollowed out.

In all of these cases, there was originally a clear concept: hell as fire, chosen people, protection from god, and deserved suffering. For centuries, people believed in these original interpretations of the concepts. Since then, these concepts have been re-interpreted beyond recognition: hell is no longer hell, castes are no longer castes, deserved punishment is no longer deserved, an answer is not necessarily something that happens, and chosen people are no longer really chosen people. All of these words have become pumpkin words ↗.

Christians find themselves in extremely awkward and, quite frankly, embarrassing positions. They must believe that God answers their prayers even though it is quite obvious that he does not.

By WhyWontGodHealAmputees.com

Moral Values

Dogmatic Values

The Humanist moral system focuses on the notion of suffering: If something does not cause suffering to other humans or animals, it is allowed ↗ ↗. If something does cause suffering, the perpetrator has to pay a compensation. Furthermore, a punishment is applied to prevent the perpetrator from repeating the deed. The goal

of this process is simple: It is aimed at compensating past suffering and at avoiding future suffering.

Some religions share this philosophy. The Five Precepts of Buddhism, e.g., concern only worldly issues, and prohibit killing, stealing, lying, sexual misconduct, and intoxication ([Wikipedia/Buddhist Ethics](#)). The 18 Titles of Hindu Law, likewise, regulate only earthly concerns. These are debts, ownership, field boundaries, contracts, verbal and physical assault, inheritance, and sexual violence ([Wikipedia/Titles of Hindu Law](#)). The Wicca religion even mirrors the Humanist understanding of moral values one-to-one, by stating "Eight words the Wiccan Rede fulfil: An it harm none do what ye will".

The abrahamic religions, in contrast, are not principally aimed at reducing suffering.

Judaism

Judaism derives 613 Commandments from the Torah. And yet, the vast majority of them is concerned with food constraints, idolatry, and rites rather than with fellow humans ([Wikipedia/613 Commandments](#)). Furthermore, Judaism traditionally punishes apostasy, which causes no suffering ↗.

Islam

Of the 5 pillars of Islam, only one is concerned with other people. The others are concerned with fastening, prayer, pilgrimage, and faith ([Wikipedia/Five Pillars of Islam](#)). Furthermore, most interpretations of Islam prohibit the criticism of the Prophet Mohammed ↗, apostasy ↗, and/or blasphemy ↗ – all of which do not cause suffering to other (living) humans.

Christianity

Christianity may seem an exception to this rule, with its overarching call to "love your neighbor". Still, of the Christian 10 Commandments, only 4-10 are concerned with people, and the others with God. Catholicism, in particular, has developed an elaborate system of rules, most of which are not concerned with harm against other people ↗.

This is part of a grander pattern, where rules are concerned more with the supernatural and rituals than with other living beings. Religions clash with Humanism whenever they elevate some moral good above the well-being of humans, such as accepting a divine savior, ratifying a sacred narrative, enforcing rituals and taboos, proselytizing other people to do the same, and punishing or demonising those who don't [Steven Pinker: Enlightenment Now, p. 30]. In all of these cases, morality is not question of whether someone is hurt, but a question of duty for its own sake.

Morality is doing what is right, regardless of what you are told.

Religion is doing what you are told, regardless of what is right.

By [Atheist World](#)

Morality in Islam and Christianity

Islam has developed this thought further: In the common view of this religion, we should do something not because of our sense of morality, but because God wants us to. This makes people follow rules not out of empathy, but out of fear from God's punishment.

Christianity, too, has built up an entire philosophy in this direction. In Christianity, morality has become a self-runner, independent of human suffering, and advocated purely for its own sake. This makes the idea of compensation pointless. Hence the importance of the compensation decreases. In return, the importance of punishment increases. The focus has shifted so much towards punishment that Christianity holds that the punishment itself could make up for a bad deed. The most visible example is Jesus: Jesus' death pays for the sins of mankind ↗. From a Humanist point of view, it is absurd that a death shall repair other people's bad deeds. In the same vein, some people think that sacrifices or self-castigation could repair a bad deed. From a Humanist point of view, of

**ANY GOD THAT IN
ITS TOP TEN RULES
WASTES FOUR OF
THEM TELLING YOU
HOW TO KISS HIS
ASS IS NEVER
WORTHY OF
WORSHIP.**

[Found in: [Atheist World](#)]

course, sacrifices and self-punishment are nothing else than additional, needless suffering. Rather than adding new pains, one should fight the existing ones.

The Consequences

These religious value systems detach morality from the effect on mankind. This has several consequences. First, certain behaviors may be immoral in the system, even though they do not hurt people. The majority of religious ritual obligations falls into this category. From a Humanist point of view, such rituals are needless restrictions of liberty ↗. Second, and worse, certain behaviors may be moral in the system, even though they do hurt people. Examples are circumcision, female genital mutilation, or child marriage ↗. Since the abrahamic morality does not depend on whether someone is hurt or not, people can perform these harmful rituals unconcerned. Here, the religious system is in direct contradiction with Humanist ethics ↗. Third, a moral system that does not depend on its effect on people teaches people that morality is something that they have to obey no matter whether they understand the reasons for it or not. This makes it impossible to adapt the values to the progress of society ↗. It also makes it impossible to find compromises with other people who have a different religion ↗. Compromises can only be found if people are ready to adapt their stance. A dogmatic religion cannot do that.

Dogmatic values can even fuel extremism and fanaticism. This works as follows: A religion that accepts dogmatic values accepts that people believe something just out of conviction – no matter whether there is an understandable reason for it or not, and no matter whether someone is hurt or not. The problem appears as soon as someone believes in a dogmatic value that is harmful. This may be the belief that he has to fight against infidels, that he has to marry his daughter at the age of 12, or that he has to have his religion taught to everyone at school. If we accept that dogmata are a valid reason for belief, then we have no argument against such a person. Whatever argument we bring, the person can always reply that he upholds his dogmata just like other people uphold their dogmata. He can always say that god told him to obey a dogma. Thus, the very concept of dogmata withdraws believes from the control of reason and argument.

It is thus surprising that moderate religious leaders teach their own dogmata on one hand, but complain about extremist dogmata on the other hand. If you teach people to follow dogmata, you should not be surprised that some people follow other dogmata ↗.

Obedience is not morality.

By anonymous

An Atheist and Humanist View

For atheists, there are no dogmata. In atheist eyes, moral rules are made by men. This applies also to religious rules, which were, according to atheists, also created by men and then later ascribed to gods ↗. In a Humanist world view, rules should be the product of a consensus of people ↗ ↗. This requirement for consensus subdues the rules to argument, reason, and checks and balances. Thereby, it makes the rules less volatile to extremism. Much like open source software is more robust to bugs thanks to the collaboration of many people, secular values are more robust to fanaticism or discrimination. The overarching goal of rules is to avoid worldly harm to other beings ↗.

This does not mean that secular values are always perfect. On the contrary, secular values have been brutal at times, they are far from being canonical or universally accepted, and they still offer plenty of room for improvement ↗ ↗. Fortunately, secular rules can be changed if they are found to be imperfect. Secular rules are continuously discussed, changed, and improved. They are continuously adapted to technological progress, and modified to mirror the consensus of society ↗. Dogmatic rules, in contrast, cannot do that.

Exculpation

Religions typically provide moral rules as well as mainly ideational rules. The latter include the instructions to pray, to wear certain clothes or to follow certain rites ↗. This allows religious people to fall prey to the following fallacy: If they follow the rites, they can claim (and believe) that they are good religious people – even if they vault over some of the moral principles of their religion. Following the rites, ideational rules, and clothing requirements can calm your conscience, even if you behave immorally.

This does not mean that religious people would behave immorally in general. It just means that religion has created the vehicle for certain people to behave immorally and feel good with it.

Atheists have less possibilities to calm their conscience. They do not have the choice to confess in church or to bath in a holy river in order to free themselves from guilt. Atheists have to find comfort in making up for the harm they caused.

Setting up factitious exercises – belief in creeds, devotional feelings, and ceremonies, not connected with the good of humankind – and causing these be to accepted as substitutes for genuine virtue.

By John Stuart Mill



A bath in the Ganges River is said to clean a person from all sins. Here a self-experiment by the author. [Picture taken in Varanasi/India]

Women's rights

The vast majority of people in this world adhere to a religion that does not give equal rights to women. These are:

Islam

According to the Quran, a man can have 4 spouses while a woman cannot; a woman has to be obedient to her husband; a son inherits twice the share of a daughter; a man can marry a non-Muslim, while a woman cannot; in court, the word of a man counts twice that of a woman; a man can have sex-slaves, while a woman cannot ↗; a man can beat his wife ↗; and a man is allowed force his wife to sex ↗. The Sharia goes further, requiring women to cover their entire body, prohibiting them from speaking to men, and instructing them to stay at home ↗. These points of view are shared by a large plurality of Muslims in the world. All of this is sold as "respect to women" ↗.

Christianity

Christianity is traditionally dominated by male entities. All its prophets are male. Its god is male ("Father in heaven"). Its main addressee of worship is male (Jesus). Hence, most major Christian denominations give leadership roles exclusively to males (priests, popes, bishops, etc.). This general preference for males in leading roles is just the tip of the iceberg. It goes hand in hand with a less measurable, but more ubiquitous discrimination against women, in which men are generally considered the leaders in the family and society. This discrimination is then sold as a difference of roles – just that women are denied some roles while men are not. Pentecostalism and Lutheranism are an exception: they support full equality of the genders ↗.

Hinduism

The Laws of Manu require that "In childhood a female must be subject to her father, in youth to her husband, when her lord is dead to her sons; a woman must never be independent" [Laws of Manu / 5 / 148]. On the contrary, "she shall obey [her husband]" [ibid / 151], and "a husband must be constantly worshipped as a god by a faithful wife" [ibid / 154]. The authenticity of these texts is disputed. This does not change the fact that Hindu societies are de facto generally dominated by males. This shows in practices such as the bride being given away by her guardian to the groom (Wikipedia/Hindu Wedding); asymmetric wedding vows, where the wife says she will "manage the home according to [her] ability and reason", but always "to seek [his] consent" (ibid); the prohibition for widows to remarry (Wikipedia/Women in Hinduism); the wife becoming subject to her mother in law (Hinduism Beliefs / the Role of Women in Hinduism); and her primary duty as to give birth and care for the offspring (Hindu Website / Traditional status on women in Hinduism).

Buddhism

According to the Buddha, "It is impossible that a woman should be the perfect rightfully Enlightened One" [Pali Canon / Sutta Pitaka / Majjhima Nikaya / Bahudhaatukasutta]. According to him "women are prone to anger; women are envious; women are miserly; women are unwise. This is why women do not sit in council, engage in business, or go to Kamboja." [Pali Canon / Sutta Pitaka / Anguttara Nikaya / 4:80] Women are like black snakes, in



In some other French cities (Aubervilliers, Saint Denis) cafes that accept women have been explicitly labeled ([Saint Denis: Pour la mixité dans les cafés de Saint-Denis](#))

that they are "wrathful, hostile, of deadly venom, double-tongued, and betray friends" [ibid / 5:229–230]. "Women die unsatisfied and discontent in two things. What two? Sexual intercourse and giving birth" [ibid / 4:61]. Maybe this is why, "for the most part women are adulterous" [ibid / 5:229–230]. The Buddha classified women into 7 types of wives – which are either evil or submissive ([Wikipedia / 7 types of wives, Pali Canon / Sutta Pitaka / Anguttara Nikaya / 7:59](#)). To be fair, the ordination of women in Buddhism is and has always been practiced in some Buddhist regions [[Wikipedia/Ordination of women in Buddhism](#)], and the Dalai Lama is in favor ([Dalai Lama: Sakyadhita International Conference on Buddhist Women in Taiwan, 2002-07-10](#)).

Judaism

This religion has traditionally given less rights to women. A husband could divorce a wife if he chose to, but a wife could not divorce a husband without his consent [[Wikipedia/Women in Judaism](#)]. Women generally did not own property [ibid]. Laws concerning the loss of female virginity (Bible / Deuteronomy 22:13-21) have no male equivalent. The 10 Commandments refer to the wife as the husband's property – along with oxen and donkeys (Bible / Exodus 20:17). A traditional Jewish prayer goes "Blessed are you, Lord, our God, ruler of the universe who has not created me a woman" [[My Jewish Learning](#)]. The Web page [My Jewish Learning](#) tries to re-attach the prayer to originally Greek, not Jewish, sources, and takes comfort in the fact that Islam treats women even worse. Today, there are different views on women's rights in Judaism. Orthodox Judaism does not ordain women as rabbis, but other movements do [[Wikipedia/Rabbi](#)].

Bahai Faith

According to this religion, "The Emancipation of Women and The Achievement of Full Equality is one of the Most Important Prerequisites For Peace" [[Lights of Guidance: Women / § 2090](#)]. Unfortunately, this religion does not fully contribute to it. The faith excludes women from its House of Justice, because its founder said so. The reason for this is unknown: The "wisdom of this will be known in the future, we can only accept, believing it is right, but not able to give an explanation calculated to silence an ardent feminist" [[Lights of Guidance: Women / § 2073](#)]. The religion also says "The Hearts of Women are More Tender and Susceptible Than the Hearts of Men" [ibid / § 2091], "Woman by Nature is Opposed to War" [ibid / § 2092], "The Woman has Greater Moral Courage Than Man" [ibid / § 2093]. These are instances of benevolent sexism ([Wikipedia/Benevolent sexism](#)). If the faith really saw men and women as equal, it would make no such generalizations.

Confucianism

The Master said that "Girls and inferior men are hard to get along with" (Confucius: Analects / 17:23). Confucians in general began to gradually teach that a virtuous woman was supposed to follow the lead of the males in her family [[Wikipedia/Women in Confucian thought](#)]. The "Lessons for women", a Confucian text from 100 CE, says that women should be silent, hard-working, and compliant (ibid).

Does not apply to Spiritism

This religion postdates the Enlightenment, and hence it explicitly supports equal rights for women ([Allan Kardec: The Spirits' Book / § 822](#)).

Does not apply to Taoism

The religion strives for a balance between male and female, which are "understood to simply be two sides of the same coin" [[About.com: Gender and the Tao](#)]. The idea of balancing male and female energies is fundamental to Taoism, and applies to women as well as to men [[Patheos / Religion Library / Taoism](#)]. Consequently, the word "woman" is used in the [The Ultra Supreme Elder Lord's Scripture of Precepts](#) exclusively in the conjunction "men and women". The word "woman" never appears on its own. This is because there is no regulation that would apply exclusively to them. A legend relates: When Liezi realized how little he knew he went home and took the feminine role in his own household, cooking and doing other chores usually done by his wife. Taoist priests emulate Liezi and take the advice of the Taode jing, avoiding typically male activities and emulating attitudes expected of women, such as keeping a cheerful attitude or speaking in quiet tones. They may even urinate while seated as women do. [[Patheos / Religion Library / Taoism](#)]

As we have seen, most major religions either depreciate women or deny them things that are allowed for men. This is directly opposed to Humanist values → and the Human rights ([Human Rights / Article 2](#)). It also creates a general attitude that it is OK for women to be less privileged than men. This attitude contributes to the nearly ubiquitous discrimination against women in this world, with less education for women, honor killings, sex-selective abortions, domestic violence against women, laws that disadvantage rape victims, and a deep-rooted mindset that women are inferior in general (see my essay [Why are poor countries poor? / Women's Rights](#)).

The discrimination of women generally goes hand in hand with less education ↗, earlier marriage ↗, higher fertility rates ↗, more male dominance ↗, and more religiousness ↗: the earlier women are married, the less educated they are, the more submitted they are to their husbands, the more children they have, and the less educated these children will be, and the more religious the society will be as a whole. The more educated women are, the less likely they are to marry early, the less likely they are to be dominated by their husbands, the less children they have, the more educated these children are, and the less religious the society will be as a whole.

If the woman can't choose her husband freely, he can never be sure of her fidelity. And thus was born the oppression of women from the evil of arranged marriages.

By Thilo Sarrazin, paraphrased

Interfaith Marriage

Most major world religions prohibit or constrain marriage with people of another faith ↗. While this is understandable from a darwinian point of view, it is not from a Humanist point of view.

First, the free choice of a partner is a Human Right ([Human Rights / Article 16 \(1\)](#)). Thus, any prohibition of marriage based on faith runs counter to the Human Rights. We may say that it is not good if people marry someone of a different religion, because the partners will likely not share the same values. This, however, does not entitle us to outright forbid interfaith marriage. The partners know much better whether they share the same values or not. We could also argue that everyone is free to just exit their religion and then marry whom they wish. This, however, does not change the fact that any moral framework ↗ that does not grant this freedom is incompatible with the Human Rights. If you have to exit the framework to get your rights, then the framework is incompatible with these rights.

Second, it is discriminating to put down people of other faiths as not marriageable. Imagine that a father decides "I do not want my daughter to marry a vegetarian". That would be perceived as stupid, over-generalizing, patronizing, and offensive. And yet, this is exactly what religion does.

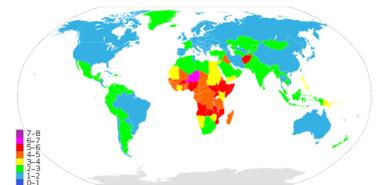
Finally, the prohibition of interfaith marriage partitions mankind. Consider the definition of a species: A species is a group of animals that do not interbreed ↗. This is exactly what religion creates: Religion partitions humanity into different species. This leads to an unawareness of the other "species", segregation, discrimination, and sometimes violence ↗. Half of the world's most deadly conflicts run along religious lines ↗. If people were allowed to intermarry, the scars that separate them would heal within a generation.

Fertility

Nearly half of people on this planet adhere to a religion that encourages large families: Islam, Orthodox Christianity, and Catholicism ↗. Such an encouragement is understandable from a darwinist point of view, but it contributes to severe humanitarian problems, in particular in Africa.

The average African woman has 4-8 children ([Wikipedia/Total fertility rate](#)). The population of the continent has doubled since 1982, and quadrupled since 1950, to 1.1 billion people ([Wikipedia/Demographics of Africa](#)). To understand what that means, consider a country such as France. In 1950, France had 42m inhabitants. Today it has 60m. If France had had the same population growth as Africa, France would stand today at 160m inhabitants – that's more than Russia. The country would just have collapsed under this growth.

This is roughly the situation many African countries are in: Statistically speaking, their population has quadrupled. This has an effect on the well-being of the children: If a family cannot feed 2 children, it cannot feed 5. If a family cannot send one child to school, it cannot send 5 to school. If it is hard to find university scholarships for thousands of students, it is harder to find scholarships for tens of



Average number of children per woman
[Supaman89@Wikicommons, based on CIA data]



% of undernourished
[Lobizón@Wikicommons, based on UN data]

thousands of students. In other words, the exorbitant growth of population seems to have outpaced the resources and infrastructure that the countries provide. Indeed, the countries with the highest fertility rates are often those with the highest malnutrition rates. I discuss these problems in detail in my essay [Why are poor countries poor? / Fertility](#).

Catholicism, Orthodoxy, and Islam contribute to this spiral, because they encourage people to have large families. Nowhere in these religions can we find the commandment to restrain the number of children. Catholicism even prohibits contraception ↗.

This is not just an abstract reproach. Friends of mine have been at a Catholic wedding counseling in a developing country. They were encouraged to make as many children as possible, even if they do not know how to care for them. This is an irresponsible teaching.

Leaders who forbid their followers to use effective contraceptive methods express a preference for "natural" methods of population limitation. A natural method is exactly what they are going to get. It is called starvation.

By Richard Dawkins

Homophobia

All major religions shun homosexuality to varying degrees ↗. This is particularly visible in Islam: Many flavors of this religion punish homosexuality by death ↗. Consequently, five Muslim countries have capital punishment for homosexual acts ([Wikipedia/Homophobia](#)). But even the milder forms of Islam, as well as the other religions, do their part: They regard gays as unnatural, condemn homosexual acts, or encourage gay people to not engage in them ↗.

Any singling out of people based on their sexual orientation runs counter to Humanist ideals of personal freedom ↗. It is no one's business whom someone loves, as long as it is consensual.

Any religious denomination that singles out gay people contributes to a culture in which these people are discriminated against. In most of the world, gay people cannot openly live their sexual orientation. They are harassed, stigmatized, and sometimes attacked. Even in more liberal countries, society makes it hard for gays to "come out" (Why do they even have to "come out" in the first place?). In some countries, LGBT teens and young adults have one of the highest rates of suicide attempts ([Wikipedia/LGBT Suicide](#)). By stigmatizing gays or gay behavior, religion makes life needlessly harder for those 2%-10% of us who are gay.

Shunning Apostasy

Christianity, Islam, and Hinduism have a history of condemning, shunning, insulting, threatening, or ridiculing apostates ↗ ↗.

Christianity

This religion stopped persecuting heretics in the 19th century ↗. Still, deep-rooted Christian beliefs contribute to the discrimination of atheists in the US: Atheists cannot hold a public office in some states, they are associated to criminality, and they are less likely to be accepted, publicly and privately, than any others from a long list of ethnic, religious, and other minority groups ↗. If someone identifies as atheist, family members can turn against her, she can lose friends, people can denounce her in prayer groups, and she can be excluded from clubs and associations.

