

```
1. 0
                                                 Premise
2. ~E
                                                  Premise
      (sub-argument) \begin{cases} a. & E \supset P \\ b. & \sim P / \therefore \sim E \end{cases}
3. O \supset (I \equiv (\sim E \cdot \sim F))
                                                  Premise
4. I⊃~M
                                                  Premise
5. ~M ⊃ ~U
                                                  Premise
6. U
                                                  Premise
7. F \supset G / :: G
                                                  Premise/Conclusion
8. I = (~E • ~F)
9. (I ⊃ (~E • ~F)) • ((~E • ~F) ⊃ I)
                                                  M.P. 1, 3
                                                  Equiv. 8
10.(~E • ~F) ⊃ I
                                                  Simp. 9
11.~~U
                                                  D.N. 6
12.~~M
                                                  M.T. 5, 11
13.~I
                                                 M.T. 4, 12
14.~(~E • ~F)
                                                 M.T. 10, 13
15.E ∨ F
                                                 DeM. 14
16.F
                                                 D. Syll. 15, 2
17.G
                                                 M.P. 7, 16
```

Formal arguments are called 'formal' precisely because our analysis of them focuses on the "form" or "structure" of the argument, not the contents of the premises of the argument.

When analyzing formal arguments, what matters is how the premises of the argument relate to the conclusion.

In formal logic, there are strict rules governing these relationships.

When any of these rules are broken, the argument is said to be invalid, having committed a formal fallacy.

Formal fallacies

stem from an error regarding the form or structure of the argument irrespective of the content of the premises.

Informal fallacies

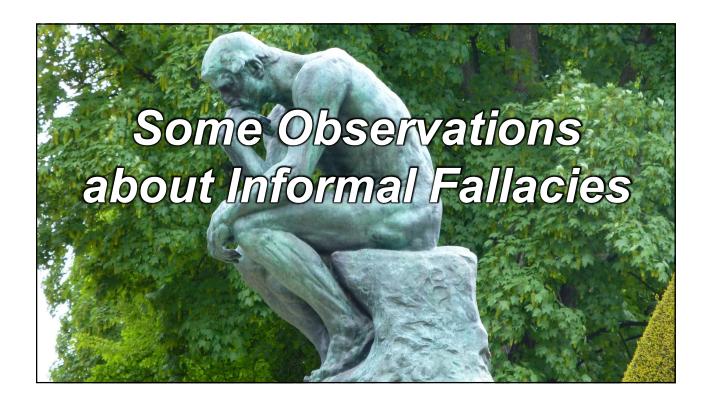
arise almost exclusively from the relationship of the content of the premises to the context within which the argument is advanced.

- 1. The Sun is sixty miles from the Earth.
- 2. Light travels at sixty MPH.
- 3. Therefore, it takes light one hour to get from the Sun to the Earth.

If the premises are true,

the conclusion has to be

true.



Because informal fallacies arise from the relationship of the content of the argument to the context of the argument, the same informal structure in a different context might not give rise to an informal fallacy.

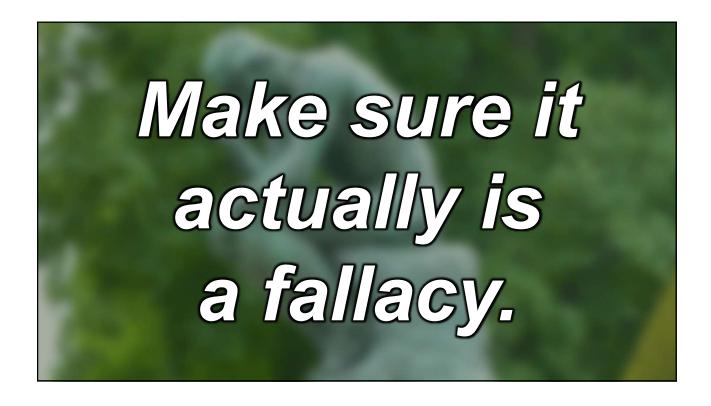
If x is bigger than y and y is bigger than z then x is bigger than z.

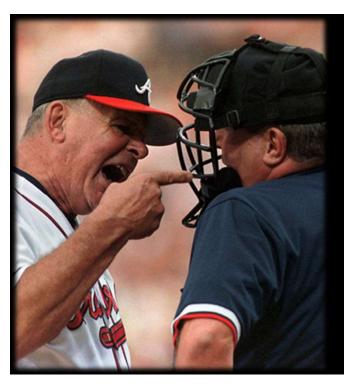
∀(x) ∀(y) ∀(z) ((Bxy • Byz) ⊃ **Bxz))**

If x is the mother of y and y is the mother of z then x is the mother of z.

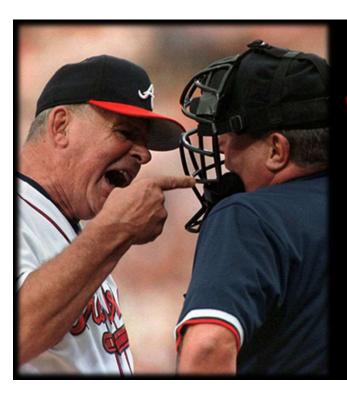
 $\forall (x) \ \forall (y) \ \forall (z) \ ((Bxy \cdot Byz) \supset Bxz))$ $\forall (x) \ \forall (y) \ \forall (z) \ ((Mxy \cdot Myz) \supset Mxz))$





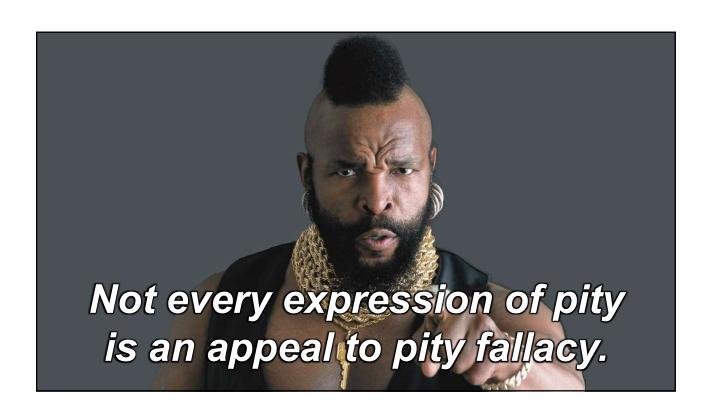


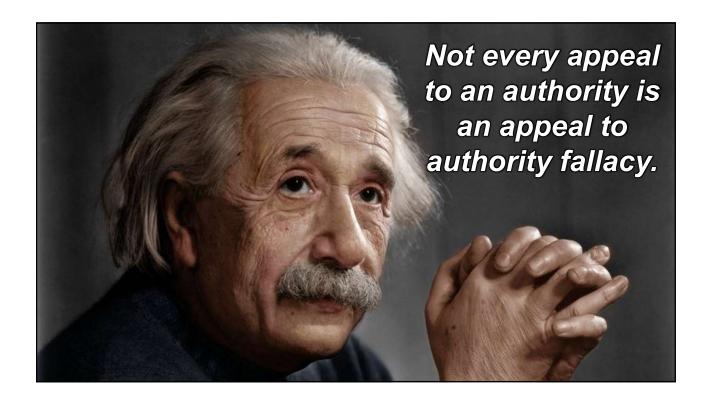
There's nothing necessarily wrong with someone using passion and emotion in conveying his views and arguments.



The fallacy occurs when the emotions seek to serve as a surrogate for evidence and reason.



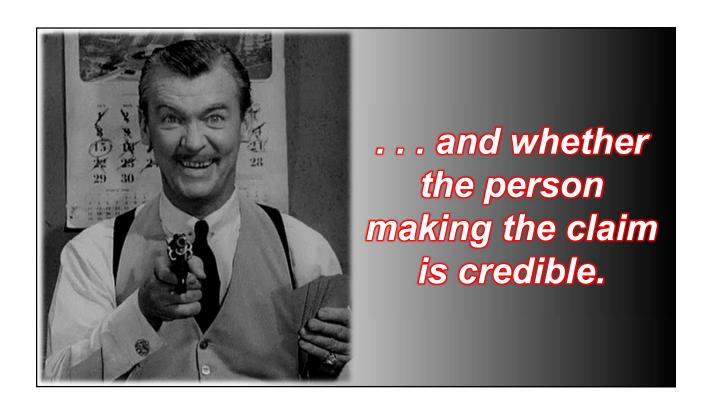




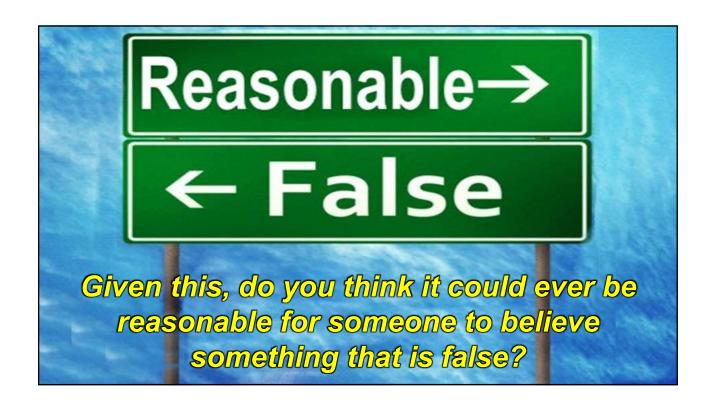


Note, further, that there is a difference between truth and credibility.

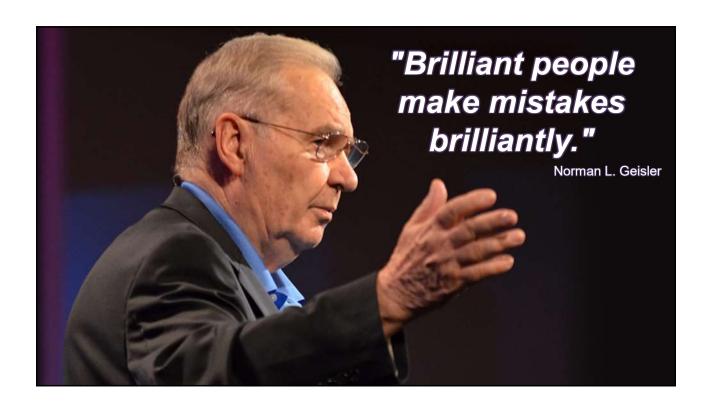




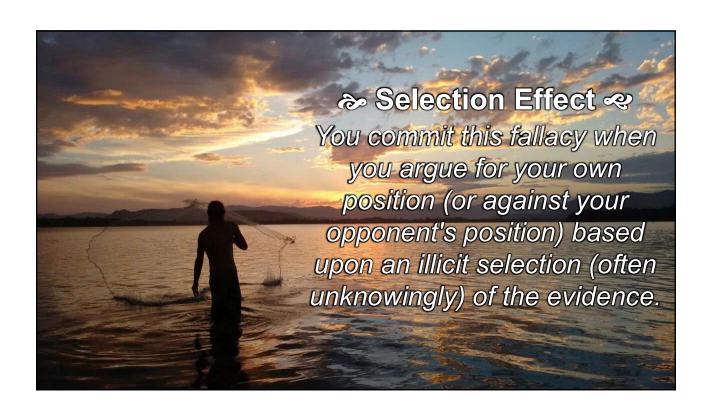
Thus, while is it true that certain facts about the person do not necessarily make the person's claims false, it may be that certain facts about the person would make it unreasonable to trust him.

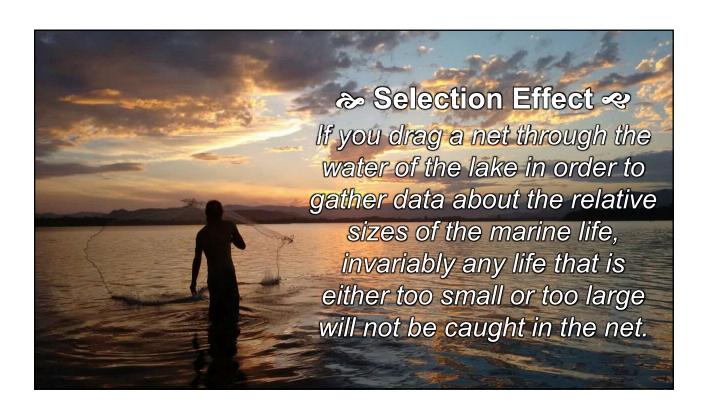


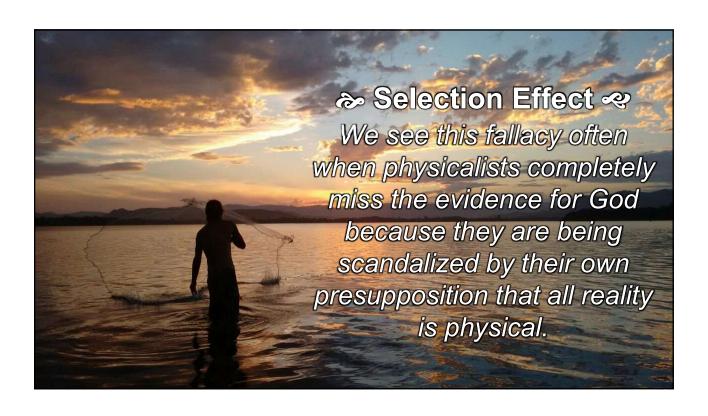


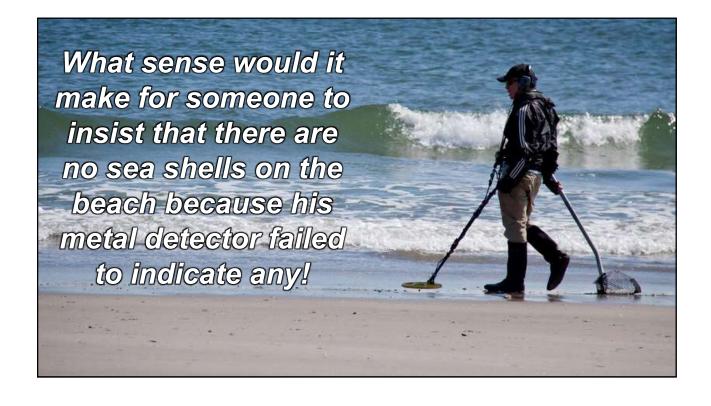


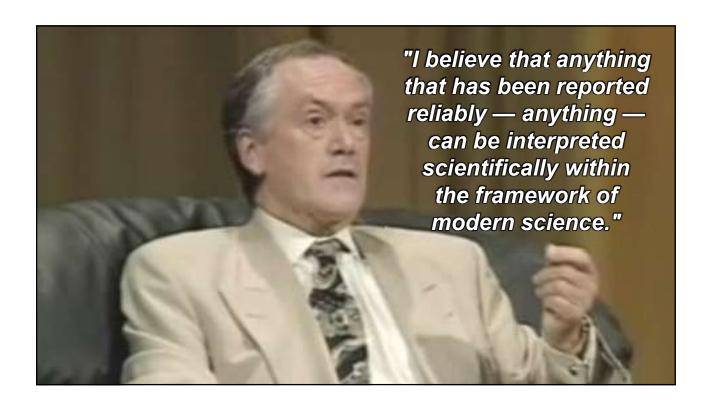












Can Atkins' statement "be interpreted scientifically within the framework of modern science"?