Islam

All main authorities, the majority of citizens in some countries, and the laws in at least 5 countries condemn the apostate to death ↗ ↗. Even in places without the death penalty, apostates face social exclusion in the best case, and repression and aggression in the worst case. We discuss details in the [Chapter on Islam](#).

Hinduism

This religion has a more pluralistic history than the abrahamic religions. Still, Hindu sources condemn atheists quite clearly ↗. As we have seen, atheists lack legal recognition in India, and an Indian member of parliament can openly call for the execution of apostates.

In addition, all major religions deny atheists the right to marry one of their adherents ↗.

The freedom of religion is a central Human Right ([Human Rights / 18](#)), as is the right not to be discriminated against on the basis of religious belief (ibid / 2). Thus, any system that proposes that atheists or adherents of other religions should not have the same rights as believers runs counter to the Human Rights. Any system that nurtures a disdain for atheists contributes to the discrimination and social pressure that atheists and agnostics witness in most countries in the world.

The basic premise is simple and rational: unless society encourages people to think freely, out of the box, originally and question present conditions, how can there be improvements, progress and innovations? That is why we see that the societies where apostasy is punished are among the most uncivilized terror-prone hells on earth.

By [Chamarthi Srinivas Sharma](#)

Child Marriage

Three of the world's largest religions permit child marriage in their regulations ↗.

Catholicism

The minimum age of marriage for a woman is 14 according to Canon Law.

In Islam

The Quran encourages adherents to follow the example of the Prophet Mohamed in everything. Mohamed married Aisha when she was 6, and had sex with her when she was 9. The Quran also explains how to divorce a pre-pubescent girl.

In Hinduism

The Laws of Manu set 8 years as a minimum age for a girl to marry.

This is not to say that all Catholics, all Muslims, or all Hindus think that their religion permits child marriage. On the contrary, opinions about child marriage vary widely. It is also not to say that child marriage would be caused by these religions. On the contrary, child marriage correlates more with poverty than with religion. For example, Southern Africa has high rates of child marriage, while South America has low rates – and both are Catholic.

It is to say, however, that these three religions do not have anything against child marriage in their books. As a consequence, their institutions have historically not opposed child marriage. They have made people attend churches and temples, they have made women veil themselves, and they have prohibited people from marrying spouses from other faiths – but they have not prohibited people from marrying children. The three religions have thus been a bystander to the practice. They would have had the social power to prevent it, but they did not ↗. Technically speaking, the reproach is that these religions contain a moral framework that does not condemn child marriage ↗.

A particularly delicate case is the rape of a minor. Many religious interpretations hold not just that the girl can marry the rapist (even if she is minor), but that she has to. Press reports detail this procedure for Morocco, India, Afghanistan, Jordan, and, until at least 1997, 12 Latin American countries (see my essay on [Why are poor countries poor? / Women's Rights](#)). Even in the United States, some conservative religious families force their daughters to marry their rapist ([The New York Times: 11 Years Old, a Mom, and Pushed to Marry Her Rapist in Florida, 2017-05-26](#)).

Child marriage is incompatible with the Human Rights, because these require "free and full consent of the intending spouses" for marriage [[Human Rights / 16 \(2\)](#)]. Child marriage is prohibited because it causes harm to both the under-age spouses and their offspring (see again [Why are poor countries Poor / Women's rights](#)). A UNICEF

The Landscape of Child Marriage

Idaho had the most married children on a per-capita basis among states that provided data; Texas led in sheer numbers of children married. Based on state records covering 11 years, 2000 to 2010.



Child marriage in the US
[[The New York Times: 11 Years Old, a Mom, and Pushed to Marry Her Rapist in Florida, 2017-05-26](#)]

report explains that "medical complications from pregnancy are the leading cause of death among girls ages 15 to 19 worldwide. Compared with women ages 20 to 24, girls ages 10 to 14 are five times more likely to die from childbirth, and girls 15 to 19 are up to twice as likely, worldwide." [The Girl Effect: Data] Early marriage also has consequences for the children. A UNICEF report explains that early marriage "is also associated with adverse health effects for her children, such as low birthweight. Furthermore, it has an adverse effect on the education and employment opportunities of girls." [UNICEF: Domestic Violence Against Women and Girls] Finally, sex between an aged man and a premature girl can be traumatic for the girl.

Remark: Child marriage is closely related to forced marriage in general. In the United Kingdom, the Government's Forced Marriage Unit is "bringing three girls a week back from Islamabad as victims of forced marriage" – sometimes in spectacular rescue actions [The Independent: A question of honour: Police say 17,000 women are victims every year, 2008-02-10]

Cruelty

Religions are, by definition, old ↗. Therefore, their value system predates ours, and is often incompatible with it. One example of such divergence is the cruelty of punishments. Most major religions have punishments in their scripture that are considered cruel by today's standards ↗. These are beating (Islam, Judaism, Christianity, Hinduism), amputation (Islam, Christianity, Judaism, Confucianism, Hinduism), and execution (Islam, Christianity, Judaism, Confucianism, Hinduism). The latter can take very brutal forms, such as crucifixion in Islam, stoning in Judaism, burning in Hinduism, or the slow slicing of the body into several pieces over an extended period of time until death arrives (Wikipedia/Lingchi) – as part of the Five Punishments in Confucianism. Islam, in particular, knows the concept of kin punishment, where an innocent person can be killed in revenge (Quran 2:178).



[Found in: Progressive Secular Humanist]

These punishments are horrible by today's standards. Still, they are on the books of these religions. The scriptures have never been changed to remove them. A religion that has abandoned brutal punishments is inconsistent ↗. A religion that has not abandoned them (such as variants of Islam ↗), is incompatible with the Human Rights. These say that "no one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment" [Human rights / Article 5].

The Lord says: Whoever does any work on Sabbath must be put to death. Thus, the word of the Lord basically tells us to kill half of the U.S. population. But if God is an all-powerful being, he would kill them himself. There would be no need for people to do the murdering. These people would already be dead, and Wal-Mart would be closed on the Sabbath through lack of employees.

By GodIsImaginary.com / 22

Slavery

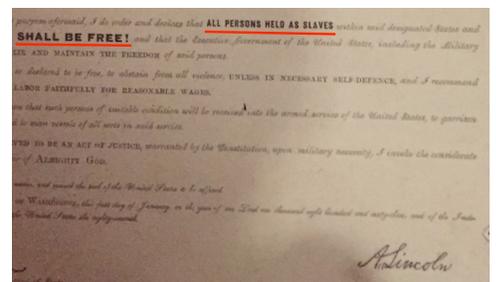
Traditionally, several major religions have supported the segregation of humanity in lower and higher classes. This segregation took the form of slavery in the West, and of the caste system in India. In both cases, the characteristic principle is that rights are denied to a class of people based on their birth. This applies to the following religions:

Christianity

This religion has historically supported slavery ↗. The major branches renounced slavery only in the 20th century.

Islam

This religion, likewise, has historically supported slavery ↗. Like Christianity, it renounced slavery only in the 20th century.



How it looks when you abolish slavery and you mean it. Go find that in your holy book. [Picture taken in the Chicago Museum of History]

Judaism

This religion has historically known the notion of slavery. The movement against slavery began only in the 19th century ([Wikipedia/Jewish views on Slavery](#)).

Hinduism

This religion has known the caste system since the Vedic times ([Wikipedia/Caste system in India](#)). Nowadays, Hinduism is interpreted so as to forbid the caste system ↗. Still, a hundred years after the British introduced positive discrimination for lower castes, the Indian society is still stratified ([Wikipedia/Other Backward Class](#)).

Sikhism

This religion, likewise, knows the concept of castes, even though it has been officially opposing it for the past few hundred years ([Wikipedia/Caste System in India](#)).

Jainism

In this religion, the caste system "has existed for centuries" [ibid].

While most religious leaders and adherents of these religions nowadays say that their religion is against such segregation, the segregation has de facto been part of the value system of these religions for centuries. In some cases, it is still in the religious scriptures of these religions.

Slavery and servitude is against the Human Rights [[Human rights / Article 4](#)]. Thus, the value systems of these religions have, at least historically, been at odds with today's values.

I have stayed in a house where a young household mulatto, daily and hourly, was reviled, beaten, and persecuted enough to break the spirit of the lowest animal. [...] And these deeds are done and palliated by men who profess to love their neighbors as themselves, who believe in God and pray that it will be done on Earth. It makes one's blood boil, yet heart tremble to think that we Englishmen and our American descendants, with their boastful cry of liberty, have been and are so guilty.

By Charles Darwin in "Mauritius to England", 1845

Human rights

With the above, we find that all major religions are at odds with one or more articles of the Human Rights. The Human Rights go as follows [[United Nations: Universal Declaration of Human Rights, 1948](#)]:

Article 1: All human beings are born free and equal in dignity and rights.

The Abrahamic Religions have traditionally allowed slavery ↗. The Indian religions have known the caste system. Islam, in particular, does not grant unbelievers the same rights ↗ (marriage with Muslim women, e.g., is prohibited, while Muslims can marry non-Muslim women).

Article 2: Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as [...] sex [or] religion

Nearly all major religions give women less rights ↗.

Article 3: Everyone has the right to life, liberty and security of person.

Congratulations, this article is not contested.

Article 4: No one shall be held in slavery or servitude

The Abrahamic Religions and the Indian Religions have traditionally allowed slavery and/or servitude ↗.

Article 5: No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.

Most major religions have traditionally supported cruel punishment ↗. Variants of Islam still do ↗ ↗.

Article 6: Everyone has the right to recognition everywhere as a person before the law.

OK

Article 7: All are equal before the law and are entitled without any discrimination to equal protection of the law.

As discussed, slaves were not ↗, and women still are not ↗.

Article 8: Everyone has the right to an effective remedy by the competent national tribunal

While most religions go hand in hand with the government ↗, some religions challenge the role of national governments in jurisdiction. Extremist variants of Islam aim for a theocracy ↗.

Article 9: No one shall be subjected to arbitrary arrest, detention or exile.

OK

Article 10: Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal

OK

Article 11: Everyone charged with a penal offence has the right to be presumed innocent until proved guilty according to law in a public trial at which he has had all the guarantees necessary for his defence.

In Islam, the word of a woman counts half of that of a man in court (Quran 2:282 ↗). Thus, in any litigation of a man against a woman, the woman automatically loses out. For rape, for example, the woman has to bring 4 witnesses (Quran / 4:15) – an impossible thing to do ↗. DNA evidence is not admitted.

Article 12: No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence.

On the contrary, all major religions have a totalitarian system that interferes heavily with the private life ↗.

Article 13: Everyone has the right to freedom of movement and residence within the borders of each state.

Yes, apart from slaves, historically speaking ↗.

Article 14: Everyone has the right to seek and to enjoy in other countries asylum from persecution.

On the contrary for Islam: In many Muslim countries, apostates have to seek asylum in other countries from persecution in their own ↗.

Article 15: Everyone has the right to a nationality.

Most religions do not specifically regulate citizenship.

Article 16: Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family.

All major religions forbid interfaith marriage ↗.

Article 17: Everyone has the right to own property alone as well as in association with others.

OK

Article 18: Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief.

All major religions shun or punish apostasy ↗. In some Muslim countries, apostasy remains punishable by death ↗ ↗.

Article 19: Everyone has the right to freedom of opinion and expression.

All major religions shun criticism ↗.

Articles 20-30

These articles deal with social and cultural rights.

Thus, nearly all major religions have a value system that is incompatible with the Human Rights in at least one aspect. Much verbal acrobatics has been attempted to hide this ↗, but the fact remains. The Islamic world has come up with several alternative "Islamic Human Rights", most notably to fight against equal rights for men and women, and against religious freedom ([Wikipedia/Cairo Declaration](#))([Wikipedia/Arab Charter](#)). Catholicism, too, continues to be at odds with the Human Rights ↗. All of this is not surprising: these religions are centuries old. They are based on an ancient world view in which accidents and diseases were a punishment of the gods, physical laws were unknown, mankind was the center of the universe, and humans were considered incapable of giving themselves rules. No wonder that this outdated physical world view goes along with an outdated moral world view (Stephen Pinker: Enlightenment Now, p. 394).

This book argues that moral values have evolved over time, and have then lead to the Human Rights ↗. Religions, in contrast, have remained static. This has led to a divergence between the religious value systems and modern values ↗. There are several solutions to this problem.

Continuity

The religion can just impose its values, and prevent any update. This way, current values and religious values remain identical. This is indeed what we observe in some religious countries: In Egypt, e.g., 80% of the population back the death penalty for apostates from Islam ↗. Such a penalty has long been out of date: Egyptians (and the rest of the world) would revolt if Western countries prescribed the death penalty for people who convert from Christianity to Islam. However, the Egyptian variant if Islam just continues to impose its values, and thus keeps the society in the past.

Emphasize previous progress

Islam did not abolish slavery, but it gave slaves some rights. At a time when slaves were mere objects, that was revolutionary. Similarly, Christianity allowed women to lead (female) monasteries and receive education. At a time when women had less rights than men, this was an unusual responsibility. The Old Testament, valid for Jews and Christians, codified with the principle "an eye for an eye". This principle was revolutionary, because it limited the punishment of a deed to the damage done by the deed ↗. Other religions can be credited with establishing other moral standards, or with prohibiting cruel pagan rituals. When criticised for other shortcomings, these religions can point to their early achievements. They will argue that they have historically been very progressive. However, past achievements cannot belittle the fact that what was progressive a thousand years ago is utterly backward now.

Extrapolation

Another way to deal with the evolution of human values is to interpret the religious scriptures as indications for the right direction. For example, the fact that Jesus appreciated Mary Magdalene can be seen as an indication that, on the long run, Jesus desired equal rights for women (which is what feminist Christians hold). The fact that Islam appreciates the freeing of a slave can be understood as the instruction to abolish slavery on the long run. This, however are speculations. If it had been the divine will to give women equal rights, or to abolish slavery, then the respective prophet could have easily stated that explicitly. If we start speculating about extrapolations, then what is the extrapolation of the fact that Jesus did not marry, or that he asks us to stone to death children who curse their parents? What is the extrapolation of the fact that Mohammed allowed men to have four women (and himself an arbitrary number of women), that women should cover themselves, or that men can have sex with slaves? There is the danger that we extrapolate the holy sources in whatever direction we like.

Re-Interpretation

Religious leaders can find that the religious sources have been mis-interpreted. For Hinduism, one has recently found that the religious scriptures have been misinterpreted during the last 2000 years, and that Hinduism does not actually prescribe the caste system, the oppression of women and child marriage ↗. If religious scriptures can be misinterpreted so easily, this raises the question who guarantees that the current interpretation is the good one (or whether it would not be better to abandon the scriptures altogether).

Re-Emphasizing

Religions typically offer some leeway in their interpretation ↗. Nowadays, the leaders of the world religions emphasize equal rights of women, condemn slavery, and proclaim religious tolerance. However, between 1000 CE and 1500 CE, when the world religions controlled Europe, the Arab World, and India unchallenged, the world saw no progress on these matters: Women's rights remained the same, slavery was ubiquitous, and heresy or apostasy were punished severely. Only when the religions lost their grip these issues moved. This indicates that it is religion that follows the values of society rather than vice versa.

Cherry-Picking

Another way to deal with an incompatibility is to selectively drop tenets from the scripture or previous interpretations of the religion. For example, the Bible states that it is forbidden to wear cloths made of two different materials (Bible / Leviticus 19:19). For unknown reasons, this rule no longer finds adherents ↗. Similarly, the Quran states that a woman's word counts half of a man's word in court (Quran / 2:282). This has the effect that when a man and a woman have a dispute in court, the man automatically wins. And yet, few Muslims in the Western world insist on this tenet today.

Auto-Adaptation

Some believers hold the view that the religious sources automatically adapt themselves. While the literal text stays the same, their interpretation changes, so that the current reading of the texts is always congruent with current values. The problem is that we never know when to change the interpretation and in which direction. Furthermore, whoever wishes to propose new values has not just to justify these new values, but also to come up with a new interpretation of the texts. Therefore, the texts always act as a support for the status quo, and never as a proponent for change. In the end, it is always the doubter who develops values, and sacred texts that trail behind ↗.

Denial

Another option is to deny the divergence between religion and society. Examples for such denials are: "Tunisia is a secular country" (while the constitution states that it is Muslim), "Hinduism is tolerant towards other religions" (while current Hindu culture prohibits marriage with non-Hindus), "Muslims had slaves just to protect them" (while Arabs traded slaves during centuries and sold them to Europeans), "Islam gives equal rights to women" (while Islam prohibits women from marrying non-Muslims, gives women less heritage, and husbands the right to beat their wives ↗), "Hinduism does not support the caste system" (while the caste system has existed for millennia in this religion ([Wikipedia/Caste system in India](#)) and Hinduism did and does nothing to abolish it), or "Jesus wanted peace for all people" (while he said he did not come to bring peace, but the sword (Bible / Matthew 10:34)). Denial does not change the fact that a traditional interpretation of the world religions conflicts with modern values.

Not the real religion

When confronted with a problematic stance of a religion, a believer can point out that this stance is not the real stance of the religion, but rather a wrong interpretation of the true religion ↗. The problem is that every interpretation claims to be the real one. In any case, even if one interpretation is the "true one", this does not change the fact that millions adhere to the "wrong one".

New Religion

If society and religion lose touch, people can develop a new religion. This has happened several times in history ↗. The foundation of a new religion often leads to violence, if there is an established religion around ↗. This is because most religions, once established, forget that they have been young before, and oppose new religions.

In atheist eyes, all of these strategies are but apologetic attempts to reconcile modernity and religion. If believers know anyway what they want (no slavery, equal rights for men and women, freedom of religion, etc.), then what is the purpose of retro-actively justifying these beliefs with a religion? This just makes matters needlessly complicated ↗ ↗. Believers could just admit that they have their own value system.

Truth never triumphs. Its opponents just die out.

By Max Planck

Social Effects

Justification of Evil

One of the attractive points of a religion is that it offers explanations for the evil in this world ↗. Common explanations are that the evil is either wanted by the gods, deserved for previous wrong-doing, or minuscule in comparison to the joys of the afterlife. Such explanations can reduce the emotional discomfort that we feel when we see the suffering around us. The problem is that, more often than not, the religious explanation also justifies the suffering. This applies to the following religions:

The Abrahamic Religions

Islam, Christianity, Judaism, Spiritualism, and the Bahai Faith believe in an all-powerful god. Therefore, the evil in this world must come in one way or another from this god, or at least happen with his permission. Furthermore,

Congressman says 'God will take care of climate change' if it is real

The comment comes as Donald Trump is set to make an announcement on the Paris Agreement on climate change

Mythili Sampathkumar New York | @MythiliSk | Thursday 1 June 2017 18:04 BST

Republican Congressman Tim Walberg has said that God will address **climate change** if it is real and that humans can do nothing to help the planet.

...and he is not alone: The Cornwall Alliance of 1500 theological signatories ([Wikipedia/Cornwall Alliance](#)) believes that the Earth was created by God's intelligent design is hence robust to climate change.

this god is benevolent. Therefore, all evil in this world has to be somehow justified. Various theories have been developed ↗. The evil could be a punishment, a prerequisite for a greater good, an entertaining distraction, a catalyst for spiritual growth, or a test for the afterlife. All of these explanations mean that the evil in this world is actually alright. It is, paradoxically, good that it happens. Such a viewpoint is abominable from a Humanist point of view. For a Humanist, suffering is never good.

Another line of reasoning goes that the suffering is actually either subjective, or minuscule in comparison to the joys of the afterlife. Such a viewpoint diminishes the plight of those who suffer. It is, therefore, inadmissible in any system that is based on empathy ↗, such as Humanism.

Hinduism

This religion teaches that bad behavior accumulates bad karma, and leads to suffering in the next life ([Wikipedia/Karma](#)). Good behavior, in contrast, produces good karma. It then follows ↗ that whoever suffers has accumulated bad karma in the past. This is because if he had done good deeds, he would have accumulated good karma, and would not suffer. But since he suffers, he cannot have done good deeds. Thus, every person who suffers deserves the suffering. The Laws of Manu agree, and say that disease is a punishment for former bad deeds ([Laws of Manu / 3 / 92](#)). However, there is no proof that these people did anything wrong. And even if they did, that would not justify their illness or hunger. Any notion that someone would actually deserve such suffering is incompatible with Humanist ethics.

Buddhism

Like Hinduism, Buddhism teaches the theory of Karma ↗. The Buddha is recorded to tell a man who suffered violence by villagers "Bear with it! The fruit of the kamma that would have burned you in hell for many years, many hundreds of years, many thousands of years, you are now experiencing in the here-and-now!" [[Pali canon / Majjhima Nikaya / Angulimala Sutta](#)]. Again, any system that justifies suffering based on putative bad deeds in a previous life is incompatible with Humanism.