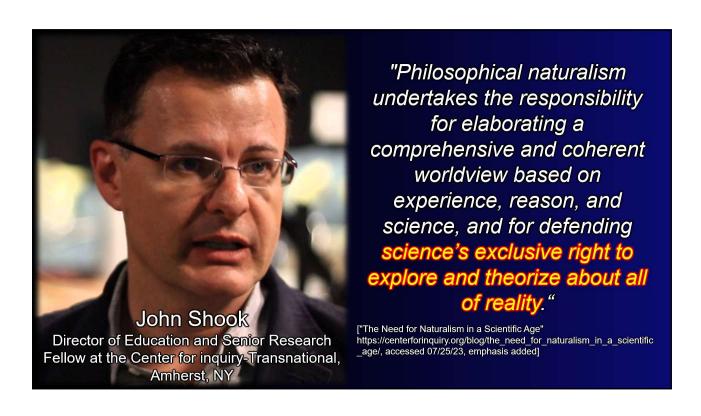
"I believe that anything that has been reported reliably — anything — can be interpreted scientifically within the framework of modern science."

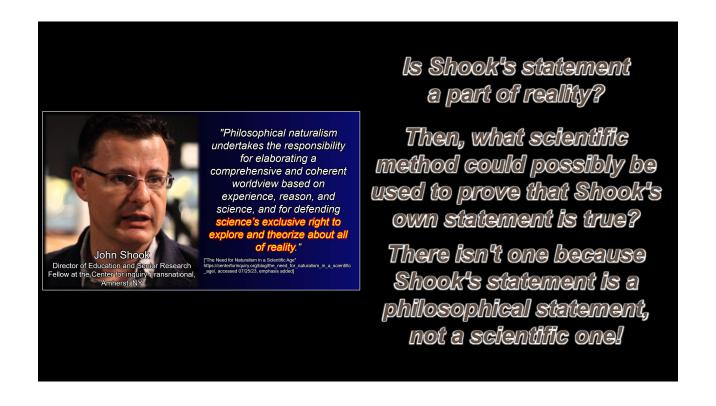
It would seem one could interpret any statement within any framework.

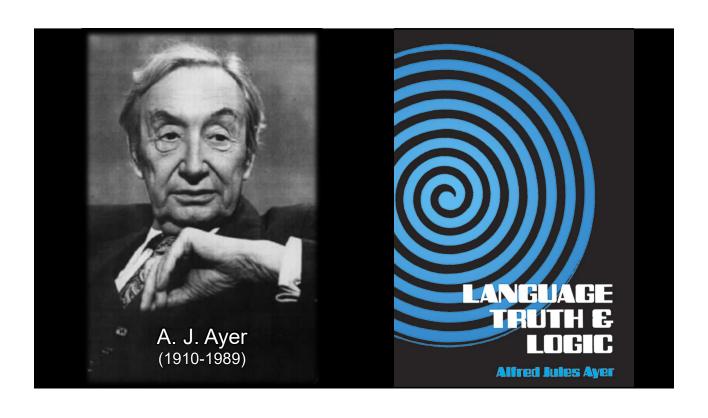
"I believe that anything that has been reported reliably — anything — can be interpreted scientifically within the framework of modern science."

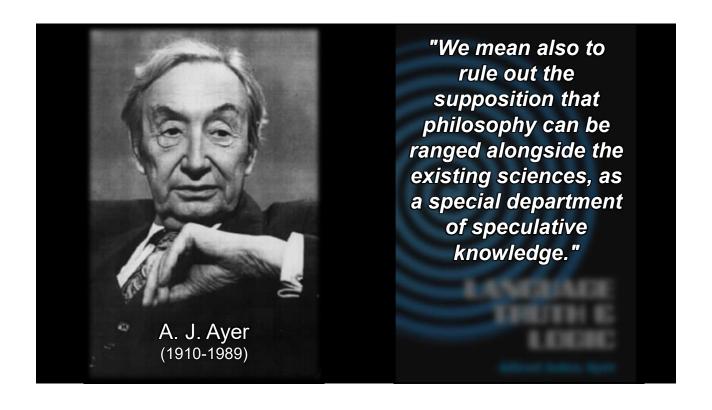
Can Atkins'
statement "be
CORRECTLY
interpreted
scientifically
within the
framework of
modern science"?

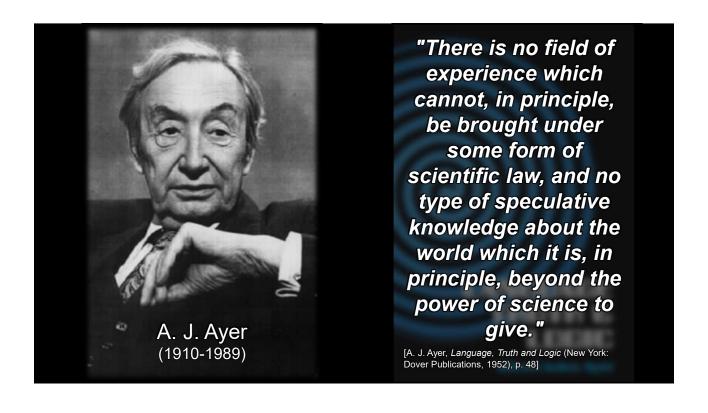
"I believe that anything that has been reported reliably — anything — can be interpreted scientifically within the framework of modern science."





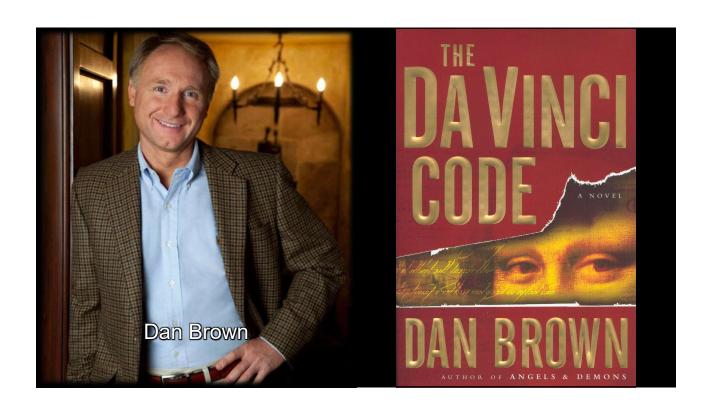


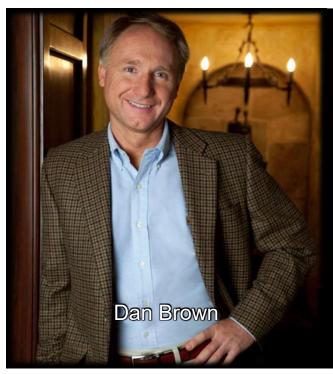




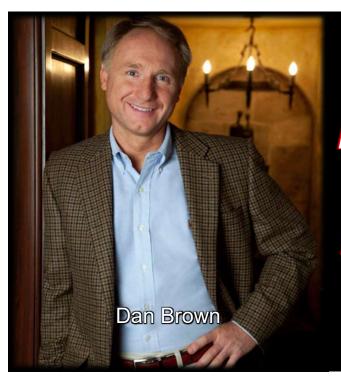


You commit this fallacy when you imply or argue that your opponent's position is false because of some questionable aspect about the origin of the opponent's belief.