Taoism

This religion does not see suffering as a punishment for previous bad deeds ([Patheos: Taoism / Suffering](#)). However, Taoism seems to advocate a passive approach to the evil in this world. The Dao De Jing tell us that "one who suffers disgrace will succeed" [[Dao De Jing / 22](#)], and that "the Person who suffers hardships for the nation, Is the King of all under heaven" [[Dao De Jing / 78](#)]. This way of thinking is part of a larger concept in Taoism, Wu Wei, which literally means "non-action" ([Wikipedia/Wu Wei](#)). Any approach to life that does not actively aim to fight against injustice is incompatible with a Humanist ethical system.

Does not apply to: Confucianism

Confucius does not see a supernatural component or justification for evil (Confucius: Analects / 14:19). Common interpretations of Confucianism hold that evil is inevitable, and that it should be countered with empathy ([Patheos: Confucianism / Suffering](#)).

This is not to say that adherents of these religions would welcome the evil in this world, or that they would not help others in need. On the contrary, helping others in need is a welcome recruitment ground ↗. Rather, the criticism is that these religions justify the evil in this world as deserved, ultimately good, negligible, or acceptable. Any justification of innocent suffering, however, runs counter to the principles of Humanism.

If God has a plan, then everyone who died in the Holocaust died for a reason.

By anonymous

Totalitarianism

A totalitarian regime is one that attempts to control virtually all aspects of the social life, including the economy, education, art, science, private life, and morals of citizens. Such a regime state recognizes no limits to its authority

and strives to regulate every aspect of public and private life wherever feasible. A distinctive feature of totalitarian governments is an elaborate ideology, a set of ideas that gives meaning and direction to the whole society. [\[Wikipedia/Totalitarianism\]](#)

All major religions are totalitarian in this respect. They definitively have an "elaborate ideology that gives meaning and direction to the whole society" ↗ ↗. They also "attempt to control all aspects of life". They regulate

Education

Most major religions infiltrate the school system in one way or the other ↗.

The Arts

All major religions influence the arts – sometimes merely by inspiration, sometimes by pressure ↗.

Opinions

Most major religions sanction people who criticise them ↗.

Sex

Most major religions regulate sexual behavior, even between consenting adults or when alone ↗.

Desires

Most major religions regulate how we should think, and punishes wrongful thinking in the afterlife – even if these thoughts were neither spoken nor implemented ↗.

Truth

All religions claim to define what is truth – at least in metaphysical issues ↗. They admit no scientific evidence to challenge these beliefs.

Thus, the major religions actually share many characteristics of a totalitarian regime. The parallels go further: Another distinguishing characteristic of a totalitarian regime is a secret police [\[Wikipedia/Totalitarianism\]](#). A secret police is a law enforcement agency that operates in secrecy, and therefore has little to no transparency, accountability or oversight [\[Wikipedia/Secret police\]](#). In a religion, this role is taken by the supernatural. Much like a secret police, the supernatural knows everything that happens, but operates "in secret" – in the sense that the victim cannot know if they are being spied on. Also, there is indeed "little to no transparency, accountability or oversight", because humans cannot control the supernatural. Finally, the supernatural threatens people with tortures in case of disobedience ↗ – which is exactly what the secret police does in worldly totalitarian systems. Thus, the belief system of a religion comprises something that resembles a secret police in many aspects. Even though this secret police is imaginary, it still fulfils its purpose of instilling fear.

The major religions are thus totalitarian according to the definition of the word. Totalitarianism runs counter to liberal ethics ↗. It also runs counter to the Human Rights, which do not tolerate intrusion in the private sphere [\(Human Rights / Article 12\)](#). The only reason why these religions can remain legal in spite of their totalitarian affectation is that their threat to privacy is, well, imaginary.

Any system is fine, as long as you can change it.

Orwellianism

As a corollary to the above, religions also fulfil the criteria of an Orwellian regime [\(Wikipedia/Orwellian\)](#):

- They "control by [...] misinformation, denial of truth, and manipulation of the past" ↗
- They invade "personal privacy, either directly physically or indirectly by surveillance" ↗
- They request the "adoration of [the] leaders"
- They encourage "doublethink, whereby the population must learn to embrace inconsistent concepts without dissent" ↗
- They proclaim a "generally dystopian future" ↗
- They use "euphemism to describe [a] concept, especially when the name denotes the opposite of what is actually occurring" ↗.
- They punish thoughtcrime, i.e., the "act of holding beliefs or doubts that oppose or question" the system – even if these beliefs are never spoken and exist purely in the mind ↗ ↗. Thoughtcrimes are controlled by something called the "Ministry of love" – just like in the religions.

Thus, technically, religions fulfil all criteria of an Orwellian regime. They are thus Orwellian. Religious leaders will of course contest this interpretation – much like Orwellian regimes always contest that they are Orwellian.

Spiritual Abuse

In some cases, religious totalitarianism is taken so far that it becomes spiritual abuse. This is abuse administered under the guise of religion, including harassment or humiliation, which may result in psychological trauma [Wikipedia/Religious abuse]. It may include the creation of phobias, the induction of fear, the subjugation of children, the suppression of alternative opinions, emotional abuse, physical abuse, intimidation, false accusations, and isolationism [ibid].

The most visible cases of such abuse have happened in Catholicism (Wikipedia/Catholic Church sexual abuse) and Protestantism (Wikipedia/GRACE). However, also Islam's relationship to God is reminiscent of an emotionally abusive relationship ↗.

Prudery

By definition, a religion is old ↗. In older times, there were no efficient means for birth control, or paternity tests. Hence, all major religions restricted sex to married couples ↗. Since then, technical means and societal norms have changed, but the religions were unable to update their scriptures ↗. Hence, still today, all major religions restrict sex to married couples.

Inside the married couple, Hinduism and Taoism acknowledge the importance of sexual pleasure. Taoism sees sex as a spiritual practice (Wikipedia/Taoist sexual practices). Hinduism sees sexual pleasure as one of the four goals in life (Wikipedia/Kama). The other major religions, however, have created a system of straight-laced sexual mores, in which erotic pleasure has no place ↗.

Christianity

...disapproves of pre-marital sex and homosexual relationships in its mainstream interpretations. Beyond that, Catholicism explicitly prohibits masturbation, prostitution, and pornography. Protestantism is proverbial for its strict sexual mores. Jesus reportedly said that even looking at another woman "in lust" already constitutes adultery.

Judaism

The Torah requires the death penalty for a woman who is not a virgin on her wedding night. Traditionally, a man was not allowed to be in the same room with a woman to whom he was not married. Ejaculation in general was considered unclean. Still today, conservative variants of Judaism shun adultery, masturbation, adultery, and pre-marital sex.

Buddhism

...prohibits pre-marital sex and homosexual relationships. Going further, the Buddha identifies sexual craving as one of the hindrances to attain insight.

Islam

The mainstream interpretations prohibit pre-marital sex, homosexual relationships, masturbation, prostitution, and pornography. Islam prides itself of allowing all sexual pleasures in the couple, but its most popular interpretations take a suffocating stance on female beauty in public ↗. Far from appreciating women as equal participants in public life, they are obsessed with guarding the "honor" of women.

All these sexual practices do not produce tangible harm to others, and are therefore allowed in a liberal moral framework ↗. The religious prudery is thus a needless restriction of life in Humanist eyes.

Remark: Despite the prohibition of pornography in Islam, pornography is actually particularly popular in Muslim lands ↗.

Trivialisation of Violence

In older times, punishments used to be more brutal. Hence, most major religions still have cruel punishments on their books ↗. Even if these punishments are no longer enacted, they are still part of the scriptures of these religions. The scriptures also rave about the tortures in hell. In all of these cases, the cruelty is presented as something normal, acceptable, and sometimes even noble. This is particularly disturbing when it is taught to children – which is what all major religions do ↗ ↗ ↗.

Christianity

In Christianity, God orders mock executions, desires human sacrifices, and commits genocide ↗. All of these stories are read to children as if they concerned normal, justifiable behavior. The children learn to glorify a God who wiped out the entire humanity by drowning. They learn to spend their day looking at the half-naked body of a man who has been tortured to death (Jesus). This atrocity is presented as a necessary step to make God forgive the sins of humanity.

Islam

Every 10th verse of the Quran is concerned with describing hell in the most vivid colors ↗. People learn that burning men to death, and then replacing their skin so that they can be burnt to death again, is a valid way of punishment by the all-loving God. The Quran also presents the amputation of hands and crucifixion as the correct ways of punishment for crimes – along with an array of other tortures and ways of execution ↗. In some countries, all of these brutalities are taught to children in schoolbooks. Hence, considerable proportions of Muslims wish to see these punishments applied ↗.

Judaism

The Torah is full of descriptions of cruelty. God orders mock executions, desires human sacrifices, and commits genocide ↗. Children learn to pray to this god as the most loving entity. The Torah also upholds the “eye for an eye” principle ↗, which is essentially retaliation by amputation. The traditional techniques of execution were stoning, burning, slaying, and strangulation. Nowadays, amputation, retaliation, and execution are less popular. However, they have never been removed from the holy books. Children still come in touch with them whenever they read the scripture.

Chinese Religions

Taoism and Confucianism blend into the general background of Chinese folk religion ↗. These know Diyu, a purgatory in which sinners are fried in oil cauldrons, are put into a grinding machine and ground into a bloody pulp, have their tongues being ripped out, and are frozen into ice cubes that then break apart ↗. This is not criticised as something outrageous, but is presented as the normal course of things.

Indian Religions

Hinduism and Buddhism, likewise, know a brutal hell between two lifes on Earth. In Buddhism, people are “roasted in an immense blazing oven with terrible suffering” ↗. In Hinduism, sinners are devoured by ravens, boiled in jars, and subjected to diseases. Again, this is not criticised as something outrageous, but is presented as the normal course of things.

All of these stories trivialise violence. Graphical violence is presented as something normal. In the abrahamic religions, cruelty is even presented as a choice of their god. Since this god is presented at the same time as the object of worship, the abrahamic religions effectively justify and glorify this violence.

Any glorification, justification, or trivialisation of violence runs counter to Humanist values.

Potential Consequences

Much effort had been devoted into explaining, justifying, softening, or re-interpreting violence in religious books ↗. However, violent words have an impact that goes beyond the conscious: Hostile words might subconsciously make us more hostile. This is a theory known as priming, and it has been studied extensively ([Wikipedia/Priming](#)).

Furthermore, people learn from observing others ([Wikipedia/Observational learning](#)). If people read stories that glorify violence, then they might become more accepting of violence themselves – they become desensitized. Let us consider the case of children, which religions target abundantly ↗ ↗ ↗. Religions teach children that cruelty is OK as punishment in some cases. In this way, the children learn to suppress their usual emotional response to cruelty when it comes to religious matters. When the children grow up, they will learn to distinguish the violence of the imaginary stories from the violence in the real world. Some children, however, never learn the difference.

Scaremongering

All major religions know the concept of hell ↗. In Europe, hell has become an abstract concept that very few people actually take literally ↗. In the rest of the world, however (and even in Europe until a few years ago), hell is a concept that scares people.

My grand-mother, for example, was terribly afraid that her husband would go to hell, because he did not believe in God. This was a thought that tormented her: she in Heaven, and her husband in the fire of hell. And no matter how much the priest tried to assuage her, the fear of hell was instilled into her long before her particular denomination of Christianity decided to abolish it. Other people I know (of different religions) are likewise afraid of the torments of hell. This may be completely incomprehensible for a modern European Christian, who has learned to live his religion by lip service only ↗. However, the fear of hell can be a significant detriment to the life quality of people who really believe.

We may say that it should be, because this very fear of hell keeps people moral. However, unfortunately, it doesn't ↗. Furthermore, it also torments people who have done nothing wrong (such as my grand-mother).

Any threat of violence goes against Humanist values.

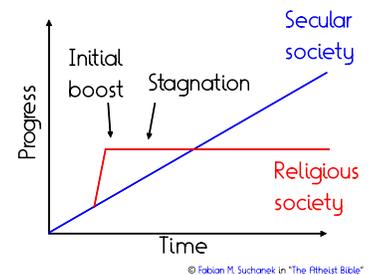
Fear not hell, because if it exists, you shall find yourself in good company.

By the [Global Secular Humanist Movement](#)

Stifling progress

Moral progress

Religions typically have a moral framework ↗. This moral framework cannot easily evolve. There is usually no mechanism by which the gods could update the framework when it no longer fits the mainstream society. This entails that the religious framework often trails behind the society's moral framework. Eventually, the framework will be updated – accompanied by claims that the religion has pushed for change all along ↗. But a change for more Humanist morals never originates inside a religion after it became a religion. More precisely: When a religion has passed its first 150 years of existence, it will retire ethically, and stop pushing for Humanist values.



Examples are:

- Slavery was abolished by the British parliament, and much later only removed from the mainstream interpretations of Christianity and Islam ↗.
- Cruel punishments were not abolished by religious preachers ↗.
- Equal rights for women are not spearheaded by religious figures ↗.
- Gay rights are not being pushed forward by religions ↗.
- Freedom of (and from) religion was not invented by the religious authorities ↗.

Not only does a religion not spearhead such initiatives ↗. By sticking to the divinity and eternity of its current moral framework, it also hinders such initiatives ↗. In other words: Once a religion is established, it cannot advocate change. An ideology can advocate change only if this very advocacy of change is part of it. Humanism, for example, advocates questioning current convictions ↗.

Scientific progress

Religions typically provide gap-fillers for the open questions about the universe ↗. These used to be questions like "How does the sun rise" – which were quickly answered by means of a specific god. Today, the questions are more like "How did the universe originate?". Here as well, religions provide their answers. The problem is that by providing an answer, they discourage us from finding other (scientific) answers. Worse, any other answer may be perceived as a challenge to the religious teaching, and hence as blasphemy. For example, the Bible tells us that

God ordered the sun to stand still so that Joshua could fight longer (Bible / Joshua 10). This was seen as a divine confirmation that the Sun orbits around the Earth. Hence, until 1822, the Catholic Church prohibited the publication of books that support heliocentrism – as blasphemy. But even if blasphemy is not invoked, the very conviction of already having an answer discourages the exploration, the understanding, and the dissemination of scientific ideas ↗.

Humanism ↗, in contrast, explicitly encourages scientific research, and the learning about the world.

Economic progress

Y. N. Harari has argued in his book "Sapiens" that the major world religions tended (and tend) to glorify the past ↗. The ideal world is the one of the respective prophet (Jesus, Moses, Mohammed, Buddha, Confucius, the ancient Hindu sages). Since then, the world has continuously degraded. Hence, human well-being comes from going back to that old world. People could not imagine that the new world could actually be better.

This has an important economic consequence: The entire business of giving loans to someone is based on the idea that the future will be somehow better: The creditor believes that the debtor will be able to pay back the loan in the future. That is, the creditor believes that the debtor will create a value in the future that currently does not exist – a thing of impossibility in traditional religious thinking, where humanity constantly degrades. This impossibility is illustrated in the traditional Christian and Muslim prohibitions to charge interest (later watered down or abolished, [Wikipedia/Interest](#)).

Now the practice of loans has led to a great number of problems in Western economies: The first is obviously the great financial crises that were kicked off by bad credits. The banks lent more money than they had, in the vain hope that they would eventually get it back. When they did not, the system nearly collapsed. Debt is also a major burden on households – financially, morally, and psychologically. The same is true for entire countries. At the same time, a loan is the one institution that allows individuals and organizations to create large businesses. Imagine that there is some village that does not have a bakery. Now, some entrepreneur wants to build a bakery there. She cannot build the bakery with her own money. She needs a loan. If she does not get a loan, she cannot build the bakery. That means that she cannot make money with selling bread, she cannot employ assistants, and the villagers have to travel elsewhere to get their bread. The same is true, on a larger level, for companies, expeditions, and entire countries. Without the Marshall plan, Europe would not have recovered so fast after the second world war. And the Marshall plan was, at least in part, a loan. For all its problems, financial credit has helped the economic growth and the material comfort that we enjoy in today's rich countries.

This institution of loans, in turn, is based on the trust that the future will be better. And it paid off: Humanity has now a higher a higher health standard and a better material life than 3000, 1000, or even 500 years ago. For all the faults of the current world, few people want to go back to the middle ages – thus defeating religious pessimism about the future ↗.

Do not expect grapes from a burning bush.

By Philaletes in Arthur Schopenhauer's "Dialog about Religion"

Exemptions to laws

There have been several cases where religions have won exemptions from the law.

Judaism and Islam

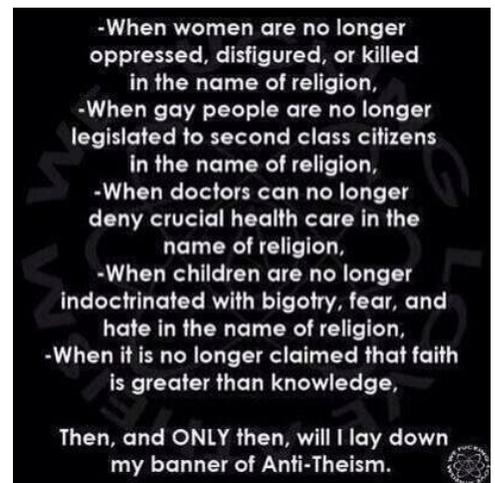
These religions require the circumcision of young boys. This is, technically speaking, bodily injury: a body part is cut off without the consent of the concerned (see my [Thoughts on Ethics / Injury](#)). Therefore, a German court ruled that circumcision without medical indication is a criminal act ([Wikipedia/Circumcision and law](#)). This revelation caused a lot of embarrassment in Germany. Since the religious rule could not be changed, the law was changed instead: Article 1631d of the German Civil code was added to permit circumcision of male infants. To appease followers of Judaism, the article specifically permits the circumcision by non-medical personnel during the first 6 months after birth for religious reasons ([Bürgerliches Gesetzbuch / § 1631d](#)).

Islam

Muslim religious leaders have set up "Sharia courts" in the UK, which arbitrate in religious and family matters ([Wikipedia/Islamic Sharia council](#)). These courts have been criticised for disadvantaging women in divorce cases and for "meddl[ing] in legal issues that should be matters for the UK court" [[Telegraph: Inside Britain's Sharia Courts, 2013-04-07](#)]. Thus, the Sharia courts are close to a socially accepted exemption from the law.

Charismatic Christianity

Usually, parents are expected to care for their children. In particular, they are required to get medical help if the child suffers from an illness or accident. This follows from variants of the laws on child neglect or non-assistance of a person in danger. However, the US has a law that exempts parents from this duty, if (1) the parents do not wish to provide medical assistance to their child due to religious beliefs or (2) choose to rely on spiritual means rather than medical care ([42 U.S. Code § 5106i](#)). This concerns in particular charismatic Christian faith healing practices – which do not work ↗. Thus, the law effectively allows parents to let their children die for religious reasons ([Pew Research: Most states allow religious exemptions from child abuse and neglect laws, 2016-08-12](#)). This has indeed happened in some cases ([Wikipedia/Faith healing](#)), and it was systematic in the case of the Followers of Christ ([Wikipedia/Followers of Christ](#)). Furthermore, most US states allow children not to be vaccinated on religious grounds ([Wikipedia/Vaccination and religion](#)). This leads to several preventable deaths per year.



-When women are no longer oppressed, disfigured, or killed in the name of religion,
-When gay people are no longer legislated to second class citizens in the name of religion,
-When doctors can no longer deny crucial health care in the name of religion,
-When children are no longer indoctrinated with bigotry, fear, and hate in the name of religion,
-When it is no longer claimed that faith is greater than knowledge,
Then, and ONLY then, will I lay down my banner of Anti-Theism.

[WFLA]

Christianity

Anti-discrimination laws say that companies or organizations may not refuse a job candidate because of their religion. However, in the US and Germany, religious groups are exempted from anti-discrimination rules in hiring and firing ([RevealNews: 6 ways religious exemption laws are exploited, 2016-02-29](#)). They can decide to hire only Christians. For example, I went to a Catholic school in Germany. The school was run by nuns, but financed by the state ↗. This school required that all teachers who work there follow a Christian lifestyle. They were, e.g., not allowed to divorce and marry again. At any secular institute, any such requirement would be illegal. But for a Christian school, the law does not apply.

In a slight variant of the scheme, the Pope has approved of excommunicating politicians who support abortion ([Wikipedia/Excommunication of Catholic politicians who support abortion](#)). In this way, the Catholic Church is taking a direct influence on the democratic institutions of a country.

Hinduism

In India, slaughtering cows is prohibited in roughly half of the states ([Wikipedia/Cattle slaughter in India](#)). While supply chain reasons are cited, the real reason is most likely religious, given that it applies only to cows, and given that cows are considered sacred in Hinduism.

New Religions

In the US, adherents of the Centro Espirita Beneficente Uniao do Vegetal believe they can understand God only if they drink Hoasca tea ([Wikipedia/União do Vegetal](#)). Even though this tea contains Dimethyltryptamin (a controlled substance), the adherents were allowed to continue importing that tea by the Supreme Court ([Wikipedia/Gonzales v. O Centro Espirita Beneficente Uniao do Vegetal](#)). A British court has let a Wicca adherent out of jail for 4 nights to worship the moon ([Daily Mail: Criminal caught carrying knife, 2011-03-11](#)). Another Wicca was narrowly prevented from obtaining a knife in prison as a "ritual object" ([Wikipedia/Dettmer v. Landon](#)). The court ruled that his beliefs were indeed "religious", but not "usual" enough to grant him a knife.