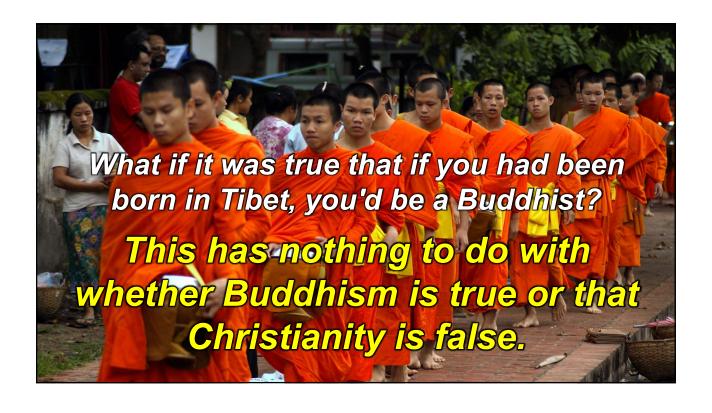


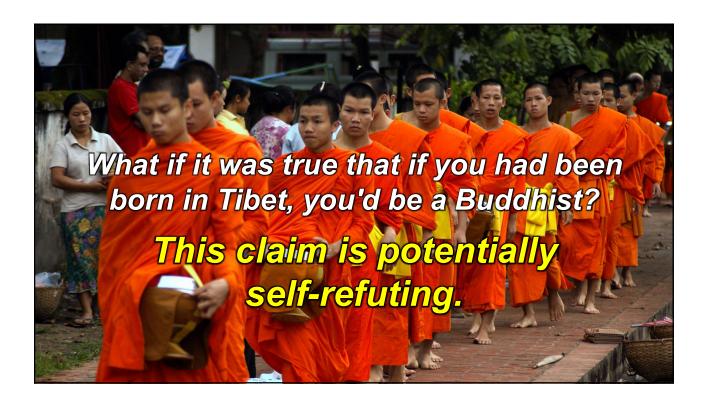


"I humbly submit that if all of us in this room had been born in Tibet, probably a lot of us would be Buddhist. I think the chance is pretty good.



"And I also think
we'd hold on to that
Buddhist philosophy
with all the passion
that some of us
might hold on to our
Christian ideals."





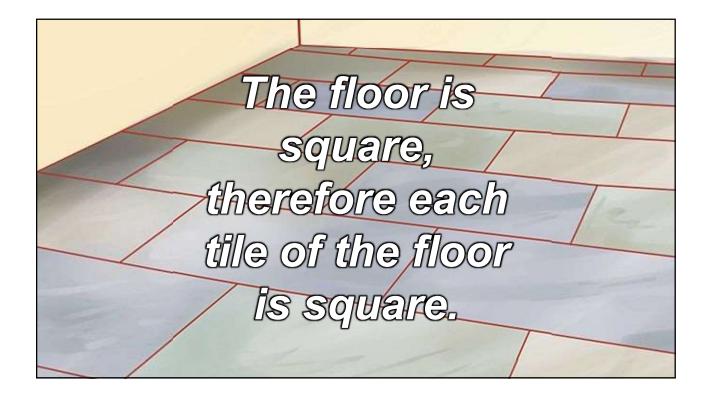
I could counter by saying that
the only reason Dan Brown
believes that if all of them in the
room had been born in Tibet,
probably a lot of them would be
Buddhist is because of where
Dan Brown was born.



Secondary of Composition/Division
You commit the fallacy of composition
when you illicitly apply the
characteristics of the parts to the whole.



You commit the fallacy of division when you illicitly apply the characteristics of the whole to the parts.



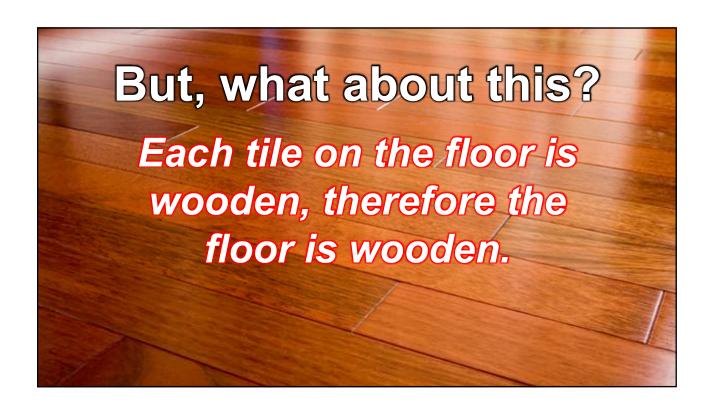
The most common first name in the world is Muhammad.
The most common surname in the world is Chang.

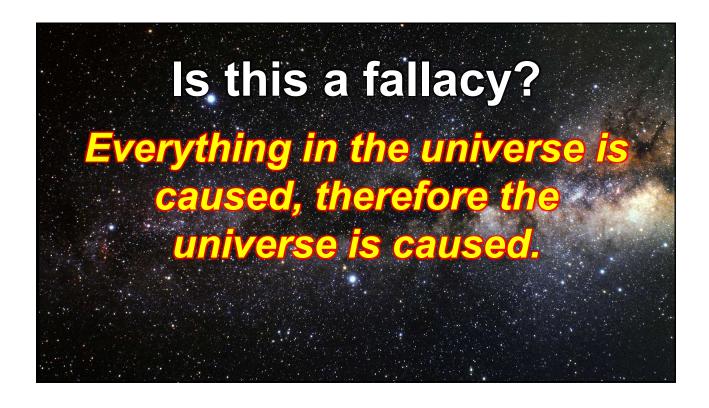
Does it follow that the most common full name in the world is Muhammad Chang?

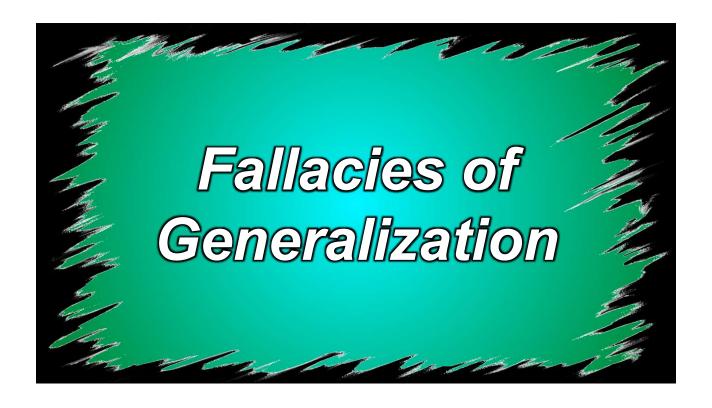
- 1. Fifty-five percent of Ole Miss graduates are female.
- 2. Richard is an Ole Miss graduate.
 Therefore, Richard is fifty-five percent female.

But, what about this?

Each tile on the floor is white, therefore the floor is white.





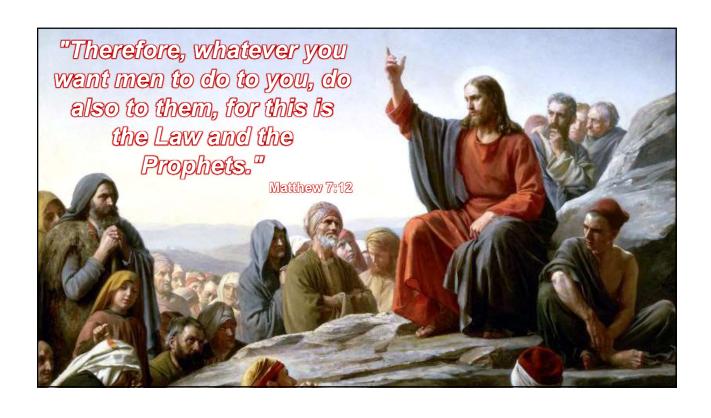


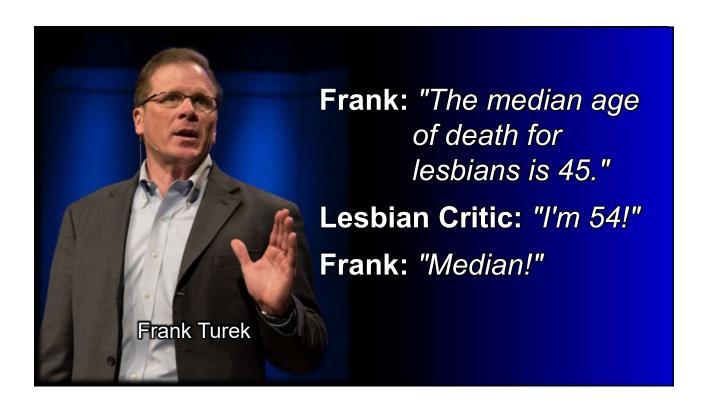
Fallacy of Accident ✓

(dicto simpliciter)

You commit this fallacy when you illicitly apply a legitimate generalization to a specific (accidental) exception.

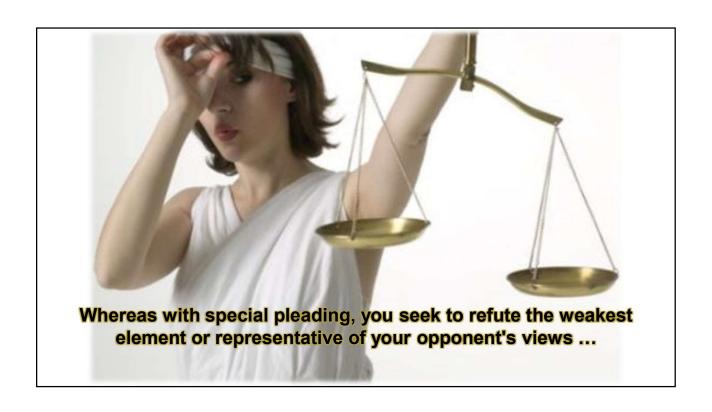


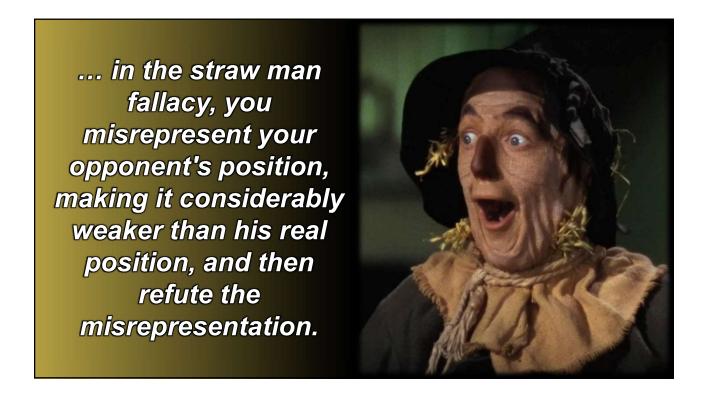


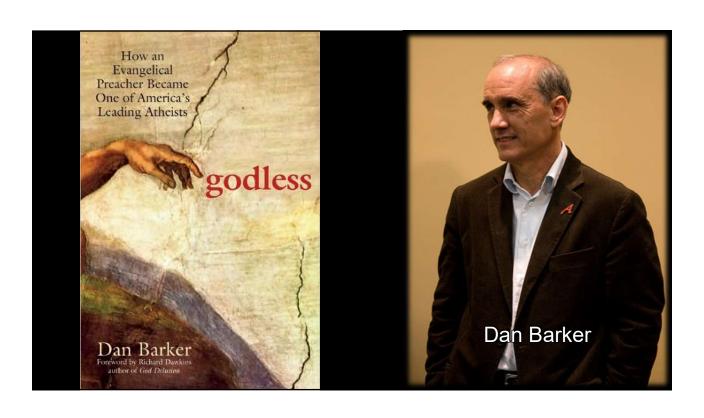


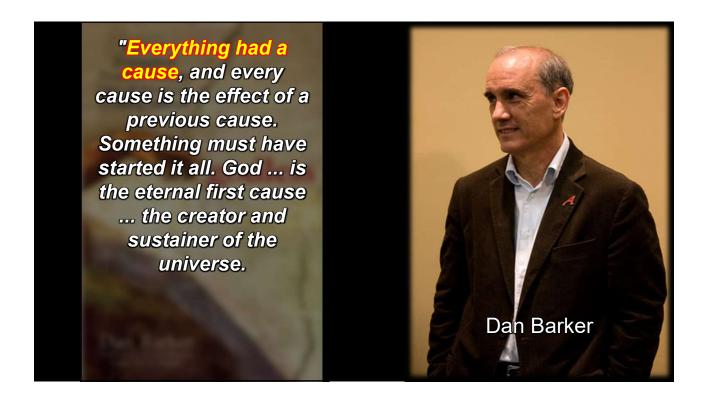






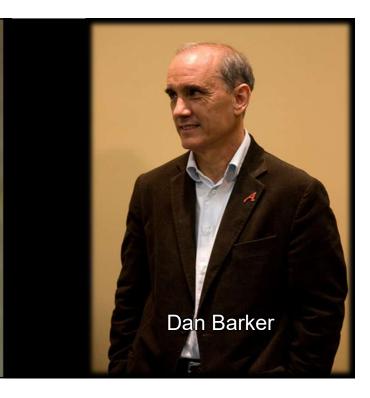






"The major premise of this argument 'everything had a cause,' is contradicted by the conclusion that 'God did not have a cause.' You can't have it both ways. If everything had to have a cause, then there could not be a first cause."

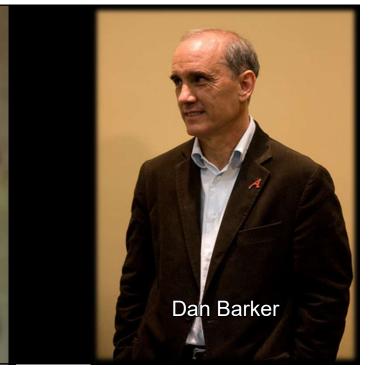
[Dan Barker, Godless: How an Evangelical Preacher Became One of America's Leading Atheists (Berkeley: Ulysses Press, 2008), 113-114]



"The old cosmological argument claimed that since everything has a cause, there must be a first cause, an 'unmoved first mover.'

Today no theistic philosophers defend that primitive line because if everything needs a cause, so does God."

[Dan Barker, Godless, 130]





"I want to quickly go over some of the eleven major proofs. They have been 900 years in the formulation, and during this 900 years, this is what people have basically come up with. ... Everything must have a cause, therefore the universe must have a cause, and that cause was God. God was the first or uncaused cause. ... This leads to a real logical bind for the theist, because, if everything must have a cause, then God must have a cause. If God had a cause, he cannot be the first or uncaused cause. If God did not have a cause, then not everything must have a cause. If not everything needs a cause, then perhaps the universe doesn't need a cause. Thus, there is a logical bind and the proof fails."

[The Great Debate: Does God Exist? Greg L. Bahnsen and Gordon Stein,

University of California, Irvine, 1985]

ATHEISN.

THE CASE AGAINST GOD

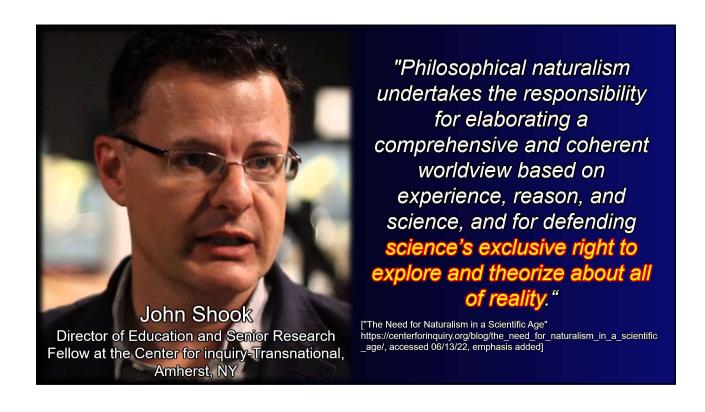
BY GEORGE H. SMITH

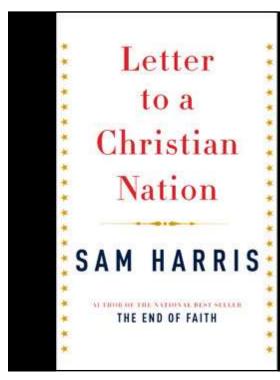
The Skeptic's Bookshelf



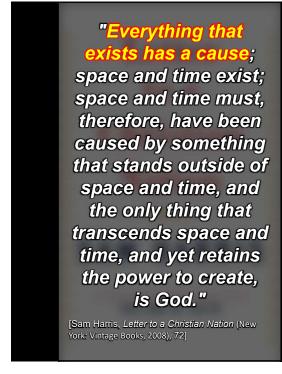
"Every existing thing has a cause, and every cause must be caused by a prior cause, which in turn must be caused by a still prior cause, and so on, until we reach one of two conclusions: (a) either we have an endless chain of causes—an infinite regress, or (b) there exists a first cause, a being that does not require a causal explanation.