Apart maybe from the harm done to children, these exemptions do not cause much damage. Many of them concern only fringe groups or certain individuals. Furthermore, the cases remain limited to certain jurisdictions, or certain religions.

However, these cases prove a more general point: Religious belief can be granted an exemption from the law. This contradicts Humanist values, which demand equal treatment for all before the law ↗. From a Humanist perspective, religions are organizations like all other organizations. They claim to be divine, but they are man-made systems ↗. Therefore, it is unacceptable that they would stand above the law.

As soon as you admit God on the political scene, he's a tyrant. This is because, sooner or later, every dictator dies. God, however, does not.

By Gérard Biard, paraphrased

Rites and Restrictions

All major religions come with some rites and restrictions. These may include

Rites

Rites may include regular praying (in Islam, e.g., 5 times a day), regular attendance of a religious service (in a church, temple, or mosque), pilgrimage (Islam), or slaughtering rites (as required e.g. for halal food for Muslims or for Kosher food for Jews).

Constraints

Constraints may include fasting (Christianity, Bahai Faith, Jainism, and Islam), special clothing (e.g. veils for women in some interpretations of Islam; sables for Sikhs; kippas for Jews; not wearing mixtures of garments, as in the Old Testament ↗), or inactivity on one day a week.

Dietary laws

Some religions have dietary laws, such as the prohibition of alcohol (Bahai Faith), pork (Islam), beef (Hinduism), meat (as in some variants of Hinduism and Buddhism), or the combination of milk and meat (Judaism) ([Jesuit Refugee Service: Dietary Restrictions for Major Religions](#)).

In short, all major religions restrict our daily life in some way. These restrictions do not cause much harm. However, they also do not prevent any harm. Therefore, they are in contradiction to the principle of liberal ethics, which permits anything that is harmless.

In some cases, religious rituals are outright harmful. This concerns foremost female genital mutilation – a practice that is condemned by many Muslims, but upheld by many others for religious reasons ↗. But also male circumcision is technically bodily injury: The amputation of a body part without medical indication (and more often than not: medical supervision). Such rituals fiercely contradict Humanist values.

Intolerance

Religions have successfully bridged many differences across humanity: Nowadays, most religions welcome members of all races and origins. This bridging effect, however, leaves out one of the largest fissures in humanity. This is the fissure that religion itself has created: the gap between different faiths.

In most cases, believers know exclusively about their own religion. A poll in the US found that atheists (together with Jews and Mormons) know more about the religions of this world than the average citizen. Atheists also showed firm knowledge in the aspects of Christianity, firmer knowledge than some Christian groups ([Pew Research: Religious knowledge, 2010](#)). This holds even if the results are controlled for education (Atheists in the US tend to have a higher level of education). One reason may be that "religious education" at school or at home is always limited to a single religion. No religion encourages believers to read the holy books of the other religions.

On the contrary, religious beliefs by other people are usually ridiculed. A Christian will laugh about the Jew who is not allowed to operate a microwave on Saturdays. A Jew will laugh about the Hindu who marries according to a constellation of the stars. A Hindu will laugh about a Muslim who gets up in the morning to have breakfast before sunrise during Ramandan. A Muslim will laugh about a Christian who believes that God is both one and three. In a variation of

WIKIQUOTE:
SPIEGEL: Aber allein die scientologische Genesis ist doch schon völlig irre. Hubbard, der ehemalige Science-Fiction-Autor, schrieb, der galaktische Herrscher Xenu habe vor 75 Millionen Jahren in einem Universum gelebt, das unserem geähnelt habe. Er habe Menschen mit dem Vorwand einer Steuerprüfung angelockt, in Raumschiffe gebracht, die ausgesehen hätten wie die amerikanischen Jets DC-8. Dann seien sie auf den Gefangenenplaneten Erde verfrachtet, in Vulkane gestopft und mit Wasserstoffbomben in die Luft gejagt worden. Das kann man doch nicht ernst nehmen.

German magazine "Der Spiegel" complains that the genesis story of Scientology (which involves extraterrestrials) "cannot be taken seriously". How is it in any way less serious than a genesis story that involves a talking snake?

this theme, the other religions are portrayed as mere deviations of one's own (true) religion. This strategy is pursued in Christianity, Islam, the Bahai Faith, and Hinduism ↗. All differences between the faiths are just swiped under the rock. This attitude does not do justice to the diversity of faiths that exist.

All of this discourages the serious examination of the other religions as an option of equal value. The reason for such disdain is clear in atheist eyes: If a religion encouraged its adherents to learn about other faiths, then the adherent would (1) be tempted to try out the other religion or (2) find out that all religions are equally delusional. Both are detrimental to the original religion.

Yet, if you want to be tolerant, you have to know about other cultures and belief systems, you have to understand and appreciate them. And indeed, the unbiased search for truth is one of the tenets of Humanism. A religion, however, focuses people exclusively on its own culture and belief system. And indeed, religious people tend to be less tolerant overall [Aldashev & Platteau: Religion, Culture, and Development]. While, admittedly, Buddhists tend to be more tolerant (as compared to non-religious people), Hindus and Muslims are the least tolerant towards immigrants and other races, followed by Christians [ibid]. This leaves us to think that the continuous focus on one's own religion may make people less tolerant towards the other faiths.

Hell

A supreme form of intolerance can be found in some variants of Islam. These condemn all non-believers to eternal hell-fire ↗. Such a belief may seem harmless, given that the hell-fire is purely imaginary from an atheist point of view.

And yet, such a belief is not harmless. It says that the non-believers are worthy of being burnt alive. It says that non-believers deserve eternal suffering. Such teaching is a direct insult to any non-Muslim. It de-humanises them.

This is more than an abstract danger. It makes terrorists believe that it is OK to kill non-believers. By killing the non-believer, you just shorten the path to his well-deserved burning. Such teaching also makes children believe that people of other religions are less good. What other consequence could a child possibly draw from the belief that all unbelievers deserve torture?

Adherents will either argue that this belief is not "the true Islam" ↗, or otherwise hold that the belief has no consequences on friendly relations with unbelievers. However, the teaching of hatred against unbelievers can even be found in schoolbooks in some countries of the Muslim world ↗.

Any such teaching of hatred against other people is incompatible with Humanist ideals.

*If you plan to enjoy Heaven, while multitudes are being tortured forever,
you are as much a sociopath as the god you worship.*

By @ScepticNikki

Communitarianism

If we want world peace, mutual tolerance and respect, we have to understand what other people believe and why they do so. However, religions teach people exclusively about their own religion ↗. Furthermore, the religions typically prohibit marriage across religious boundaries ↗. Thereby, the religions partition humanity into cells that are poised to persist over the generations to come. By prohibiting a conversion to another faith, the religions fortify the boundaries between these cells ↗. By granting every adherent divine confidence in their faith ↗, and by building up a community based on religious conviction ↗, the religions further shield their adherents socially and intellectually from the other faiths.

All of this leads to an estrangement between the peoples. It encourages a thinking of "us versus them", in which adherents of one faith consider themselves



RILLIEUX-LA-PAPE - INTÉGRATION Place des femmes dans la Ville : « Je marche, donc j'existe »

Ce mardi après-midi, pour la quatrième fois, une vingtaine de femmes, emmenées par Brigitte Desmet, conseillère chargée de la Proximité, ont marché au cœur de la Ville Nouvelle.

Vu 67 fois | Le 28/09/2016 à 05:00

In France, some cities organize "Women's marches" in order to reaffirm the right of women to walk

culturally different from people of other faiths. In French, this phenomenon is called "communautarisme".

openly in the street – perceived as endangered by the local conservative Muslim society.

We give here some examples to illustrate how this phenomenon can look in practice:

- A friend of mine tells that she overheard a conversation between schoolchildren (in France), where one presumably Muslim child says to the other: "Do not play with Pierre! He's Christian!". This shows that children can learn early on to draw the boundary between the religions.
- In Germany, until the 1960's, there was a white line on the schoolground that separated the Protestant children from the Catholic children.
- Richard Dawkins remarks in his book "The God Delusion" that Children in Northern Ireland are separated into Catholic and Protestant schools. Thus, children make friends in different communities. Only 9% of children go to school with children of the other faith ([The Economist: Growing numbers of Northern Irish children learn alongside those of other faiths, 2018-01-09](#)). Even these learn that it is a "false ideology that everyone is the same" [ibid]. It is no wonder then that these children grow up in an environment of ignorance or hostility towards the other faith. Let children go to school with children of the other faith, let them make friends with them, allow them to marry them, and the conflict between Protestants and Catholics will defuse within a generation.
- In France, certain urban quarters have become so dominated by conservative Muslims, that women have been bullied out of public life. The pressure is so strong that women avoid walking around in a dress, or having a coffee in a bar ([France TV Info: Quand les femmes deviennent indésirables dans les lieux publics, 2016-12-08](#)).

All of these are but individual examples for a more general phenomenon: The partitioning of society into religious communities. This partitioning runs counter to the Humanist ideal of a free society.

Is religion not just like any other ideology?

No, it's not. Religion is different because you are not allowed to criticize it.

By anonymous

Proselytism

Christianity and Islam actively seek to convert the rest of mankind to their religion ↗. Both religions emphasize that the conversion has to be voluntary, and may not be achieved by force. However, even peaceful proselytism is a profound sign of disrespect. It means that a religious community cannot accept that a person has a different faith. By extrapolation, it means that two communities of believers cannot live together without one community constantly bothering the other one to convert. It is a human right to follow whatever religion you choose, without being invited or pushed continuously to convert to some other religion [Human Rights / Article 18]. Therefore, obligatory proselytism runs counter to Humanist values.

As it happens, both Christianity and Islam also shun people who convert away from their own religion. Historically, both religions have put apostates to death. Variants of Islam still do ↗. If we put together two religions, which each want to convert the adherents of the other religion, but which each punish the conversion of their own adherents, the result is violence. And even though both religions have recently inched away from mandatory proselytism and punishment of apostasy in their mainstream interpretations, the tensions between the two religions remain ↗.

Conflict

Religious boundaries and Conflict

In the past, religion has been used to justify witch burning, the Inquisition, terrorism, or attacks on people of other faiths. Yet, still today, religious boundaries often correlate with violence. Let us look at the list of the most violent armed conflicts:

Conflict

Opponents

Religious

War in Afghanistan	Taliban (Islamist) - Government (Muslim)	Yes
Iraqi Civil War	Islamic State (Islamist) - Government (Muslim)	Yes
Mexican Drug War	Government - Drug Militias	
Syrian Civil War	Syrian Armed Forces (led by Alawites) - National Defense Force (Shia-leaning) - Shabiha (Alawite) - Christian militias (Christian) - Hezbollah (Shia) - Iran (Shia) - Russia (Orthodox) - Foreign Shia militias (Shia) - Free Syrian Army (Sunni) - Islamic Front (Sunni) - Al-Nusra Front (Salafist) - Syrian Democratic Forces (multi-faith and/or secular) - Islamic State (Islamist) - Western coalition (Secular) (Wikipedia/Belligerents)	Yes
Kurdish-Turkish conflict	Government - Kurdish insurgents	
Somali Civil War	Government - Militant groups (Islamist)	Yes
Communal conflicts in Nigeria	Government - Boko Haram (Islamist), as well as other conflicts, not all of them religious or cultural	Yes
War in Dafur	Government - Insurgents	
Boko Haram Insurgency	Government - Boko Haram (Islamist)	Yes
Libyan Civil War	Islamist forces (Islamist) - Anti-Islamist forces	Yes
Yemeni Civil War	Shia - Sunni	Yes
Sinai insurgency	Islamists - Government	Yes
Kordofan Conflict	Army of Sudan - Sudan People's Liberation Movement	
South Sudanese Civil war	Government - Opposition forces	

2017 ongoing military conflicts with more than 1000 deaths per year
[\[Wikipedia/List of ongoing armed conflicts\]](#)

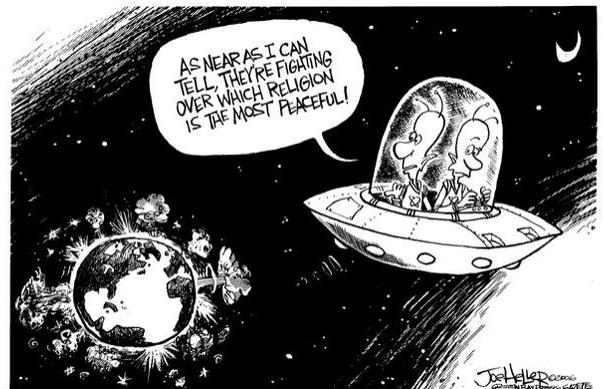
In two-thirds of the ongoing military conflicts with more than 1000 deaths per year, the factions coincide with religious boundaries. This does not necessarily mean that religion is the cause of conflict. Many factors play a role in wars, including cultural differences, claims to power, claims to oil, claims to land, war lords, the military, and outside interests and intervention. However, it is striking in how many cases these other factors coincide exactly with religious frontiers.

This coincidence appears elsewhere, too. Take the conflict in the Middle East: Israel is Jewish, the Palestinians are Muslim. Jewish scripture explicitly contains the call to capture the city of Jericho (Torah / Joshua 6) – which is exactly what the Jewish settlement movement aims to do. Vice versa, the Muslim Quran explicitly calls upon Muslims not to take Jews as friends (Quran / 5.51), and curses them (Quran / 5.64). Is it any wonder then that the conflict never comes to rest? Remember the civil war in Sri Lanka: The Tamils are Hindu in majority, the Sinhalese are Buddhist. Or take the conflict in ex-Yugoslavia: Did you ever wonder why the Serbs, Bosniacs, and Croats got into conflict, although they speak the same language? Part of the reason is that Serbs are Orthodox, Bosniacs are Muslim, and Croats are Catholic. As a consequence, the eternal conflict on the Balkans is proverbial. The same holds for the conflict in Northern Ireland: Unionists, who want the union with the UK, are Protestant, while nationalists, who want the union with Ireland, are Catholic. The same is true for the conflict in Sudan: While the North is Muslim, the South is Christian and Animist ([Wikipedia/South Sudan](#)). The same is true for the conflict in the Phillippines: While

the majority of the country is Christian, the break-away region is Muslim. The same is true for the animosity between Armenia and Turkey: Armenia is Christian while Turkey is Muslim. The Second World War opposed the Christian United States to the Buddhist and Shintoist Japan ([Wikipedia/Buddhism and Violence](#)). The same goes for the everlasting conflict between India and Pakistan for the region of Kashmir: India is Hindu and Pakistan is Muslim. Many other conflicts in South-East Asia run along religious lines, too: The Muslim Rohingya are persecuted by the Buddhist majority in Myanmar; Bangladesh chased non-Muslim tribes into India; Christians, Hindus, Shia Muslims, and Ahmadiis are hounded in Pakistan ([The Economist: Why South Asia's majorities act like persecuted minorities, 2018-04-14](#)). While this is rarely made explicit, war boundaries coincide with religious boundaries again and again.

Preaching Peace...

Most mainstream theologians and religious leaders condemn violence. They point out that violence is not allowed by the value system of the religion, and that it goes against the will of the gods ↗. Thereby, they show that the current mainstream interpretation of the religion is not violent. This leaves us to ask why religion and conflict correlate so frequently. One hypothesis is that religion is not violent, but that it creates the ideal breeding ground for violence. According to this hypothesis, religions would preach peace, but seed conflict.



[Found in: Evangelical Pastafarism]

...but Seeding Conflict

Let us first look at the proselytizing religions. These are religions that aim to convert the adherents of other religions ↗. Christianity and Islam are examples. At the same time, these religions historically shun or prohibit apostasy, i.e., changing one's own faith ↗. As soon as we put two religions together, which each wants to convert adherents of the other religions, but punishes apostasy of its own adherents, it is clear that the result is conflict. This has historically been the case, and this old antagonism quite possibly still fuels today's conflicts. Islam is still a case to the point: The majority of Muslims longs for peace between the religions, but at the same time, the majority of Muslims considers it a duty to convert others to their faith ([Pew Research: The world's muslims, 2013-04-30](#)). These goals cannot co-exist.



"Peace walls" such as this one separate some Catholic and Protestant communities in Northern Ireland

[David Dixon]

Another problem is the claim to be the "true" interpretation of the religion ↗. Again, this claim is particularly visible in Islam: The religion exhibits a wide diversity of beliefs ↗. At the same time, the majority of Muslims is of the opinion that there is only one correct interpretation of the faith ↗. Such a claim offends people of other denominations and religions, who also believe that they own the only true faith. The inability to accept that there exist several interpretations of Islam is quite possibly a key factor in the conflicts in the Muslim world. It also extends to other religions: The problem is that religion divides humanity into those who are "right" and those who are "wrong" [[Philipp Möller](#)].

Other sources of conflict are more subtle: Usually, religions teach adherents exclusively about their own faith ↗. They prohibit marriage across religious boundaries ↗, and shun a conversion to another faith ↗. In this way, the religions shield their adherents socially and intellectually from other faiths. They build up a strong identification of people with their faith, in which adherents of one faith consider themselves culturally different from people of other faiths ↗. Furthermore, they grant every adherent divine confidence in their own faith ↗. This is helped by the fact that religious convictions are usually unfalsifiable, so that they cannot be proven wrong.

Now add to this setting anything that can be understood as a threat to the group: A dispute with people who happen to have another religion, a careless remark by the leader of another religion, scarcity of resources, social

tensions, or poverty – and the easiest way to discharge these tensions is to seek safety in one's own religious community and scapegoat the other religious community. Therefore, the theory goes, armed conflict often coincides with religious boundaries.

While this is nothing more than a theory, it can explain well the correlation of violence and religious boundaries. While this theory does not say that religion itself is violent, it gives us reason to think that religion at least forms the breeding ground for conflict.

If all religions teach peace then why can't all religions achieve it?

By *anonymous*

Underperformance

We have seen before that religious countries belong to the poorest, least well-governed, least free, and least healthy ones on Earth ↗. This book has argued that religion is not necessarily the cause for this misery, but that rather, vice versa, misery is the cause for religiousness ↗. And still, we can reproach religion with being an accomplice to this misery. Not just because it has benefited from the misery ↗, but also because it has not used its power to counter it.

Let us develop this argument step by step.

The Power of Religion

We first observe that religion has an enormous power on people. In Islam, for example, it is suggested that Muslims pray by reciting parts of the Quran. Pious Muslims pray 5 times a day. The Quran is read out in its entirety every Ramadan every year. Something similar goes for the other major religions: For centuries, the messages of the Bible, the Vedas, the Buddha, or Confucius have been re-iterated in churches, in schools, by preachers, and by parents. In addition, these religions are (or were) deeply rooted in the educational system, making sure every child gets in touch with the religion from the youngest age on ↗. Religion is or was taught in every school, hammered into every child's brain, re-iterated every week in religious gatherings, shouted every few hours from the minarets, and written in scripture that every single person in the country is exposed to. Thus, religion has an extraordinary outreach on society. In addition, its teachings are regarded by its adherents as absolute truth ↗.

Such a religion has the power to change people's lives. And it does:

- It can prescribe rituals and customs ↗ (all major religions).
- It can tell people what to eat ↗ (Judaism, Islam, Hinduism, Buddhism).
- It can tell people what to wear ↗ (mainly Islam).
- It can tell people whom to marry ↗ (all major religions).
- It shapes a society's value system, for example in the treatment of women ↗ (all major religions).

Religion is literally one of the most powerful systems on Earth. It can profoundly influence what people do and what they think.

The Results of Religion

Despite its enormous power, religion has not used its force to lift people out of their misery. If one had the power to write a book that every person in the country would have to study and read, probably many times in life, and that every person would believe to be true, then one could change life in that country drastically. One could, for example,

- establish the equal treatment of men and women ↗
- re-iterate the importance of education, literacy, and scientific research ↗
- establish the freedom of religion ↗
- teach the respect for all other religions, including the right to marry the adherents of the other religions ↗
- condemn corruption
- shout English vocabulary rather than prayers from the pulpits or minarets

- praise democratic elections, and ask adherents to respect the result of a vote even if it does not coincide with one's own interests
- propagate family planning ↗

Even just simple instructions would help: wash your hands frequently with soap; boil water before drinking it; give iodine supplements to pregnant women; defecate in latrines rather than in the fields; or treat diarrhea with salt and sugar in clean water. These little things would save millions of lives – literally [Stephen Pinker: Enlightenment Now].

These tenets could really change life in poor countries for the better (see my essay on [Why are poor countries poor?](#)). But no religion maintains these tenets as part of their value system. On the contrary, many religions have the opposites of some of these tenets on their books (see the respective articles). We thus conclude that on the one hand, religion has an enormous power, and has shaped entire societies, but that on the other hand, religion has not used that power to establish tenets that could change today's societies for the better. Religion thus abuses its power.

*Religion has successfully made half of its adherents wear a veil,
but it forgot to tell them to go to school.*

Justification of Suicide Attacks

Religions typically promise a life after death ↗. In particular, some religions promise heaven to people who died while fighting for the religion ↗. Historically, this has applied to Catholicism (think of the Crusades) and the Old Norse religions (think of the Vikings). Nowadays, it applies mostly to extremist interpretations of Islam.

In such cases, the religion encourages people to fight for its values, even if this entails the death of the adherent. The religion can do that because it has the power to promise a life after that death. Thus, a principal obstacle to warfare is eliminated: people are no longer afraid to die. This procures the religion with fighters that are more ferocious and more useful to its mission than secular people could ever be.

In the past 40 years, suicide attacks have led to more than 55,000 deaths ([Suicide Attack Database](#)). Nearly all of those with a known mastermind came from Islamist groups. The practice continues to be supported by Islamist militant organisations (Al-Qaeda, Islamic State, Hamas, Hezbollah, etc.), Ayatollah Ruhollah Khomeini of Iran, Pakistan's acting Minister of Religious Affairs Muhammad Ijaz-ul-Haq ([Wikipedia/Istishhad](#)), and more than 20% of the population in Egypt, Malaysia, Lebanon, and Palestine ([Pew Research: Muslim Publics Share Concerns about Extremist Groups, 2013-09-10](#)).

Humanism does not prevent people from taking their own lives. However, any ideology that permits the killing of others for the purpose of establishing a religion, or of eliminating another one, runs counter to Humanist values. A religion clashes with Humanism whenever it values souls over lives [Steven Pinker: Enlightenment Now, p. 30].

*Silence is not neutrality.
Silence is an approval of the status quo.*

By Yuval N. Harari in "21 Lessons for the 21st Century", paraphrased

Disconnection from Reality

Marshall Brain tells the following story [[WhyWontGodHeal-Amputees.com/Heal](#), adapted]:

Imagine that I have an adult friend. Once you get to know her, you realize something. She believes in Leprechauns. She believes in them with all her heart.

- *She believes that she can talk to the Leprechauns by speaking silently to them in her head, or by speaking to them outloud with her hands folded.*
- *She also believes that the Leprechauns will help her heal diseases.*

- *If she loses something, she calls to the Leprechauns who live in her house to help her find it.*
- *She says she has a personal relationship with the Leprechauns, and they guide her in many parts of her life.*
- *She wears a shamrock necklace.*
- *She believes that the Leprechauns created the universe. She says, "No one can deny that the Leprechauns created the universe, and no one can prove that they did not."*
- *When she dies, she believes that he will join the Leprechauns in a magical castle in the sky and live forever.*
- *She believes that by talking to the Leprechauns, they will grant her wishes. Even if this has never happened in the past, she insists that it works.*



Leprechauns
[Irish Festivals]

Now, what do you think of my friend? Her beliefs are harmless, are they not? By speaking out loud to the Leprechauns living invisibly in her house, she feels less lonely and happier.

And yet... there is something creepy about it, isn't there? Yes there is. It is creepy because you know that my friend is completely and totally delusional. She has lost her ability to distinguish the imaginary from the real.

In the very same way, atheists hold that believers in other supernatural reveries have lost the connection to reality. That in itself may be harmless. The trouble is that such people hold positions of power in our world. The presidents of the United States and of Pakistan, for example, are fervent believers in the supernatural – and they have access to nuclear weapons. They believe that they can influence reality by talking in their head. They also believe that when they die, they go to Heaven. Quite plainly, such people should not possess nuclear bombs.

The other religious people are actually accomplices to this situation. They insist that it is perfectly normal that these presidents believe that they can talk with the supernatural, and that they will be saved by that supernatural when they die. Thereby, the other religious people make it impossible to criticise the absurdity of the situation.

Legitimizing Idiotic Disputes

In his book "The God Delusion", Richard Dawkins tells the following story:

In medieval Europe, a Christian girl and a Jewish girl were playing with each other. The Christian girl had just attended a baptism, and they decided to play baptism. The Christian girl put water on the other girl's head and said "I baptize you".

At the time, there was no legal age requirement or formal procedure to baptize someone. Everybody could baptize everybody. Therefore, the Jewish girl was now Christian in the eyes of the law. Since Jews were not allowed to take care of Christian children, the girl was forcibly withdrawn from her family, and put in an orphanage.

What a crazy story, you might say. After all, this is just a drop of water. And yet, did you think of an easy way to solve this problem for the Jewish family? Well, they could have themselves baptised as well! After all, it's just a drop of water. But we all understand that the Jewish family did not want to do that. Thus, we are actually exactly as stupid as the society that withdrew the girl from the family.

The problem is not just historical, as the following contemporary story shows:

Mormons retrospectively baptize people ([Wikipedia/Baptism for the dead](#)). In this process, the Mormon church has also retroactively baptised thousands of Jewish Holocaust victims. This annoyed the American Gathering of Jewish Holocaust Survivors, who requested from the Mormons to "implement a mechanism to undo what [they] have done" [[CBS News: Baptism Of Holocaust Victims Sparks Anger, 2008-11-11](#)].

In both cases, a purely symbolic act, with no real-world effect, becomes a bone of contention. The same is true for blasphemy cases:

Blasphemy is the the act of insulting or showing contempt or lack of reverence to things considered sacred. Blasphemy has long been persecuted in the Christian world ↗. In the Muslim world, it still is ([Wikipedia/Islam and Blasphemy](#)). The punishment for blasphemy, can be fines, imprisonment, flogging, amputation, hanging, or beheading [ibid]. Individuals have been accused of blasphemy or of insulting Islam for finding fault with

Muhammad, speculating about how Muhammad would behave if he were alive, naming a teddy bear Muhammad, believing in transmigration of the soul or reincarnation or disbelieving in the afterlife, expressing an atheist or a secular point of view, reciting Muslim prayers in a language other than Arabic, finding amusement in Islamic customs, watching a film or listening to music, and touching a Quran or touching something that has touched a Quran because the individuals were not Muslim [ibid].

Depictions of the Prophet Mohammed are, likewise, generally prohibited in Islam ([Wikipedia/Depictions of Muhammad](#)). Pictures of the prophet (even illustrative ones) in the Western world have entailed protests in the Muslim communities. Cartoons (such as the *Jyllands-Posten* or *Charlie Hebdo* cartoons) have led to killings, mass protests, burned churches, and hundreds of dead all over the world (ibid).

Again, purely non-physical or symbolic acts lead to very physical consequences: protests, punishments, and deaths. Not all variations of Islam, not all believers, not all religions, and not all believers of all religions consider blasphemy a punishable crime. However, all major religions know sacred people, places, or practices, and they take offense when these sacred things are ridiculed. Thereby, these other religions approve, at least in principle, of the idea that the sacred has to be defended. For example, the Pope has compared the drawings of Charlie Hebdo to an insult to his mother, saying that "if [a close friend] says a swear word against my mother, he's going to get a punch in the nose" [[Time: Pope Francis Speaks Out on Charlie Hebdo, 2015-01-15](#)]. Thereby, he explicitly justified if not the attacks themselves, then still the need for revenge.

From a Humanist perspective, it is absurd that acts against the supernatural should be punished in the real world.

Let the gods avenge themselves.

By a Roman saying



Buddhism is not immune to it either.
[Picture taken at the Longhua Temple in Shanghai/China]

Chapter on the Benefits of Religion

Introduction

This chapter discusses the positive effects that religion can have on the individual and on society. The chapter consists of the following parts:

- [Guiding Society](#): Discusses positive effects that religion can have on society as a whole.
- [Giving Strength](#): Lists healthy effects of religion on the individual.
- [Making Society Better](#): Discusses the idea that religion makes society better.

In all of the following, we mean by "religion" the fact that religions exist in general ↗. We mean by "positive" anything that advances personal well-being or the well-being of the society, and by "negative" anything that hinders it.

For each of the positive aspects of religion, we will also give a Humanist perspective ↗. We have already discussed in the [Chapter on Proofs for Gods](#) why the positive effects of religion do not convince atheists to become religious ↗.

Guiding Society

Moral Values

One of the main arguments that are brought forward in favor of religion is that it provides a moral framework ↗. The moral framework tells people what to do and what to avoid. This has several advantages: First, it guides society. It tells people that they should not steal, kill, and injure. This is the very basis of any society ↗. Second, a religious moral framework provides legal security. Religious frameworks typically evolve very little over time. Thereby, they provide a constant that people can rely on ↗. Through these factors, religious rules may have made the development of civilization possible in the first place ↗. For example, the Abrahamic religions know the law of retaliation (often paraphrased as the "Eye for an eye"). This law limited the revenge that the family of the victim could impose on the family of the perpetrator. This limitation of revenge was essential in order to allow society to evolve the way it did.

A Humanist perspective

Humanists have a different perspective on religious moral frameworks. The "eye for an eye" principle stems from the Code of Hammurabi – which predates the Abrahamic religions by several hundred years ↗. The Abrahamic religions simply took it over. In the meantime, Western societies have given up on the principle, because it is now considered brutal. Humanists note that this is part of a broader pattern, where what was progressive a thousand years ago becomes backward today ↗. There are other examples. Some religions have justified slavery ↗, the crusades, or the suppression of lower classes ↗. Such values are outrageous today. And yet, the same religions that once justified these values present themselves as the guarantors of morality today. In Humanist eyes, this is contradictory. These religions have gambled away their trustworthiness. How could you delegate moral questions to a religion that once justified slavery? This mistrust does not just concern the past. Still today, religious moral frameworks fall behind secular values in many aspects. Most major religions do not fully support women's rights, gays' rights, and freedom of religion. All major religions conflict with Humanist values on one or more topics ↗. Therefore, Humanists cannot approve of such systems ↗.

Today, we know that moral frameworks can also be provided by secular systems. For example, the rule not to steal, kill, and injure is not specific to religion. Such moral frameworks have existed for millennia ↗ – inside religion,

outside religion, and ascribed to a religion. Such frameworks also arise spontaneously in any group of people who have to make do with each other ↗. These frameworks have then been developed further into legal systems ↗. These legal systems perform so well that most countries favor them over religious frameworks. The Human Rights ↗, in particular, have proven so fundamental that they are universally understood as a moral guideline in the Western world and beyond. This shows that moral questions do not have to be delegated to religion.

In fact, today's Western values have little to do with Christian values ↗. Human Rights, Freedom of Religion, Women's Rights, Democracy, Republicanism, and Freedom of Speech have been created in opposition to Christianity (Philipp Möller). It is thus false to credit that religion with it.

All the world's major religions, with their emphasis on love, compassion, patience, tolerance, and forgiveness can and do promote inner values. But the reality of the world today is that grounding ethics in religion is no longer adequate. This is why I am increasingly convinced that the time has come to find a way of thinking about spirituality and ethics beyond religion altogether.

By the 14th Dalai Lama on his [Facebook page](#)

Community

The second principal argument that is brought forward in favor of religion is the community that a religion can provide ↗. Religious communities give adherents the feeling of safety, a sense of belonging, contact with like-minded people, and, ultimately, happiness. The community can also provide a safety net for those who are in distress. All of these factors establish a bond between the individual and the community by giving and taking from both sides.

This community has benefits that go beyond the individual person. Religious people (as compared to atheists) declare to have more trust in others, in their governments and in the legal system, to be less willing to break the law, and to hold stronger beliefs about the fairness of market outcomes [Aldashev & Platteau: [Religion, Culture, and Development](#)]. Trust, in turn, is the basic prerequisite for a society that wants to progress beyond clans. Thus, religious communities can play a significant role in creating and maintaining a society.



A Hindu community
[Picture taken in Bodhgaya/India]

Going further, such communities can achieve things that are not possible for the individual alone. One example are the Monday Demonstrations in Germany, which ultimately led to the fall of the Berlin Wall. These demonstrations were also, at least in part, fuelled by religious opposition to the regime.

A Humanist perspective

Humanists can point out that this "feeling of community" is not actually linked to the religion. It can be created by other ideologies as well. It has, for example, been used in communism and nationalism. A young girl would feel welcome and accepted in the "young pioneers". A young boy would learn about comradeship and shared values in the "Hitler youth". The problem is that the community feeling can lure people into a group, and can make them blind to the ideology. Therefore, we should never adhere to an ideology because we enjoy the community. We should only ever adhere to a community if we share the ideology.

Furthermore, as useful as the community might be, it also often leads to an estrangement to other communities ↗, and thus to isolated cells of religious communities ↗. The more estranged these communities become from each other, the more likely they are to despise each other. This may be one of the reasons why more than half of the world's most violent conflicts run along religious or denominational boundaries ↗.

That said, if people get together by their own choice because they share the same religion, and if they do so without shielding themselves from the rest of the society, then there is nothing a Humanist could have against that – on the contrary. Admittedly, atheist or Humanist communities have never achieved the social cohesion or intensity of religious communities.

Contribution to Culture

A common argument in the West goes that religion has made extraordinary contributions to culture: A large part of our art is religiously inspired. Much of our finest music was composed by deeply religious people. Churches, temples, and mosques belong to the most impressive architectural achievements of humanity. Most notably, some cathedrals took generations to build. They could never have been completed if people had not believed in something that transcends their own life span.

Religion has inspired not just architecture, music, poetry, books, and paintings, but also philosophy, the laws, individual rights, and our social order in general. The very structure of our societies is based on religious values.

A Humanist perspective

Humanists remark that religious cultural contributions are so prevalent because all other contributions were suppressed for a long time of history. At least in Europe, activities outside the religious frame were for a long time either unpopular or dangerous or both ↗. During most of the past centuries, atheists were persecuted as heretics in Europe ↗. The same is true for South America, where Christianity imposed its culture by the sword.

In Muslim lands, the situation was not much better. All historical interpretations of Islam condemned apostates to death ↗ ↗. Christians suffered, too. During the Islamic Golden Age ↗, Christians were not allowed to ring church-bells, to display religious symbols, or to proselytise. According to the Sharia at the time, they had to wear special signs on their cloths that identify them as unbelievers; they were not allowed to build new churches; and they were not allowed even to walk in the middle of the street ↗.

It is thus not surprising that any artwork, and any expression of thought that we see from these places during these times were Muslim or Christian, respectively. Any contribution to society had to happen necessarily in the frame given by the dominant religion. Therefore, we cannot credit the religion with these contributions to culture. On the contrary, we have to blame the religion for violently suppressing all non-religious contributions.

All of this is not to devalue the religious contributions to our culture per se. On the contrary, religious artworks are some of the finest on the planet. To this day, religion remains an important source of inspiration – for composers, for painters, for architects, and for philosophers alike. This inspiration may even reach atheists, as the present book testifies. Religion has thus not lost its inspirational force. It has just lost its exclusive claim to it. Today, atheists participate with enjoyment and in some cases also with success in mankind's cultural advancement: in the sciences ↗, in the arts ↗, and in ethics ↗.



In the "CUSCO School" in Peru, Indigenous artists were forced to copy postcards with Christian motives (bottom right).
[Picture taken in the Museo Pedro de Osma in Lima/Peru]

Social services

In Germany, the US, Ireland, and possibly other countries, religious organizations provide social services. They run hospitals, senior citizen homes, kindergardens, or social centers.

With such services, a religion materially contributes to the welfare of a society.

A Humanist Perspective

Humanists regard such religious social services with caution, because they are usually financed with state money. It is the taxpayer who pays, and the religious organization that runs the service. In Germany, e.g., some hospitals are "Catholic" or "Protestant", meaning that they are run by a church. Contrary to common perception, these hospitals do not get money at all from that church. They are financed by the state, and run by the churches. Thus, the religious organization is not a philanthropist, but a service provider.

This brings three problems: First, the religious organization reaps the praise for providing the social service. That is not fair, because the organization gets paid for it – just like any other service provider would. The state is thus financing a publicity campaign for that particular religion. The second problem is that the religious organizations will implement the service in a way that conforms to their values, and that these values are often at odds with the values of the state. As examples, consider the debate in Germany whether Catholic hospitals can administer the anti-baby pill to rape victims, the cases in Ireland where a religious hospital refused an abortion to a woman whose life was in danger, the debate in the US whether school vouchers shall also benefit Muslim schools, the debate in Germany whether religious employers may discriminate against employees of a different religion, or the debate whether creationism should be taught in school. In such cases, the religious organization does not even fully provide the service it is being paid for. Finally, religious organizations use their services also to promote their own ideology. Children, people in distress, and the old are particularly vulnerable to such advances ↗. Thus, the state de facto supports the proselytism of the religion.

Therefore, from a Humanist perspective, it would be better if these services were provided by some other institution: the state, a company, or a secular charity.

Charity

There are numerous religious charities. These are at the forefront in the fight against poverty, warfare, famines, or epidemics – often under the most adversarial circumstances. In some places, where the state is not rich enough, not powerful enough, or entirely absent, religious charities are the only ones that provide such services. The people who work in these charities draw their strength also from their faith.

With such services, religion makes a material contribution to the welfare of society.



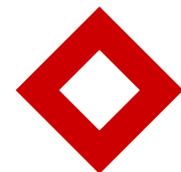
Charity is one of the Five Pillars of Islam
[Picture taken in the Blue Mosque in Kazan/Russia]

A Humanist Perspective

Humanists can appreciate the service that religious charities provide. At the same time, they remark that religious charities also always promote the ideology of their religion. This can be very explicit, as in religious schools or kindergardens. It can also be subtle, by merely advertising the brand of the religion together with the provided service ↗. Therefore, from a Humanist perspective, it would be better if the charity were provided by a neutral organization.

Fortunately, there exist numerous such neutral organizations: The largest charity, for example, is the International Red Cross and Red Crescent Movement. Despite its allusion to the Christian Cross and the Muslim Crescent, the organization is entirely secular. Nothing in its principles or statutes mentions God, Christianity or Islam. Even its symbol is not intended to be religious ([International Committee of the Red Cross: The history of the emblems, 2007-01-14](#)). The same applies to the other huge charities: Amnesty International, Doctors without Borders, and the charity organizations of the United Nations (like UNICEF) are entirely secular.

For private charitable foundations, the picture is not much different: Of the 10 wealthiest charitable foundations, only 1 is religious (The Church Commissioners for England, which manages historic property assets of the Church of England, and pays clergy pensions). The others are mostly driven by companies. They sponsor education, research, medicine, health, or child care ([Wikipedia/List of wealthiest charitable foundations](#)). In the developed world, the efforts by churches are in any way dwarfed by their secular counterparts. No religion could have decimated hunger, disease, illiteracy, war, homicide, or poverty on the scales that the implementation of Enlightenment principles have ↗ [Steven Pinker: Enlightenment Now].



The red cross symbol has led to so many unwelcome associations with religion that the Red Cross Movement has adopted an additional, neutral symbol: The Red Crystal (seriously).
[\[Wikicommons\]](#)

Thus, religion does not have a monopoly on charity. On the contrary, a large part of charitable work takes place outside religion. There is thus no need to bind charity to a religious organization.

A package

A religion offers not just moral guidelines, the principle of charity, a community, and a cultural dimension, but an entire package of values. These include ethical values ↗, rites ↗, legends, beliefs, and a sense of life ↗. This way, the religion can offer a coherent whole, which covers most aspects of everyday life – literally from the cradle to the grave. The value of this package is greater than the sum of its parts: it is a nearly complete guideline to life ↗. In this system, everything fits together, and everything makes sense. There are no moral, metaphysical, or philosophical questions left open. It is a rail to hold on. This is a very attractive property of a religion.

A Humanist perspective

Humanists point out that this coherent whole is of little use if parts of it are at odds with modern values. All major religions have a value system that is incompatible in one or more points with the Human Rights ↗. In such a case, Humanists hold, it is better to have a patchwork of values rather than a coherent whole that contains foul apples.

Fortunately, Humanism itself is now old enough to also qualify as a coherent whole. Humanism provides moral values, a philosophy of life, a scientific dimension, and a political standpoint. All of these fit together and work in tandem. Together, they have brought more equality, more knowledge, more health, and more prosperity to more people than any of the previous systems. This makes Humanism a comprehensive life stance in its own right.

Religion is but a vehicle

A religion provides a comprehensive package of moral values ↗. This package provides a moral framework for all those who do not have the power or ability to develop their own. In this sense, religion is just a vehicle for a comprehensive guide to life. Religion may have its problems, but it is a necessary tool to convey a higher message.

This is the argument that Demopheles brings forward in Arthur Schopenhauer's "Dialog about Religion". Demopheles argues that religion is like a jug that holds the precious water. It makes no sense to break the jar and to carry the water with one's hands. One has to make do with the jug as a necessary inconvenience for a higher good. Quite possibly, argues Demopheles, the metaphysical content of religion is wrong, but the ethical one is right. This can already be seen from the fact that all religions quarrel on the former ↗, but agree on the latter. One should thus not worry about the details of religious dogmata, but rather appreciate the work that religion as a whole has done to domesticate mankind.

A Humanist perspective

In Schopenhauer's dialog, Philaletes replies: Untruth may never serve as a vehicle for truth. If we permit untruth to be taught, and be it with good intentions, we open the door to malicious abuse at devastating scale – which is indeed what happens with religions ↗.

What Schopenhauer could not know is that we now have a very tangible proof against Demopheles thesis: In Western secular countries, entire populations are doing just fine without religion ↗. These countries prove that it is very well possible to carry the water without the jug.