[George H. Smith, Atheism: The Case Against God, (Buffalo: Prometheus, 1979), 236]

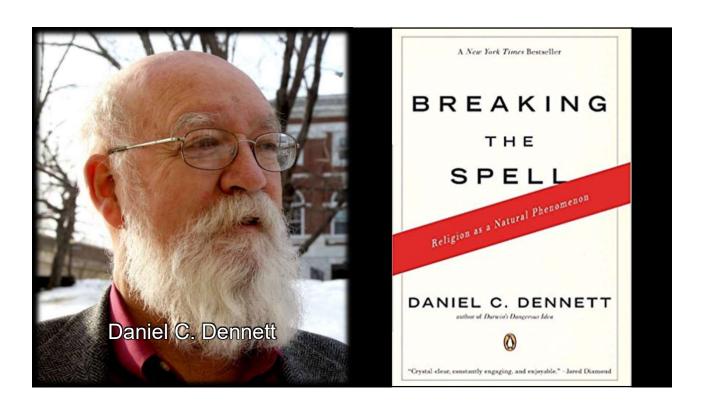


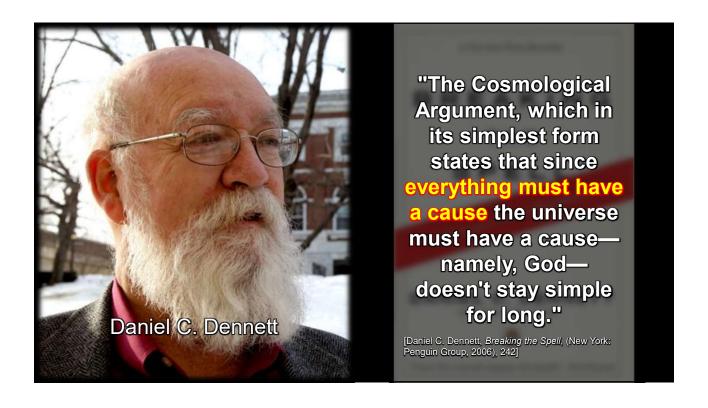


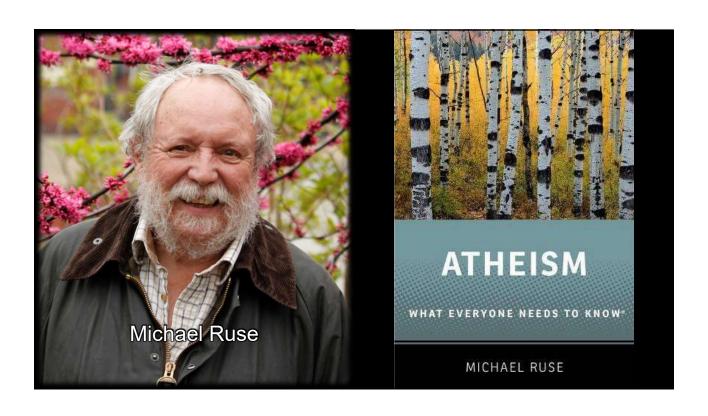


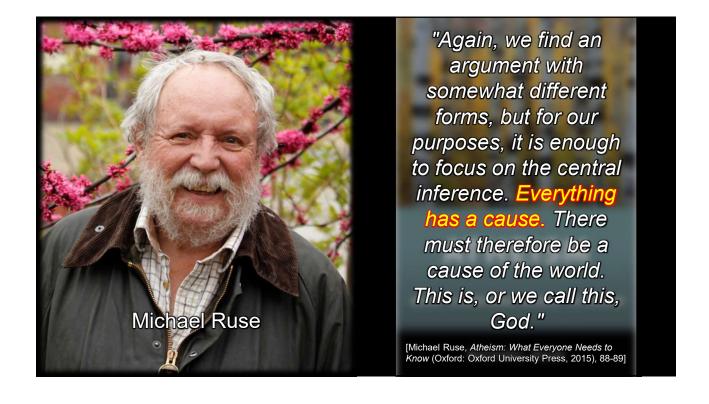


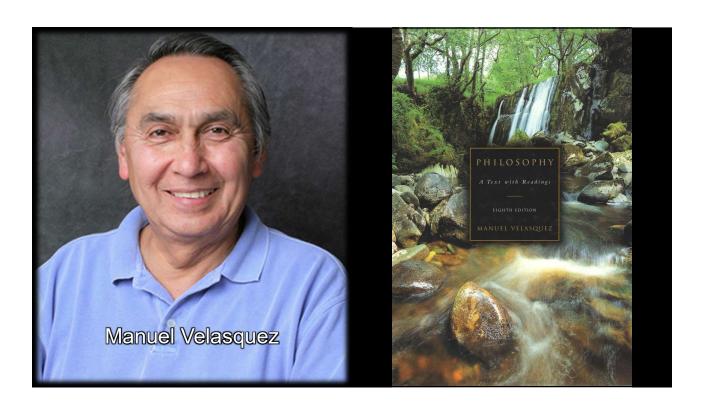


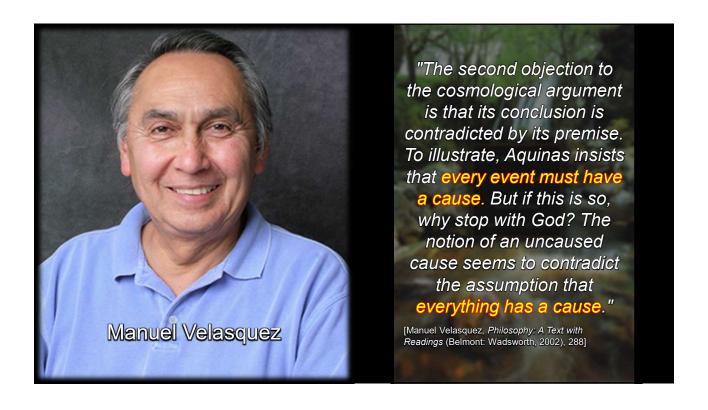












First, even if Aquinas argued that "every event must have a cause," God is not an event.

Second, notice in his misconstruing of Aquinas's argument, he illicitly shifts from "every event" to "everything." Even if one argued that every event must

have a cause, this is not

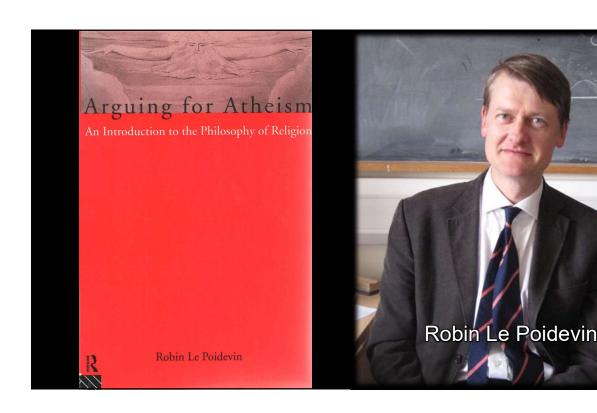
equivalent to saying that

everything has a cause.

"The second objection to the cosmological argument is that its conclusion is contradicted by its premise. To illustrate, Aquinas insists that every event must have a cause. But if this is so, why stop with God? The notion of an uncaused cause seems to contradict the assumption that everything has a cause."