Humanists believe that the key to a healthy and ethical society lies not in religion, but in education. The goal must not be to find ways to convey a message to under-educated people, but to educate these people.

*In the dark, it is good to take a blind man as guide.
But you should let go of him by the day.*

By anonymous

Giving Strength

A Reason for Life

One of the most burning questions of our human existence is why we exist ↗. What is our purpose in this life? What should we do with our lives? Why do we get up every morning? The most popular remedy to these questions is religion. A religion can tell us why we exist, what is our purpose of life, and what we should do with our lives ↗. This can be very reassuring. It gives us a place in this universe, and a direction to follow. It allows people to literally live a purposeful life.

"Do not be anxious, for I am your God. I will fortify you, yes, I will help you . . . I, Jehovah your God, am . . . the One saying to you, 'Do not be afraid. I will help you.'"
—Isaiah 41:10, 13.

CONSIDER: God is ready to help you. If you fall down, he will lift you up.

Some people find peace in such words.
[Picture taken from Jehovah's Witnesses: Watchtower 2/2019]

An atheist may point out that the religious dogmata do not really provide an answer, because they just shift the question from us to the deity ↗. For example, a believer may say that she exists because God exists, but she cannot tell us why God exists. However, God's existence is not a very essential question for people. The existence of a god is a philosophical, meta-physical, supernatural, out-of-this-world conundrum. People can live their lives without worrying why God exists. They can also accept that they cannot understand why God exists, because he is supernatural. Their own existence, however, is a very tangible experience for them. It is very important for them to know why they are there. By answering the question about their own existence, and by neglecting the question about God's existence, the religion answers the question that is more essential for people.

A Humanist perspective

Humanists do not find religious perspectives on the sense of life convincing, because they ultimately reduce everything to "because God wants it that way" ↗. As an alternative, Humanists put forward a philosophy in which people give sense to their life on their own ↗.

That said, if religions give people a sense of life, and if it is a peaceful one, then who could object to this?

Rites

Religions typically offer a set of rites ↗. These can be religious feasts, lent periods, prayers, ceremonies, or rituals. These rites serve several functions.

First, they give a structure to the year. Without feasts, every day would be like the other. With the feasts, there are dates to look forward to, days that feel special, and dates that are the occasion for family gatherings. People like this.

Second, the rites give a structure to life. They mark important moments such as birth, coming of age, marriage, and death. Without such marking points, life would be just a sequence of days. With them, it is a sequence of milestones, which is more attractive to people. The proverbial "white weddings" fall into this category.

Third, the rites are moments for social gathering. They help build a community ↗, and bind family members and communities together.

Finally, the rites tell people what to do when they are in despair. If a loved one dies, you feel desperate. Religious rites cannot give you the person back, but they can at least tell you what to do: pray this and that, participate in this ceremony, sing this song, perform this ritual, and say these words. This frame reassures people. It is also a way of expressing grief in a socially accepted form. The same goes if you did something wrong and you feel remorse. Religion cannot undo whatever you did, but it can at least tell you what to do: confess to this person, pray these prayers, perform this ritual cleansing, say these words. In this way, religious rites give people something to cling to when their minds are in trouble.



Man, 40, who lost his penis during a circumcision 17 years ago undergoes world's third successful penis transplant

By Cheyenne Roundtree For Dailymail.com
18:27 BST 22 May 2017, updated 23:03 BST 22 May 2017



The man underwent a botched ritual circumcision, and then received a penis transplant. Religion and Science, each at their best.

A Humanist perspective

From a Humanist perspective, such rites are mainly a waste of time ↗. At the same time, it seems that people do find comfort in such rites. Therefore, there have been several attempts to offer secular rites instead – most notably in atheist regimes ↗, but also in Humanist circles. For example, in Germany, the German Humanist Association offers secular rites for weddings, births, and funerals ([Humanistischer Verband Deutschlands](#)). However, these secular rites have never really caught on. In particular, they have never achieved the popularity of religious rites.

Prayer

Most religions know some way of interacting with the supernatural. This can happen through prayers, meditation, or wishes ↗.

Praying can have very positive effects. A prayer lets you think about your day, reflect your behavior, discover your wishes, and speak out your fears. In this way, praying contributes to your self-awareness. A prayer can also help you structure your thoughts, and prepare for upcoming difficulties. As it turns out, the mere planning of the things ahead can already give you peace of mind. A psychological experiment shows that students who were asked to plan the things they had to learn had lower levels of anxiety and better concentration than a control group who was planning an unrelated event – and comparable to those who worked on actually learning for the exam (Rolf Dobelli: *The Art of Thinking Clearly* / Chapter 93).



Hindu prayers in Bali/Indonesia

In cases where the prayer is directed to a particular deity, it can also give the adherent the feeling of being heard. This can be very comforting – in particular for people who are usually not heard. The idea that someone listens and that someone cares is very reassuring.

A prayer can also give the adherent the impression that they can somehow influence their future. Even if that is an illusion, it still helps people cope with their fate. Psychological experiments show that people can withstand more pain if they have a button that stops the pain – even if that button does not work. This phenomenon is known as the "Illusion of Control" (Rolf Dobelli: *The Art of Thinking Clearly*, p.55).

Finally, just the belief that prayer is effective may already bring about the desired effect. For example, if a person suffers from a psychosomatic illness, and if that person prays for betterment, then the illness may indeed abate. This phenomenon is known as the "Placebo Effect" ([Wikipedia/Placebo Effect](#)), and prayer is one of the classical application cases.

Through all of these factors, praying can have a positive effect on people's physical and mental well-being ([Wikipedia/Prayer](#)).

A Humanist Perspective

Humanists note that prayer has provably no effect other than psychological ↗. Thus, adherents are dedicating their time to an illusion.

At the same time, this illusion apparently really helps people. If that is so, then what could a Humanist have against it?

Acts of worship improve the mortal, not the god.

By anonymous

Afterlife

Almost all religions promise some continuation of life after death ↗. In the optimal case, this continuation takes the form of paradise. Thus, a religion can take away the most essential human fear – the fear of death.

A family member of mine is an example. In old age, she was unable to walk, and bound to the bed. She spent years just lying in bed. And yet, she would rejoice whenever I came to visit her, shouting "Hooray, I am still alive!". She lived in a world where she felt protected by God, and where she was sure that she would join her husband in Heaven one day. This conviction made life easier for her.

The belief in the afterlife helps people cope not just with their own death, but also with the death of a loved one. It is easier to accept the death of a family member if one can believe that the other person is in a safe place.



And if there were more to life than what meets the eye?

[Picture taken in New Zealand]

A Humanist Perspective

Humanists can demur that few people in the West actually believe the stories of life after death ↗. People do not usually rejoice when someone dies, in the belief that this person would be in Heaven. This is because they know fully well that Heaven is nothing more than wishful thinking. This is not just a modern phenomenon. In the 13th century, King Louis IX of France led a crusade with the goal to make Egypt Christian land. When their soldiers were defeated, they decided to surrender. One of the soldiers proposed instead to have themselves killed so that they all go to Paradise. Yet, the soldiers preferred to be captured rather than sent to Paradise (Y. N. Harari: 21 lessons for the 21st century; M. Francisque Michel, M. Ambr. Firmin Didot, M. Paulin Paris: *Memoirs of John, Lord of Joinville*, p. 443). This shows that even those who set out to spread the Christian faith do not believe in its stories. The same goes even for the most conservative strains of Islam: On November 13th, 2015, the Islamic State orchestrated suicide attacks on Paris as a revenge for the French military offense in Syria. At the same time, the Islamic State declared that all people who died in the French offense were martyrs who would be in Paradise. So then, the Islamic State should actually be grateful that the Frenchmen sent so many of their brethren to Paradise. Yet, they seem to be angry about it (Y. N. Harari: 21 lessons for the 21st century). And the reason is that most people, religious or not, know fully well that life after death is just a pious story. And hence, most religious people are just as afraid of death as atheists.

The only people who really believed in Paradise in the case of the Islamic State were the suicide attackers themselves. They believed that they go to Heaven when they blow themselves up. And this is the ugly face of the belief in the afterlife: Suicide attacks happen mainly because the attacker has no fear of death. The fear of death is a natural barrier to one's behavior. Once that barrier is removed, people are capable of the most horrendous acts. If people are no longer afraid to die, the principal obstacle to warfare is eliminated ↗.

Then there is the large set of people who believe in Paradise, but not enough to kill themselves. The problem is that they believe not just in Heaven, but also in Hell. Over the millennia, the threat of hell has terrorised millions of people. Still today, the Internet is full of people who ask whether they go to hell for this or that. My own grandmother was terribly afraid of hell ↗. With hell, religion has not actually taken away the fear of death. Rather, it has amplified and instrumentalized that fear. All major religions have jumped on that train ↗.

Thus, the promise of life after death is a double-edged sword, which has been exploited for demagogic purposes at times. However, as my family member testifies, there are truly cases where it helps someone cope with their fear of death. Thus, even if the promise of heaven is delusional in Humanist eyes, it may have its *raison-d'être*.

*For the past 2000 years, religion has promised you a second life.
In just 100 years, science has doubled the length of your first one.*

By Atheist World

Thanking God

The abrahamic religions require their adherents to thank God for the good things in life. At the same time, they insist that God is not responsible for the bad things in life ↗. While this is contradictory in atheist eyes, it serves an interesting purpose: It forces people to think of the good things in their life. Since they are encouraged to thank God, and discouraged from blaming him, they have to come up with good things that they can thank him for. Thinking about the good things in one's life is a great strategy for finding happiness.

Furthermore, the very act of thanking may also have positive psychological effects.



[Picture taken in the Church of our Dear Lady, Bruges/Belgium]

A Humanist Perspective

For a Humanist, it is contradictory that we have to thank someone for the good things in life, but are not allowed to blame him for the bad things. It is but a cheap trick to solidify the position of the deity ↗.

Besides, it is unfair to thank a god for works that have been done by humans. For example, if someone recovers from an illness, they should not thank God, but rather the doctors who have spent 5 years of their life studying medicine, or the scientists who have spent their life finding the medicine that cured the illness. Heaping all the glory on God devalues the effort that humans have put into it. So far, God has not eradicated a single illness from this world. Science has ↗. Thus, people should be thankful to humans rather than to God. They should donate to the organization that helped them, and they should spread the word of the science that cured them. Instead, they just pray.

Of course, people can also do both: They can pray and they can thank the people who helped them. If both are combined, then there is nothing a Humanist could object. On the contrary, thanking God is a way to become more aware of the positive aspects of life.

I have food, clothing and shelter. At this moment I am warm at 25°C – despite the outdoor temperature of 5°C. A huge array of products are available that make my life easier and better: I can watch 80 channels on cable with my TV, I can video-chat with nearly anybody in the world, and I can travel almost anywhere, too. My point here is simple: We take it completely for granted, but life in the developed world is utterly amazing. Absolutely, utterly, amazing. Who created all of this? Did God? Certainly not.

By WhyWontGodHealAmputees.com/31, adapted

Happiness

Religion has a positive effect on personal well-being. The vast majority of studies suggests that religion is correlated positively with happiness ([Wikipedia/Religion and happiness](#)). Religious people are more satisfied with their lives, they are better at coping with stress, less likely to abuse drugs or alcohol, less likely to suffer from depression, and less likely to consider suicide.

To understand the link between religiousness and happiness, let us turn to the factors that make people happy. Research is converging on the following factors [[John Medina: Brain Rules](#)]:

- many and deep human relationships (friendship, marriage, community)
- altruistic acts
- making lists of things for which you are grateful
- cultivating a general attitude of gratitude
- sharing novel experiences with a loved one

- deploying a ready “forgiveness reflex” when loved ones slight you

These factors were collected by scientists who studied happiness, not religion. And yet, the links are obvious: Religion provides exactly the factors that make people happy!

- Religion gives the believer a community ↗, and promotes marriage ↗.
- Religion encourages charitable activities ↗.
- Religion encourages “making lists of things for which you are grateful” – otherwise known as prayer ↗.
- Religion cultivates a general attitude of gratitude towards the supernatural ↗.
- Religion allows sharing novel experiences with a loved one – again a function fulfilled by prayer ↗.
- Religion encourages forgiveness in general ↗, and forgiveness towards the supernatural in particular ↗.

Another important factor is that religions provide us with a meaning of life ↗. People can bear almost any despair if they see a deeper reason for it. What has been used extensively to justify suffering ↗ ↗ ↗ is in fact a recipe for happiness. In Nietzsche’s words: “He who has a why to live for can bear almost any how.” In addition, religion provides emotional comfort ↗, helps cope with injustice ↗, and encourages a healthy lifestyle ↗. Furthermore, religion can bring psychological peace of mind, as Pamela Milam explains: Spirituality helps followers examine their feelings and mindfully witness their own fleeting emotions. Ultimately it helps us have a calmer outlook, lower blood pressure, and a more even-handed approach to dealing with life’s stresses [Pamela Milam: [How Religion and Spirituality Affect Our Health, 2014](#)]. With all of this taken together, religiousness objectively correlates with a happier life.

A Humanist Perspective

Humanists can only admire the fact that religiousness makes people happier. Interestingly, this only works when there are less religious people around as well. In countries where all people are very religious, the overall happiness is below that of secular countries ↗.

*The fact that a believer is happier than a skeptic
is no more to the point than that a drunken man is happier than a sober one.*

By George Bernhard Shaw

Coping with injustice

All major religions know some higher entity that delivers justice ↗. In the abrahamic religions ↗, this role is taken by God. He punishes the wrongdoers in the afterlife. In the Indian religions ↗, the role is taken by karma – bad deeds will entail suffering in the coming life. In the Chinese religions ↗, an abstract entity called Heaven watches over injustices, and acts accordingly.

This promise of justice is, of course, an empty one in atheist eyes. Religion promises that wrongdoers will be punished in the hereafter, but that is merely wishful thinking. And yet, it fulfils an important purpose: It helps people accept that there is injustice in this life ↗. If an injustice happens and the perpetrator slips away, atheists can do nothing except being angry about it. Believers, in contrast, know that the last word has not been spoken. They can trust that the perpetrator will find their just fate in this life or the next. This gives them a peace of mind where the atheist has no such remedy. The same is true for suffering in general: Religions can give people the confidence that all suffering will eventually find a “happy ending”.

Let me give an example here: I had a friend who had a dispute with a colleague. The conflict continued for some days, but they could not come to an agreement. Finally, my colleague talked to their boss. The boss listened, and sided with my friend. He said he would talk to the colleague. From that moment on, my friend considered the problem solved: he had his fair hearing, he got the satisfaction that his boss agreed with him, and he was sure that justice would be done. Hence, he resumed his normal work relationship with his colleague. He was wise enough to never ask whether his boss really talked to the colleague...

A Humanist Perspective

Humanists observe that the promise of supernatural justice has two effects: On the one hand, it reassures people. It helps people accept that they cannot solve all problems on Earth in our lifetime. Thus, religion provides an important emotional support to people who suffer, or who witness suffering.

On the other hand, the promise of supernatural justice can also make people accept injustice more easily. For example, the promise of supernatural oversight has been used to justify climate change ↗, the caste system ↗, slavery, the crusades ("Kill them all; God will recognize his own", [Wikipedia / Cædite eos](#)), or suppression of the lower classes ↗. In all of these cases, the argument went: Don't worry about injustice, God will sort it out later! Thus, the very same reasoning that makes believers accept injustice that they cannot counter can also make them accept injustice that they should counter.

This principle is at work not just in historical times, but also in the present. Statistically speaking, people in more religious countries tend to be more resigned concerning their plight. They are more likely to believe that they cannot influence their own fate, leaving things to destiny (see my essay [Why are poor countries poor? / Values](#)). While this resignation may be a reasonable psychological protection mechanism, it may also lead to a passiveness that actually fosters the adverse conditions in such countries.

Thus, we find ourselves in a delicate dilemma between cases where a plight has to be accepted (and where religion can help), and cases where any deferral to later justice would be a gross irresponsibility.

Personal Strength

Religion can not just make people happy, it can also give them personal strength. Millions of people, some of them politicians, scientists, or celebrities, define themselves by their religious belief. Such a belief does not just guide people, it also supports them in times of distress. Patients with a difficult illness, prisoners in abusive regimes, people who live in poverty, military servicemen, and people with trouble in their life can all draw strength from their belief. Religion gives them guidance, hope, emotional stability, and force – in bad times as in good times.

One possible reason is that religion can deliver a truly repentant from their bad conscience ↗. As a theology professor explains: Religion can help us make peace with the things we have done [[Philip Moeller: Why Religion Is Linked With Better Health And Well-Being, 2012-04-15](#)]. Another possible reason is that religion boosts our self-esteem: It tells us that we are worthy to be loved (or at least observed) by some higher power ([Clay Routledge: Is religion good for your health?, 2009-08-31](#)). Yet another factor may be that religious beliefs are usually unfalsifiable. Thus, a believer can believe in something that can never be proven wrong. This is a comfort that only religion can provide ↗ ↗.

Interestingly, this positive effect applies not just to the large religions, but also to the newer religious movements ↗. I have talked to a Scientologist ↗ who told me the following story: He was caught in a trap of drug addiction and joblessness. There was little hope he could ever get rid of his addiction. Then he got to know the teachings of Scientology. He started learning more about this group, and he began attending regular meetings with Scientologists. Through this faith, he could free himself from his addiction. He got a job, and he put his life back on track. Through Scientology, he had achieved something he considered impossible before. Today, he volunteers for recruitment at Scientology.

This story suggests that faith itself can help people get their life back on track.

A Humanist Perspective

Humanists can point out two problems of this approach: First, people can find personal well-being in any religion – even in Scientology, as we just saw. This bears the danger that weaker members of society fall prey to all types of dubious groups and preachers: televangelists, sects, faith healing groups, or indeed Scientologists ↗. People tend to mistakenly associate the ideology of these groups with their own well-being.



The name of this church is quite aptly "Mother of God, soothe my sorrows"

[Picture taken in Saratov/Russia]

Second, the personal strength that a religion delivers can turn into the conviction that one's own faith is infallible ↗. People to whom this happens are so convinced of their faith, that no rational argument can discourage them. This is dangerous because it gives people unshakeable confidence in their own righteousness. If such people want to circumcise their sons, marry off their underage daughters, or fly an airplane into a skyscraper, they will do it. Their faith gives them strength that transcends human law ↗. It also grants them exculpation where no such exculpation should be granted ↗. Thus, the personal strength that religion delivers can turn into blind conviction if it is taken too far.

These are, however, extreme cases. The vastly more frequent case is where religion really helps people cope with their life. In particular, religion provide perspectives that go beyond the human life. With this, they can offer people a comfort that secular systems, by definition, cannot offer.

Health

We have seen that religion can give personal strength ↗, help cope with injustice ↗, give hope for the afterlife ↗, make people happier ↗, and give them a reason for life ↗. All of these are positive effects of religion that are hard to reproduce with secular systems. But that is not all. Religion has one more very palatable effect on people's well-being: It makes people healthier. Thousands of studies have analyzed the link between religiousness and health, and many of them find a positive correlation ([Wikipedia / Religion and health](#), [Wikipedia / Psychology of Religion](#), [Harold G. Koenig: Religion, Spirituality, and Health: The Research and Clinical Implications, 2012](#), [Julia O. Basu-Zharku: The Influence of Religion on Health, 2011](#)).

Four reasons have been proposed for this [ibid]:

1. Religion encourages healthy behaviors (through prescribing a certain diet and/or discouraging the abuse of alcoholic beverages, smoking, etc., religion can protect and promote a healthy lifestyle) ↗
2. Religion provides social support (people can experience social contact with co-religionists and have a web of social relations that can help and protect whenever the case) ↗
3. Religion influences the psychological state (religious people can experience a better mental health, more positive psychological states, more optimism and faith, which in turn can lead to a better physical state due to less stress) ↗
4. Religion benefits from "psi influences" (supernatural laws that govern "energies" not currently comprehended by science but possibly understandable at some point by science).

Quite naturally, atheists will not find many arguments in favor of the last point. But that does not change the fact that religion objectively correlates with better health. This correlation is sometimes broken down along two axes:

1. "religion", as the practice of a moral framework, which leads to healthier life choices.
2. "spirituality", as the inner confidence in some higher power, which helps people cope with stress and adverse circumstances.

Both of these seem to have their role, and together, they objectively correlate with a healthier life.

A Humanist Perspective

Humanists note that the positive effects of religion on health come at a price: Besides useful rituals, religions also prescribe rituals that go from the useless to the harmful. Consider the damage done by genital mutilation alone ↗. Or consider the habit of marrying off girls in their puberty – still widespread in many countries ↗. Both practices are supported by local religious beliefs, and both practices are objectively harmful. Religion just splashes out a whole bunch of practices, some of which are admittedly useful, but many of which are actually absurd or damaging ↗. This is because the practices are not the consequence of scientific study, but of evolutionary trial and error over the millennia ↗.

In some cases, religion effectively works against a more healthier life ↗. In the US, Charismatic Christianity has achieved legal exemptions from the duty to vaccinate children. It has also been granted the right to prefer faith healing over effective medical treatment – at the immediate disadvantage for the concerned children.

All of these critiques stand their ground. However, they do not change the fact that religion correlates with a healthier life overall. As long as that happens in the frame of the law, there is nothing that a Humanist could object to it – on the contrary.

In the past, when doctors believed they could cure a patient by letting him bleed, a religion may have saved lives purely by keeping its adherents in the church and away from the hospital.

By Nassim Talib, paraphrased

Making Society Better

Happier Society

Religious beliefs make people happy ↗. This suggests that we should all become religious, so that our society will be happier.

Unfortunately, the solution is not so simple. A UN study has measured happiness across countries in the world ([United Nations: World Happiness Report, 2012](#)). It shows that the most happy countries are all non-religious. The most unhappy countries, in contrast, are all very religious:

Position	Country	Happiness	Religiousness
1	Denmark	7.8	Least religious
2	Finland	7.6	Least religious
3	Norway	7.5	Least religious
4	Netherlands	7.5	Least religious
5	Canada	7.5	Less religious
6	Switzerland	7.5	Less religious
7	Sweden	7.4	Least religious
8	New Zealand	7.4	Least religious
9	Australia	7.4	Least religious
10	Ireland	7.3	Less religious
...			
146	Congo (Brazz.)	3.8	Most religious
147	Tanzania	3.8	Most religious
148	Haiti	3.8	?
149	Comoros	3.7	?
150	Burundi	3.7	Most religious
151	Sierra Leone	3.6	Most religious
152	Central African Rep.	3.6	Most religious
153	Benin	3.5	More religious
154	Togo	3.0	More religious

Happiness is the average happiness on a scale from 0-10 according to the [UN World Happiness Report](#), read off approximately from the graphics provided there. Religiosity is on a 5 point scale according to [Gallup: What Alabamians and Iranians Have in Common, 2009-02-09](#).

As the UN report explains, 80% of the inter-country differences can be attributed to the same few reasons: the material, social, and institutional support that the country provides. Comparing the top four to the bottom four countries, average income is the most stunning difference: it differs by a factor of 40. Thus, in defiance of a common mantra ↗, happiness quite plainly correlates with wealth ↗. This is true both on the individual level and on the national level: people who are richer than their compatriots are happier, and people who live in richer countries are happier overall [Stephen Pinker: Enlightenment Now, p. 270]. Other differences are: healthy life expectancy is 28 years greater, people are much more likely to have someone to call on in times of trouble (95% vs. 48%), to have a sense of freedom (94% vs. 63%), and are less likely to perceive widespread corruption in business and government (33% vs. 85%). This suggests that it is not religion that makes people happy or not, but overall country performance.

Overall country performance, however, is heavily correlated to less religiousness ↗. If we wanted to take correlation for causation, then we should rather all become less religious.

Religions mostly want their followers to be generous, honest, peaceful and healthy. Therefore, we would expect religious people to fare better overall than non-religious people.

At least in the US, atheists tend to be better educated and richer than theists ↗. This does not mean that atheists would in general have a "better life" than theists, because there are more things to life than education and money. On issues such as happiness or health (not measured in the studies), religious people may well score better than atheists. Also, such positive correlation between atheism and education does not tell us whether one of them caused the other. However, it indicates that religion does not automatically improve all aspects of life.

The same holds on the macro-geographical scale. Countries that are more religious ([Gallup: What Alabamians and Iranians Have in Common, 2009-02-09](#)) tend to be

- more corrupt ([Wikipedia/Corruption by country](#))
- poorer ([Wikipedia/Poverty](#))
- less developed ([Wikipedia/Human development index](#))
- less democratic ([Wikipedia/Democracy index](#))
- less free ([Wikipedia/Press Freedom Index](#))
- less peaceful ([Wikipedia/Global Peace Index](#))
- with less life expectancy ([Wikipedia/Life expectancy](#))
- less happy ↗

Thus, religious countries fare worse than secular ones on nearly all socio-economic measures. This is not to say that atheist countries necessarily fare better. Atheist China and Russia score equally bad on many of these measures. But if a country is religious, it usually fares worse on all of the above accounts.

This does not mean that religion makes society worse. It just means that it does not make it better. And this is the elephant in the room: Despite all the good things that religion claims to promote, and despite the considerable power that it wields over society, it does not make society better ↗. It just does not work.

Religions are like wisdom teeth.

Even though they were crucial to our ancestors, today they are unnecessary, and they bring nothing but frustration and pain. Also, they provide us with no wisdom.

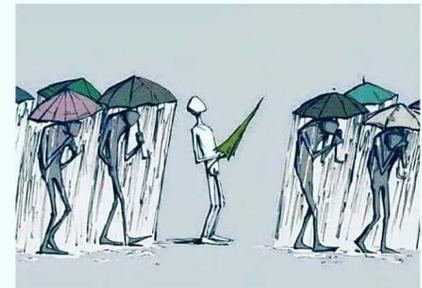
By [Evangelical Pastafarism](#)

Why these countries underperform

There is a variety of reasons why poor countries are poor. I discuss them at length in my essay [Why are poor countries poor?](#). Some factors are actually due to religion itself. For example, the denigration of women ↗ has a direct negative impact on 50% of the population. The focus on rituals instead of health, good government, or literacy has set the priorities wrong ↗. The estrangement that religious belief generates between the different communities may be one of the reasons for over half of the most deadly conflicts in this world ↗. In the abrahamic religions, the insistence on producing children contributes to the overpopulation, and thus ultimately to the undernourishment, in these regions ↗. The general teaching that everything that happens is the will of the gods ↗ may make people complacent. The promise of life after death may even make people see life as a transitional phase, in which there is little use investing ↗.

Other reasons for poverty are plainly outside religion's control: foreign interventions, dictatorships, natural disasters, or averse climate. Hence, this book does not say that religion would be fully responsible for the misery in these places. Rather, it says that the misery in these places is responsible for the religiousness there ↗. The more adverse the circumstances, the greater the need to cling to the supernatural.

What leaving your religion can be like:



@pachybrid

Remark: Israel is a notable exception among the religious countries. It is well developed and has a very high life expectancy. Still, the most religious people in Israel (the Haredi Jews) are at the bottom of the society, with 50% of them living below the poverty line ([Wikipedia/Ultra Orthodox Judaism / Israel](#)).

Better Society (2)

We have seen that religious countries are less happy than secular ones ↗. Furthermore, they are less well developed on nearly all socio-economic accounts ↗. A common objection goes that religious societies may fare better on accounts that are not so easily measurable. Consider, e.g., the care for the poor, the stability of families, or altruism. A Gallup poll, e.g., finds that people who attend religious services are more generous ([Gallup: Religious attendance relates generosity worldwide, 2009-09-04](#)). They are also more likely to help others ([Gallup: Worldwide highly religious more likely help others, 2008-10-08](#)). Religions also foster care for the elderly, and stability of marital relationships. Apart from this, they provide an overall spiritual environment. Religions make people appreciate the grandness of creation, guide them towards a less materialistic life, give them spiritual fulfillment, and bring them closer to God. This, in turn, makes religious societies more aware of the transcendent dimension of life.

All of these items can be considered advantages of religious societies. Yet, even in combination, they do not outweigh the advantages of secular societies. It is true that elderly people often lead a lonely life in secular countries. In return, they also live around 20 years longer. It is true that secular people may be less altruistic than religious people. In return, secular societies have better socio-economic indicators and better welfare systems, meaning that less people need other people's help to survive. In Germany for example, only 0.4% of the general population live on public social support ([Focus: Immer mehr Menschen sind auf Sozialhilfe angewiesen, 2013-10-28](#)). As a consequence, very few people in the developed world would want to change their life with a person in the developing world – notwithstanding all the talk of spiritual fulfilment that poor people in developing countries supposedly enjoy. All the discussion of closeness to God, or a more happy, nature-oriented, or spiritual life in religious countries cannot hide the fact that life in these countries is worse on almost all accounts. This is why many more people emigrate into secular countries than into religious countries. People vote with their feet.

In view of these facts, the admiration of religious societies appears to be little more than a nostalgic idealization.



Refugees from the world's most religious countries, trying to reach non-religious Australia
[\[Asia News\]](#)

Concluding Chapter

Main Messages

This chapter concludes the Atheist Bible. The main messages of this book are:

Part 1: Atheism and Atheists

Atheists reject belief in the supernatural ↗. Humanists are atheists who subscribe to the Human Rights, democracy, science, freedom of religion, and liberal ethical values ↗.

Part 2: An Atheist View on the World

As humans, we observe the world and we try to find patterns in what we observe ↗. This way, we approximate truth – even if we may possibly never get to know it ↗. Nevertheless, much of the workings of the universe can nowadays be explained by science ↗. People developed ethics out of empathy, and out of the desire for mutual protection ↗. The meaning of life is the intention that you pursue with your life ↗. If you do not give your life a meaning, someone else will ↗.

Part 3: An Atheist View on Gods

The existence of gods is unfalsifiable ↗, and hence the concept does not carry meaning in the sense of this book. Proofs for gods ↗ are either wrong or ill-formed, or they can equally well prove the existence of the fictional goddess Gayatri ↗. Proofs that use gods to explain the phenomena of nature, in particular, do not provide explanations in the usual sense ↗.

Part 4: An Atheist View on Religion

For this book, a religion is a set of beliefs ↗. People came up with religions out of the desire to explain nature, out of the personification of natural entities, or out of the desire to control people ↗. People follow a religion because religion makes them happy, because they tend to do what other people do, because they are coerced into the religion, because they want to influence nature, or for a variety of other reasons ↗. There is nowadays a plethora of religions, which differ in their gods, their concepts of the afterlife, their creation myths, and their values ↗. The religions that have survived until today use a number of memes to dominate over the others ↗.

Part 5: Discussion of the Abrahamic Religions in particular

The concept of the Abrahamic God is inconsistent in atheist eyes ↗, in particular because he was extremely brutal but is now worshipped as benevolent ↗. Furthermore, he is benevolent and omnipotent, but does nothing to stop the evil in this world ↗. As for Islam, there are a plethora of interpretations, all of which claim to be the only true one ↗. These interpretations go from the benevolent to the brutal. Christianity claims to implement God's eternal will, but it has gone through impressive changes over time ↗.

Part 6: The Effects of Religion

Religion has positive effects ↗ and negative effects ↗ on the individual and on society. Humanists warn people of the negative effects, but are happy to let everybody enjoy the positive effects.

Life is an unfoldment, and the further we travel the more truth we can comprehend. To understand the things that are at our door is the best preparation for understanding those that lie beyond.

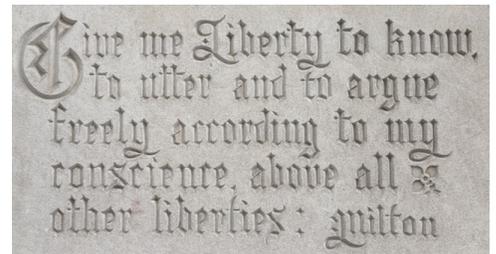
By Hypathia of Alexandria



Hypathia of Alexandria, who, although not necessarily an atheist, was kind enough to provide inspiration for this book.
[Elbert Hubbard]

Humanism ↗, the particular brand of atheism advertised in this book, is a life stance that advocates

- The search for truth through a continuing process of observation, evaluation and revision ↗.
- Liberal ethic values, i.e., the right to do whatever pleases as long as the equal rights of others are not infringed ↗.
- Democracy and the Human Rights ↗.
- Freedom of Religion, i.e., the right to adhere to any religious belief as long as it does not curtail the freedom of others ↗. This includes the right to adhere to no belief at all.
- The scientific method as the most reliable way of understanding the world ↗.
- The rejection of truth by faith.



[Picture taken in Chicago]

Thus, Humanism is a comprehensive worldview, which has an ethical, a political, a philosophical, and a scientific dimension.

The concept of goodness is too important to delegate it to imaginary beings.

By WhyWontGodHealAmputees.com/29

Religion

Technically speaking, a religion is a set of beliefs ↗. From an atheist perspective, these beliefs are not divine. They were made up by people a long time ago. The supernatural claims of a religion are unfalsifiable, and thus do not carry meaning in the sense of this book ↗. The values of most major religions are at odds with Humanist values, most notably with the Human Rights ↗. In addition, religion does much harm to society (in Humanist eyes) by propagating a medieval notion of truth, and by building up closed communities ↗.

At the same time, religion can also give people hope, strength, and a reason for life ↗. They can also make people happy. These positive aspects cannot be weighted easily against the negative effects. We cannot conclude that religion would be bad in general – or, for that matter, good in general. This is because different positive effects and different negative effects apply to different religions, to different times, to different cultures, and to different people. One has to be aware of both the boons and the banes of religion, and judge each case accordingly.

In this spirit, Humanism ↗ does not want to abolish religion. For all of its criticism against religion, Humanism does not aim to force people legally or physically to abandon their faith. On the contrary, Humanism defends the Freedom of Religion: the right for every person to adhere to a religion of their choice ↗. This includes the right to adhere to no religion at all. This freedom finds its limits only when the equal freedom of others is concerned ↗.

Religious freedom means that you can believe whatever you want.

It does not mean that you can do whatever you want.

Humanism and Religion

It is often assumed that Humanism ↗ would give religions free reign, in the name of freedom of religion ↗. That is not the case. Humanism gives free reign to religion only if no harm is done to others, and if all people enjoy the same rights ([Council for Secular Humanism: A Secular Humanist Declaration](#), [IHEU: Vision and mission](#), [EHF: What do we want?](#)).

In particular, Humanism opposes any religious belief that

- advocates giving less rights to women than to men ↗.
- does not grant its own adherents freedom of religion, e.g., by punishing or ostracising apostasy ↗.
- stigmatizes atheists, or calls for their persecution ↗.
- prohibits people from marrying adherents of other faiths ↗.

- demands exceptions to the law ↗.
- violates the separation of state and religion.
- opposes criticism of its tenets ↗, potentially as "blasphemy".
- teaches stories that run counter to scientific evidence as facts in schools ↗.
- requires the mutilation of genitals for children.
- builds up isolated communities with different laws ↗.
- considers all non-adherents worthy of hell ↗.
- discriminates against gay people ↗.
- marries off under-age girls ↗.
- otherwise supports values that run counter to the Human Rights, such as cruel punishments ↗.

Such values are incompatible with Humanist values. One cannot be a Humanist and be OK with such religious beliefs.

As it so happens, such harmful religious beliefs take an assertive role in many of today's societies. Rather than hiding behind the principle of freedom of religion, Humanists should identify, expose, and oppose such beliefs. This opposition should not be directed against a religion ↗. Rather, it should be directed against the harmful belief itself.

*Those who hammer their guns into plows
will plow for those who don't.*

By anonymous

Education

Education is a key to human development and well-being. It is also part of the Humanist quest for truth ↗. In a Humanist spirit, education should put emphasis on the following subjects:

Religions

Yes, religions (in plural). Currently, our schools and societies teach children mainly about a single religion (the one that the parents of the child adhere to). That is not good. Children should learn about all major religions ↗. The more they know about the different religions, the more likely they will be to accept adherents of these religions. They will also be less prone to overvalue their own religion.

Logic

Children should learn logical reasoning, debating techniques, and the principle of falsifiability ↗. This will help them avoid falling prey to malicious ideologies (religious or otherwise).

The values of the Enlightenment

The Enlightenment has given us the rule of law, freedom of thought, freedom of speech, freedom of religion, freedom in the choice of a partner, and freedom in general, as long as the freedom of others is not engaged ↗. These values form the bedrock of our Western democracies, and children should know what they are and where they came from.

Science

Science is the key to understanding the physical world ↗. Children should not just learn the sciences, they should also learn to master the scientific principles: validation by experiment, abandonment of wrong theories, and distinguishing hypotheses from validated theories.

The enlightenment of today will depend not on a few bright heads, but on the rise of the general population.

By Richard Dawkins in "God is not Great"

 INDEPENDENT ☰

News > World > Africa

South Africa outlaws single-religion schools

'The aim is not to ban religious practices in schools but about protecting children'

Samuel Osborne | @SamuelOsborne93 | Thursday 29 June 2017 11:43 BST | 

Single-religion schools have been outlawed in **South Africa** after a ruling at the Johannesburg High Court.

Public schools may no longer promote themselves as subscribing to a single particular religion at the exclusion of others, the court ruled.

Great idea! Let schools teach children about at least 3 religions.

Outlook

Marshall Brain imagines how a society without religion could look (WhyWontGodHealAmputees.com / 31 f.). His central message is that, once the supernatural is removed from the picture, we can concentrate on the here and now. We can focus our attention on humanity, on the needy, on science, on education, on the environment, and on cherishing the good things we already have. There is no need to waste time on worshipping some mythological beings, and no need to organise our lives around some rules these beings purportedly gave us.

Of course, we do not have to wait until all people are atheists in order to begin with this endeavor. Already now, Humanism [↗](#) calls us to work towards the implementation of the Human Rights for everybody, towards developing our laws and governments by democratic means, towards giving more people more freedom, towards learning more about nature through the use of science, towards searching truth and teaching it, and, ultimately, towards making life better for more people [↗](#).

Interestingly, religiousness is negatively correlated with these goals: Prosperity, social stability, education, scientific progress, and happiness generally correlate with less religiousness – at least at the global level [↗](#) [↗](#) [↗](#) [↗](#) [↗](#) [↗](#). Thus, if we work towards these goals, religion may yet disappear by itself.

Instruction of the Holy Office, June 20, 1866

This is the text of the Instruction Number 1293 of the Sacred Congregation of the Holy Office, June 20, 1866, which explains under which conditions the buying and selling of slaves was permitted in the view of the Catholic Church. The instruction is given first in its English translation, and then in its original Latin form. It is taken from the book "[The Popes and Slavery](#)" by Joel S. Panzer. The text is not complete, but seems to cover nevertheless the important points regarding slavery. It is published here as part of [The Atheist Bible](#).

Today, the Catholic Church prohibits the buying and selling of slaves ([Catechism of the Catholic Church / 3 / 2 / 2 / 7 / 2414](#)).

English

For the Vicar Apostolic among the Galla.

There have been sent to this Sacred Congregation of the Inquisition many questions proposed by the Rev. William Massaia, Vicar Apostolic among the Galla in Africa. For convenience these questions can be broken up into eight different kinds. The first kind deals with simultaneous polygamy both on the part of the man and the part of the wife; the second touches on the manner in which the daughters of a family are given in marriage; the third touches on the baptism of those for whom a danger of loss of faith is foreseen; the fourth touches on the buying, selling, flight, punishment and marriage of slaves; the fifth touches on the enmities or feuds exercised among the independent tribes of the Galla,...

IV. The fourth type of question concerns the buying and selling of slaves. The condition of servitude, properly so called, among the Galla and Sidama so strictly coheres with their social status that it is almost impossible to establish and maintain a home among them without the buying of slaves. Because of this it is not found that servants are hired, and every head of a household has to buy completely everything for himself and for his household, be they things grown from the land or made by human industry. Therefore the slaves are held like a principal matter of commerce; in a certain degree they have the value of money, and frequently, by the order of the leader or by prescript of their laws, creditors are held to accept them for the payment of debt. All this being the case, I ask:

12. Whether it is permitted for Christians among the Galla and Sidama to buy slaves, or to receive them as payment for a debt or as a gift as long as they act for the sake of the necessities of their home and family and without the intention of re-selling the slaves.

13. Whether a Christian family, not for the sake of gain, but only because of a grave means of support or the necessity of paying a debt is permitted to trade or sell a slave it possesses.

14. Whether it is permitted to admit to the sacraments any Christian merchant who normally abhors the buying and selling of slaves for the sake of profit, but, lest he suffer harm to his family affairs, wants to resell some slaves whom once he was forced, by a seller who was a noble, to take as the price for his wages.

15. Whether Christians and even missionaries can licitly be present as witnesses or agents or other such name at contracts, judgments or other types of public acts which deal with slaves according to the laws of those peoples.