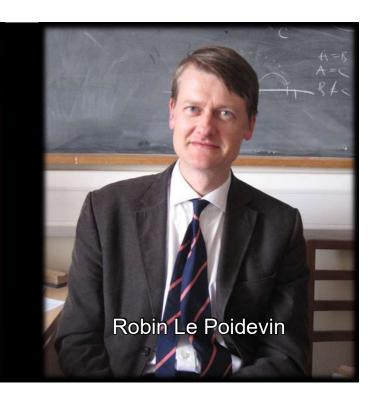
[Manuel Velasquez, Philosophy: A Text with]

Readings (Belmont: Wadsworth, 2002), 288]



"In this chapter we shall look at three versions of the cosmological argument. The first I shall call the basic cosmological argument, because the other two are modifications of it. It goes as follows. ... 1. Anything that exists has a cause of its existence. 2. Nothing can be the cause of its own existence. The universe exists. Therefore: The universe has a cause of its existence which lies outside the universe."

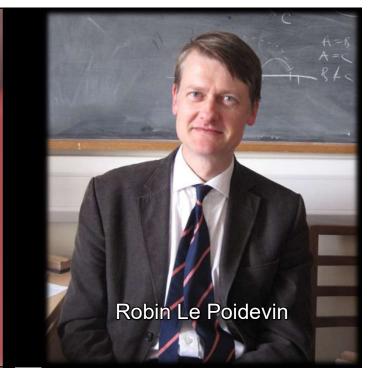
[Robin Le Poidevin, *Arguing for Atheism: An Introduction to the Philosophy of Religion* (London: Routledge, 1996), 4, emphasis in original]

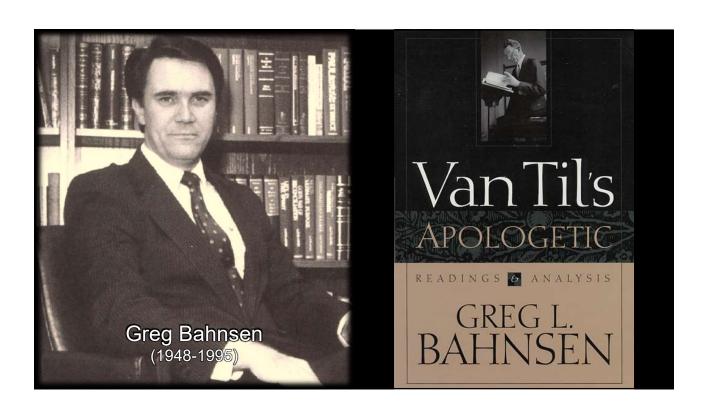


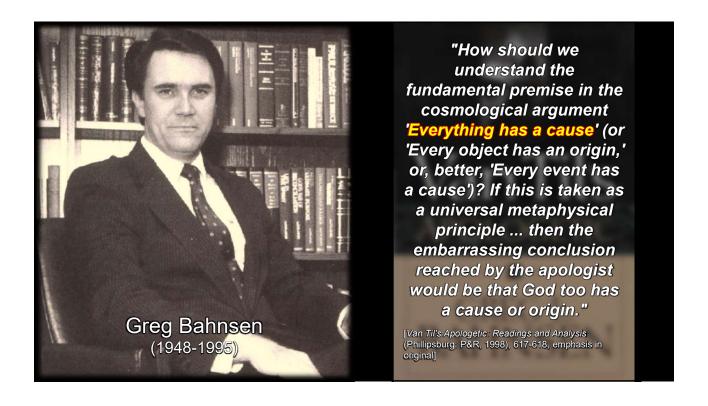
"Although no one has defended a cosmological argument of precisely this form, it provides a useful stepping-stone to the other, more sophisticated versions."

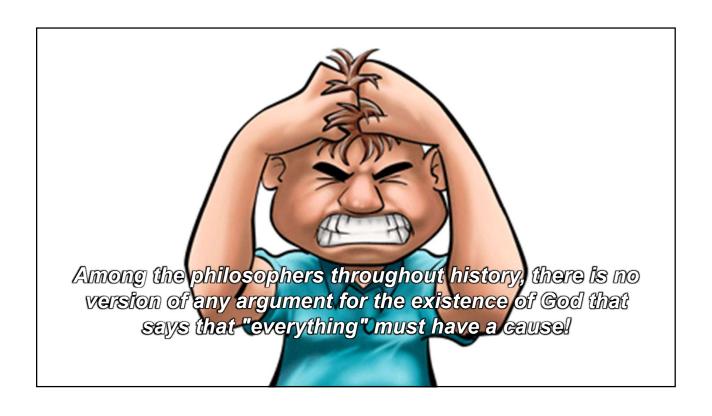
[Robin Le Poidevin, Arguing for Atheism: An Introduction to the Philosophy of Religion (London:

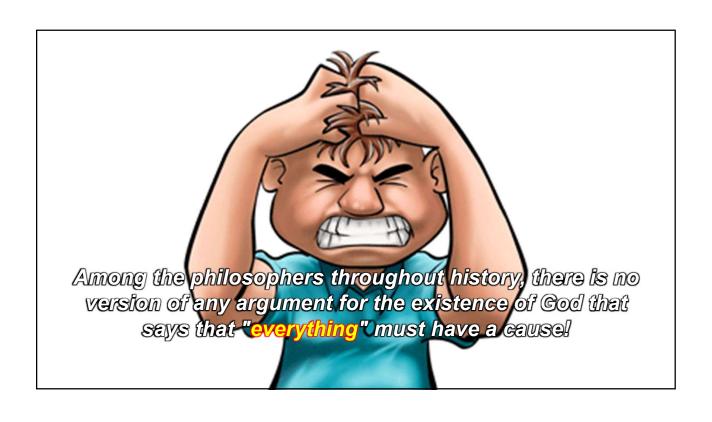
Routledge, 1996), 4]