[Response] Although the Roman Pontiffs have left nothing untried by which servitude be everywhere abolished among the nations, and although it is especially due to them that already for many ages no slaves are held among very many Christian peoples, nevertheless, servitude itself, considered in itself and all alone (*per se et absolute*), is by no means repugnant to the natural and divine law, and there can be present very many just titles for servitude, as can be seen by consulting the approved theologians and interpreters of the canons. For the dominion which belongs to a master in respect to a slave is not to be understood as any other than the perpetual right of disposing, to one's own advantage, of servile work, which dominion it is legitimate for a person to offer to another person. From this it follows that it is not repugnant to the natural and divine law that a slave be sold, bought, exchanged, or given, as long as in this sale, or buying, or exchange or giving, the due conditions which those same approved authors widely follow and explain, are properly observed. Among these conditions those

which are to be especially looked at are whether the slave who is put up for sale has been justly or unjustly deprived of his liberty, and that the seller does nothing by which the slave to be transferred to another possessor suffer any detriment to life, morals or the Catholic faith. Therefore, Christians, about whom one is speaking in the first question, can licitly buy slaves or, to resolve a debt, receive them as a gift, as long as they are morally certain that those slaves were not taken from their legitimate master or reduced to slavery unjustly. For if the slaves who are offered for sale have been taken from their legitimate master, it is not permitted to buy them, because it is a crime to buy what belongs to another and has been taken, the master being unwilling, by theft. If, however, they have been unjustly reduced to slavery, then one must determine whether they are unwilling to be sold or given to Christians or whether they consent to it. If they are unwilling, they can by no means be bought or received, since the captives themselves are masters of their own liberty, although it has been unjustly taken from them. If indeed, after they have been fully taught that freedom belongs to them by right and which they lose only by injury to others, they spontaneously and by their own free will, as masters of themselves, present themselves to Christians to be received by them and held in servitude, by a prudent plan in order to be freed from the harsh present servitude, from which they have in no way the ability to free themselves, and choose a milder servitude in the hands of Christian buyers and with whom they are easily able to persuade themselves that they can come to a knowledge of worshipping the true God, and of confessing Him to the inestimable advantage of their souls; in such circumstances it is permissible for the Christians, especially when they act in favor of the Faith, to purchase such captives for a just price, and to take and retain them in their own servitude, as long as they are of the mind to treat them according to the precepts of Christian charity, and take care to imbue them with the rudiments of the Faith so that, if it is possible, they may be freely and happily led, this being done by no compulsion, but only by opportune persuasion and encouragement, through their conversion to the True Faith into the liberty of the sons of God which is found only in the Catholic Church. On this matter one should look at the instruction of His Holiness Pius VI (Sept. 12, 1776), which is attached.

Indeed, just as slaves can be licitly bought, so they can licitly also be sold, but it is altogether necessary that the seller is the legitimate possessor of the slave, and does nothing in the sale by which the life, morals or Catholic faith of the slave to be sold would be harmed. Therefore it is illicit to sell a slave or in any manner give the slave into the ownership of any master who by a certain or probable judgment can be foreseen to be going to treat that slave inhumanely, or lead him to sin or abuse him for the sake of that most evil trade which has been condemned and strictly prohibited by the constitutions of the Roman Pontiffs, especially by Pope Gregory XVI. Likewise it is illicit to sell a slave, taking no account of the marriage rights and duties of that same slave. Much more illicit is it so sell a Christian slave to a faithless master, or even, where the danger of falling away is prudently to be feared, to an heretical or schismatic master. If he keeps these things properly in mind, the Vicar Apostolic will clearly see what response is to be given to questions 13, 14, and 15. For nothing impedes any Christian family – as mentioned in question 13 – from selling their slaves in good conscience, if they possess them legitimately and, in the sale, observe the cautions described above. So also the seller mentioned in question 14 can be admitted to the sacraments if it is a fact that the slaves who have come into his possession as pay, have not been taken from their rightful master by theft nor been unjustly reduced to slavery, and if he furthermore solemnly promises that he will sell them in such moral conditions that none of the rights and duties which belong to them as men – and, if they have it embraced the Christian faith, as Christians – will be harmed or endangered by the sale. Finally in respect to question 15 it is determined that the Christians themselves, even missionaries, can be present as witnesses and as agents – or any other name not prohibited by the sacred canons – in contracts, judgments and other public acts of this types done in respect to slaves as long as the acts are licit in themselves and are vitiated by no evil circumstance.

V. Next we come to the questions about fugitive Slaves. According to the laws of the Galla and Sidama the slave is counted among the useful things over which one has a true and proper dominion, and for which they make contracts, damages are sought, and judgment sought in case of theft or usurpation. Hence it is asked:

16. Whether it is licit for Christians and for missionaries themselves to search for fugitive slaves, and force them to return, or at least to permit that others search them out or even by use of force have the public magistrate or friends bring them back.

17. Whether slaves have the right to flight, and whether they have to repair the damages caused by their flight to the master.

18...

19...

As has been noted in response to the questions immediately above, there are some just titles or causes by which a slave can be legitimately deprived of his liberty and legitimately retained by a master. But since it is contradictory to say that a master has the right to possess and retain a slave and the slave has the right not to be possessed and retained by a master, everyone can see that the Christians and missionaries mentioned in question 16 are able in good conscience to search for fugitive slaves and force them to return, if indeed they possess a just title to those who have been justly reduced to slavery.

It is not so easy to answer questions 17 and 18. Regularly it is the right of slaves who have been unjustly reduced to slavery to flee; it is not permitted for slaves who undergo just servitude, unless perhaps they are solicited by the master to some sin, or are treated inhumanly. On this distinction depends the solution to the other question, namely whether fugitive slaves are held to make up for the damage caused to the master by their flight. Since, to incur the obligation of restitution three conditions must be simultaneously linked together and fulfilled, viz. theological sin, subsequent damage, and efficacious cause, it is clear that those slaves whose flight was gravely illicit are held to reparation while those slaves whose flight lacked all fault are not; but as to the liceity of flight and the obligation of repairing the damage caused by such flight let the Vicar Apostolic consult the approved authors and with them distinguish between the various cases and the various titles to servitude.

Latin

Instr. S.C.S. Off. 20 Iunii 1866

Pro Vic. Ap. Ad. Gallas.

Deleta sunt ad hanc S.C.

Suprema Inquisitionis plurima dubia quae proposuit R.P.D. Guillelmus Massaia Vicarius Apostolicus apud Gallas in Africa, quaeque in octo diversas classes distinguis commode possunt. Prima classis respicit polygamiam simultaneam tam ex parte viri, tam ex parte uxorum; altera modum quo filiaefamilias nuptui traduntur; tertia baptismum eorum qui perversionis periculo praevideatur obnoxii; quarta emptionem, venditionem, fugam, coercionem, matrimonia servorum; quinta inimicitias, communis vindictae nomine, inter gallarum independentium tribus exercis solitas;...

IV. Quarta dubiorum classis, de servorum emptione et venditione. Servitutis proprie a dictae conditio apud Gallas et Sydamas tam stricte cohaeret cum sociali eorum statu, ut impossibile fere sit domum inter eos sine mancipiis figere et retinere. Illic enim reperire non est servos conducticios, et quilibet paterfamilias omnia prosus sibi suaeque domui comparare debet, sive quae e terra gignuntur, sive quae hominum industria fiunt. Praeterea mancipia habentur veluti principalis commercii materia, immo valent quadamtenus pro numerata pecunia, eademque saepe ad solutionem debiti vel principis iussu, vel legum ipsarum praescripto creditores acce ptare tenentur. Quae cum ita se habeant, quaeritur:

12. An liceat christianis apud Gallas et Sidamas mancipia emere, et in debiti solutionem, aut in donum recipere, quotiescumque id agant propter domus vel familiae suae necessitates, sine animo eadem mancipia revendendi.

13. An familia aliqua Christiana non lucri faciendi consilio, sed tantum ob gravem victus comparandi, vel debitorum solvendorum necessitatem, possit licite aut tradere in pretium, aut vendere servum quem possidet.

14. An liceat admittere ad sacramentorum participationem christianum quemdam negotiatorem, qui a servis quaestus causa emendis et vendendis abhorreere quidem solet, sed ne detrimentum rei familiaris patiat, servos aliquos revendere vult, quos olim nobilium emptorum praepotentia recipere coactus est pro mercium suarum pretio.

15. An christiani, ipsique adeo missionarii licite possint interesse tamquam testes, vel sequestres, vel alio nomine contractibus, iudiciis, aut aliis id genus publicis actibus, qui secundum gentium illarum leges fiunt circa servos.

Etsi Romani Pontifices nihil intentatum re liquerint quo servitutem ubique gentium abolerent, iisdemque praecipue acceptum referri debeat quod iam a pluribus saeculis nulli apud plurimas christianorum gentes servi habeantur; tamen servitus ipsa per se et absolute considerata iuri naturali et divino minime repugnat, pluresque adesse possunt iusti servitutis tituli quos videre est apud probatos theologos sacrorumque canonum interpretes. Dominium enim illud, quod domino in servum competit non aliud esse intelligitur quam ius perpetuum de servi opens in proprium commodum disponendi, quas quidem homini ab homine praestari fas est. hinc autem consequitur iuri naturali et divino non repugnare quod servus vendatur, ematur, commutetur, donetur, modo in hac venditione, emptione, commutatione, donatione, debitaes condiciones accurate serventur quas itidem probati auctores late

perse quantur et explicant. Quas inter conditiones illa praecipuum sibi vindicat locum, ut emptor diligenter examinet, num servus qui venum exponitur iuste iniuste libertate sua privatus fuerit, et venditor nihil committat, quo servi ad alium possessorem transferendi vita, honestas, aut catholica fides in discrimen adducatur. Christiani igitur, de quibus in dubio primo sermo licite possunt servos emere atque in debiti solutionem, vel in donum recipere, quoties moraliter certi sint servos illos neque legitimo eorum domino sublatos, neque iniuste in servitum fuisse abstractos. Si enim servi qui ad emendum offeruntur, legitimo eorum domino ablati fuerunt, non licet eos emere, quia nefas est alienas res furto ablatas emere invito domino. Si autem iniuste in servitum redacti fuerunt, distinguendum est num se christianis venum ire aut donari detrectent, vet consentiant. Si detrectant, emi aut recipi nequa quam possunt, ipsi enim captivi domini sunt propriae libertatis, quamvis iniuste us ereptae. Si vero postquam plene edocti fuerint iure sibi libertatem competere, a qua non nisi aliorum iniuria exciderunt, ultro et sponte sua, et ex libera et propria voluntate tamquam rerum suarum domini se exhibeant christianis ut ab eis recipiantur et detineantur in servitum, eo prudenti consilio ut a dura servitute praesenti, a qua ipsis datum non fuerit alio modo se emancipare, mitiorem apud dominos christianos servitum sortiantur, penes quos etiam facile sibi persuadere poterunt, venire posse in cognitionem veri Dei cultus, eumque inestimabili animarum suarum compendio profiteri, in his sane circumstantiis permitti potent christianis, habito etiam respectu ad favorem fidei, ut possint eiusmodi captivos iusto pretio aut alio iusto titulo acquirere, et in propriam servitum redigere et retinere, dummodo eo animo sint ut eos tractent secundum praecepta caritatis christianae, et curent etiam rudimentis fidei illos imbuere, adeo ut, Si fieri potent, in libertatem filiorum Dei, quae in sola catholica ecclesia est, nulla tamen coactione facta, sed tantummodo opportunis suasionibus et hortationibus, a libere et feliciter traducantur per eorum conversionem ad veram fidem. Et hac de re prae oculis habeatur instructio S. m. Pii VI (12 Sept. 1776) quae adnectitur. (V. n. 515).

Quemadmodum vero servi licite emi, ita licite quoque vendi possunt, sed necessarium omnino est ut qui vendit legitimus sit servi possessor, nihilque in venditione committat quo servi alienandi vitae, honestati, aut catholicae fidei noceatur. Quare illicitum est servum vendere, aut quomodocumque in proprietatem cedere alicui domino, qui certo aut probabili iudicio praevideatur servum eundem inhumaniter habiturus vel ad peccatum pertracturus vel eodem abusurus ad iniquissimum illud commercium exercendum, quod Apostolicis Romanorum Pontificum, ac praesertim s. m. Gregorii XVI constitutionibus reprobatur districteque prohibetur. Illicitum pariter est servum alienare, nulla prorsus habita ratione iurium et officiorum matrimonialium ipsius servi. Multo magis illicitum est servum christianum vendere domino infideli, aut etiam, ubi perversionis periculum prudenter timendum sit, domino haeretico vel schismatico. Haec si Vicarius Ap. probe teneat, aperte videbit, quid respondendum sit ad 13, 14 et 15 dubium. Nihil enim impedit quominus familia christiana, de qua agitur in dubio 13, servos suos vendere tuta conscientia queat, si ipsos legitime possideat, et cautiones supra descriptas in venditione observet. Sic etiam negotiator in dubio 14 memoratus potent ad sacramenta admitti, si constet, servos, qui ei pro mercium pretio obtigerunt, neque per furtum legitimo eorum domino subductos, neque iniuste in captivitatem redactos fuisse, ac praeterea spondeat se eos honestis conditionibus ita vendituros esse, ut nihil ex eiusmodi venditione laedantur periclitentur iura et officia, quae illis tamquam hominibus, et, si christianam fidem amplexi fuerint, tamquam fidelibus competunt. Tandem de dubio 15 statuendum est christianos ipsos, etiam missionarios, interesse posse ut testes et sequestres aliove nomine per sacros canones non prohibito, contractibus, iudiciis, aliisque id genus publicis actibus servorum causa fieri solitis, qui tamen et in se liciti sint. et nulla prava circumstantia vitentur. V. Sequitur quarta dubiorum classis, de servis fugitivis. Mancipium iuxta leges Galliarum et Sidamarum in rerum utilium numero censetur, de quibus verum propriumque dominium habetur, et fiunt contractus, quaeque deperditae conquiruntur, raptae aut usurpatae apud iudices repetuntur. Hinc quaeritur:

16. An liceat christianis ipsisque missionariis servos suos fugitivos persequi, atque ad redeundum cogere, vel saltem permitttere ut eosdem persequantur, et vi etiam adhibita reducant publicis magistratus aut amici.

17. An servi ius habeant ad fugam, et an debeant resarcire damna ex eorum fuga domino illata.

18...

19...

Quemadmodum adnotatum est in responsione ad postulata proxime superiora, sunt tusti aliqui tituli seu causae, ex quibus potest servus libertate sua legitime privari, legitimeque a domino retineri. Porro cum manifeste repugnet, hinc quidem ius domino competere possidendi ac retinendi servum, inde autem ius servo inesse ne a domino possideatur ac retineatur, nemo non videt christianos et missionarios de quibus agitur in dubio 16, posse tuta conscientia servos suos fugitivos persequi, et ad redeundum cogere, siquidem eos iuste in servitum redactos iusto ex titulo possideant. Non ita expedita est ad 17 et 18 dubium responsio. Regulariter fugere iure suo possunt servi qui iniuste fuerint in servitum redacti; non possunt servi qui iustam subeant servitum, nisi forte a domino

sollicitentur ad aui quod peccatum, vel inhumaniter tractentur. Ex hac distinctione pendet solutio alterius quaestionis, an scilicet servi fugitivi teneantur resarcire damna ex fuga sua domino illata. Cum enim ad inducendam restituendi I amni obligationem tria haec simul et coniunctim requirantur, culpa theologica, damnum secutum, et causa efficax, patet profecto ad reficienda damna ex fuga sua domino illata, tenere servos illos quorum fuga fuit graviter illicita, non teneri servos illos quorum fuga omni caruit culpa; sed de licetate fugae, deque obligatione resarciendi damna ex fuga illata consulat Vic. Ap. probatos auctores et cum illis distinguat varios casus, variosque servitutis titulos.

The UN Committee on Rights of the Child and the Holy See: UN-Holy

This is a summary of the "Main areas of concern" in the "[Concluding observations on the second periodic report of the Holy See](#)" that the UN Committee on Rights of the Child issued at its 65th session on the 31st of January 2014. It is published here as part of [The Atheist Bible](#).

The reply of the Holy See is summarized at the end of this document.

Children's Rights and the Holy See

In its report, the UN Committee on Rights of the Child regrets / reiterates its concern / is concerned / expresses its deepest concern / is gravely concerned / is particularly concerned

1. that most of the recommendations [from] 1995 **have not been fully addressed**.
2. that some of the rules of **Canon Law are not in conformity with [the Convention of Children's rights]**, in particular those relating to children's rights to be protected against discrimination, violence and all forms of sexual exploitation and sexual abuse.
3. that the Holy See has not established a mechanism to monitor respect for and compliance with children's rights by individuals and institutions of a religious nature under the authority of the Holy See, including all Catholic schools, as well as in the Vatican City State.
4. about the Holy See's past statements and declarations on homosexuality which contribute to the social stigmatization of and **violence against lesbian, gay, bisexual, and transgender adolescents and children raised by same sex couples**.
5. that the Holy See continues to place emphasis on the promotion of complementarity [of genders], which differ[s] from equality in law and practice provided for in article 2 of the Convention and are often used to **justify discriminatory legislation and policies**.
6. that the Holy See did not provide precise information on the measures taken to promote equality between girls and boys and to remove **gender stereotypes from Catholic schools textbooks** as requested by the Committee in 1995.
7. that in dealing with allegations of child sexual abuse, the Holy See has **consistently placed the preservation of the reputation of the Church and the protection of the perpetrators above children's best interests**, as observed by several national commissions of inquiry.
8. that the Holy See restrictively interprets children's right to express their views in all matters affecting them, as well as their **rights to freedom of expression, association and religion**.
9. about the situation of children born of Catholic priests, who, in many cases, are not aware of the identity of their fathers.
10. that the mothers [of children conceived with priests] obtain [...] regular payment from the Church [...] only if they sign a confidentiality agreement **not to disclose any information**.
11. that girls placed in [the Magdalene laundries of Ireland] were forced to work in **slavery like conditions** and were often subject to inhuman, cruel and degrading treatment as well as to **physical and sexual abuse**
12. that girls [in the Magdalene laundries of Ireland] were deprived of their identity, of education and often of food and essential medicines and were imposed with an obligation of silence and **prohibited from having any contact** with the outside world.
13. that unmarried girls [in the Magdalene laundries of Ireland] who gave birth before entering or while incarcerated in the laundries had their **babies forcibly removed** from them.
14. that **no action has been taken** to investigate the conduct of the sisters who ran [the Magdalene laundries of Ireland] and to cooperate with law enforcement authorities.
15. that [...] **corporal punishment**, including ritual beatings of children, has been and remains widespread in some Catholic institutions and reached endemic levels in certain countries.
16. [that] the Holy See still does not consider corporal punishment as being prohibited by the Convention and has therefore not enacted guidelines and rules clearly banning corporal punishment of children in Catholic schools, in all Catholic institutions working with and for children, as well as in the home.
17. that in spite of its considerable influence on Catholic families, the Holy See has still not adopted a comprehensive strategy to prevent abuse and neglect [of children] in the home.

18. about child **sexual abuse** committed by members of the Catholic churches [...] of **tens of thousands of children** worldwide.
19. that the Holy See has **not acknowledged** the extent of the [sexual abuse] crimes committed.
20. [that the Holy See] has **not taken the necessary measures** to address cases of child sexual abuse and to protect children.
21. [that the Holy See] has adopted policies and practices which have led to the **continuation of the abuse** by and the impunity of the perpetrators.
22. that well-known child sexual abusers have been transferred from parish to parish or to other countries in an attempt to cover-up such crimes.
23. [that the Holy See] has declined to provide the Committee with data on all cases of child sexual abuse.
24. that child sexual abuse, when addressed, has been dealt with [...] through confidential proceedings [...], which have allowed the vast majority of abusers and almost all those who concealed child sexual abuse to **escape judicial proceedings**.
25. that, due to a **code of silence imposed** on all members of the clergy under penalty of excommunication, cases of child sexual abuse have hardly ever been reported to the law enforcement authorities.
26. [that there are cases where] of nuns and priests [have been] ostracized, demoted and fired for not having respected the obligation of silence, [and where] priests have been **congratulated for refusing to denounce child abusers**.
27. [that] reporting to national **law enforcement** authorities has never been made compulsory and **was explicitly rejected** in an official letter.
28. [that] in many cases, Church authorities, including at the highest levels of the Holy See, have shown reluctance and in some instances, **refused to cooperate with judicial authorities** and national commissions of inquiry.
29. [that] the Holy See objected to a draft final text proposing that religion, custom or tradition should not serve as an excuse for States to evade their obligations to protect women and girls from violence.
30. that the Holy See and Church run institutions do not recognize the existence of diverse forms of families and often discriminate children on the basis of their family situation.
31. about the situation of adolescents recruited by the Legion of Christ and other Catholic institutions who are progressively separated from their families and **isolated from the outside world**.
32. that in the case of a nine-year old girl in Brazil who underwent an emergency life-saving abortion in 2009 after having been raped by her stepfather, an Archbishop of Pernambuco sanctioned the mother of the girl as well as the doctor who performed the **abortion**, a sanction which was later approved by the head of the Roman Catholic Church's Congregation of Bishops.
33. about the negative consequences of the Holy See's position and practices of denying adolescents' access to **contraception**, as well as to sexual and reproductive health and information.
34. that **thousands of babies have been forcibly withdrawn** from their mothers by members of Catholic congregations in a number of countries.
35. [that] the Holy See did not conduct an internal investigation into these cases and failed to take action against those responsible.
36. [that] the Holy See has **systematically placed preservation of the reputation of the Church and the alleged offender over the protection of child victims**
37. that child victims and their families have often been blamed by religious authorities, discredited and discouraged from pursuing their complaints and in some instances humiliated.
38. that **confidentiality has been imposed** on child victims and their families as a precondition of financial compensation.
39. that the Holy See has in some instances **obstructed efforts** in certain countries to extend the statute of limitation for child sexual abuse

Response of the Holy See

On [its Web site](#), the Holy See responded as follows:

1. The Holy See takes note of the Concluding Observations on its Reports.
2. The Holy see regrets to see [...] an attempt to interfere with Catholic Church teaching [...].
3. The Holy See reiterates its commitment to defending and protecting the rights of the child.