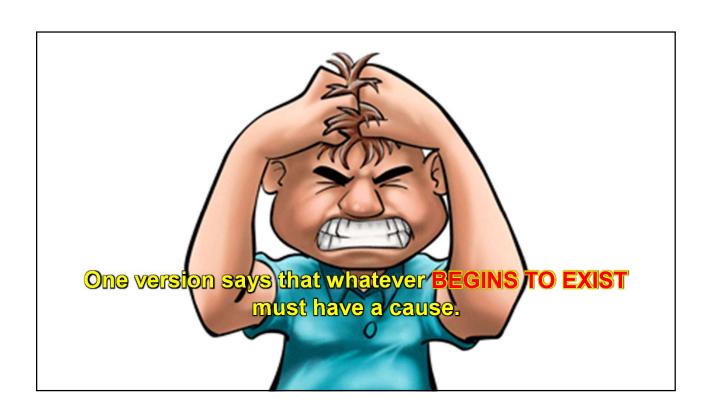


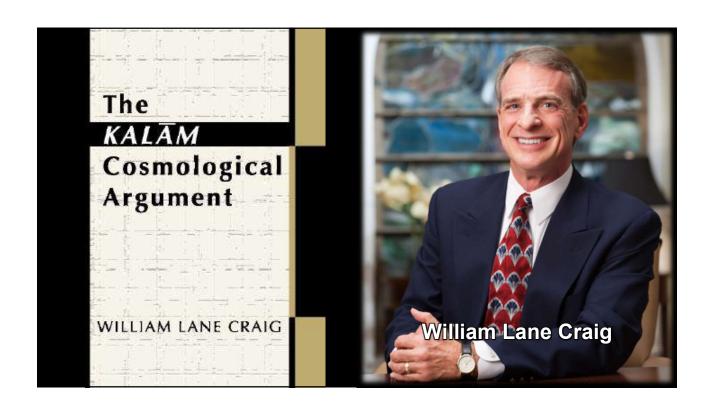


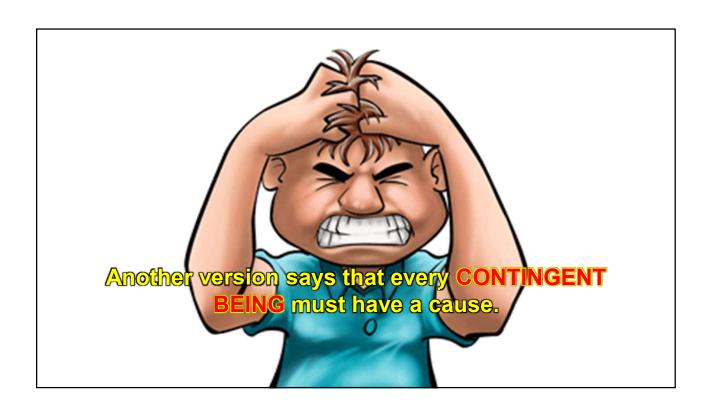




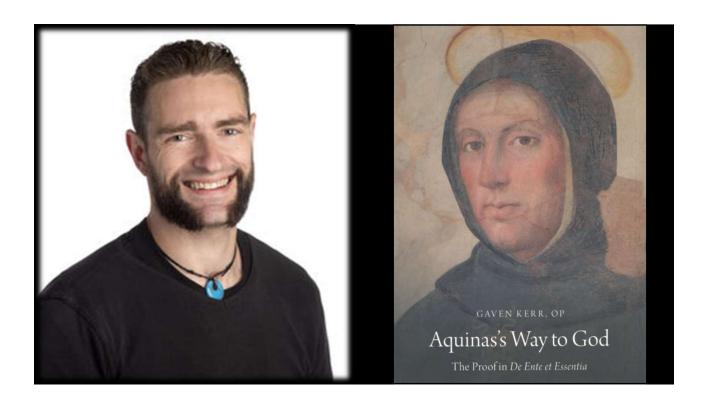












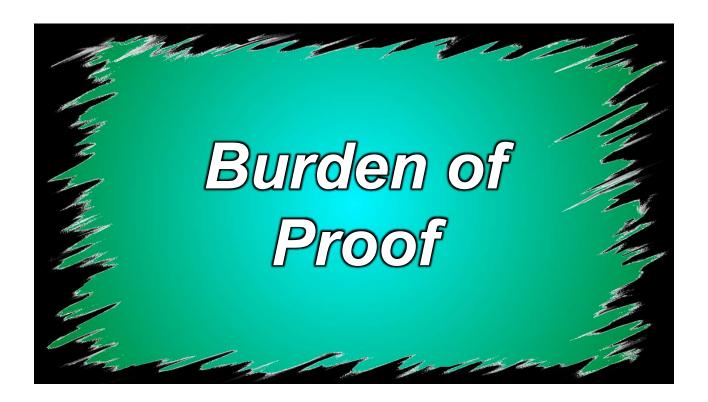
"No respectable theologian or theistic philosopher has ever made the claim, 'everything has a cause.' Yet various new atheists have proceeded to attack that straw man of their own making.

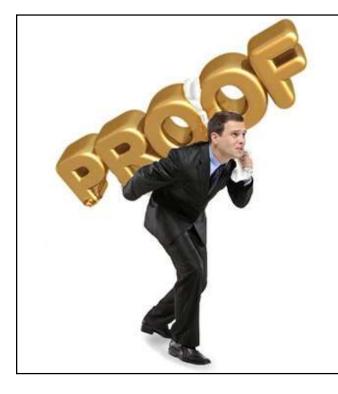
Jeffrey Jay Lowder

"I remember, when reading
The God Delusion by
Richard Dawkins, where he
attacked that straw man
and cringing. There are
many different cosmological
arguments for God's
existence and none of them
rely upon the stupid claim,
'everything has a cause."

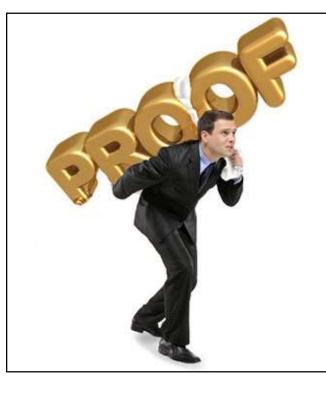


[http://www.patheos.com/blogs/secularoutpost/2014/02/17/feser-insults-readers-of-www-infidels-org/#comment-1248907824, accessed 02/06/21. This article has apparently been taken down from Patheos.]

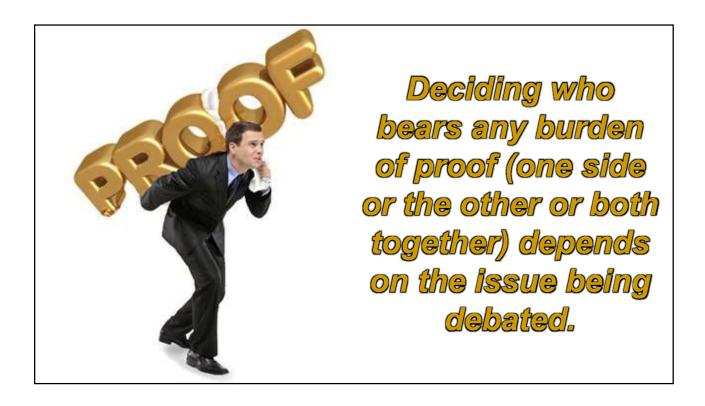


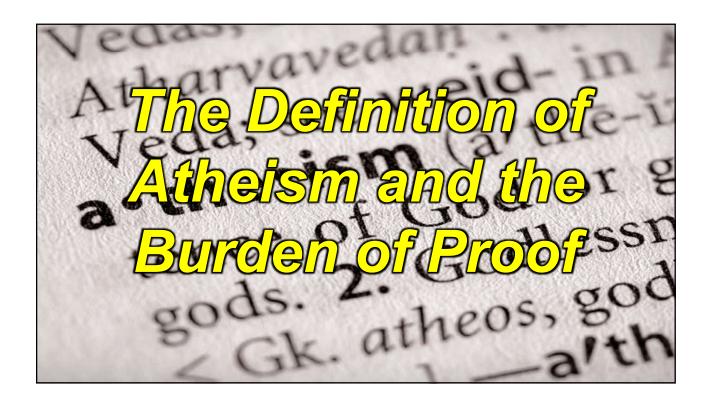


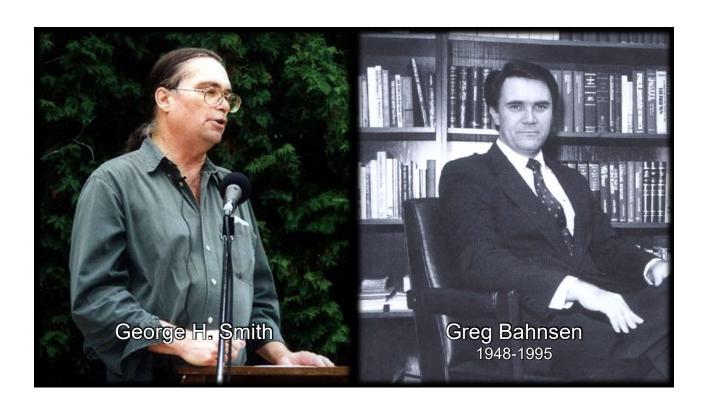
Burden of proof
has to do with
deciding who bears
the sole or greatest
obligation to prove
his position.

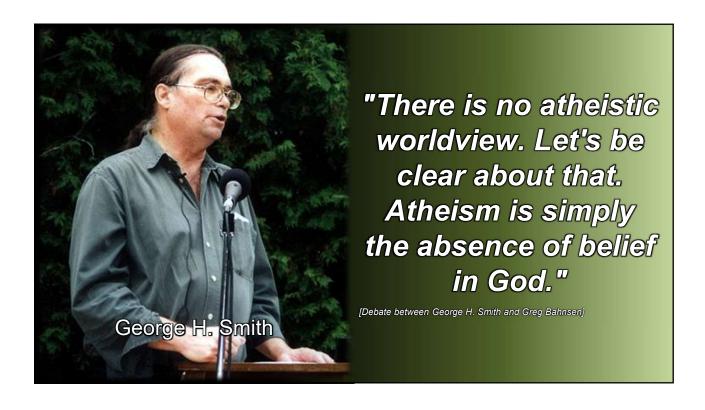


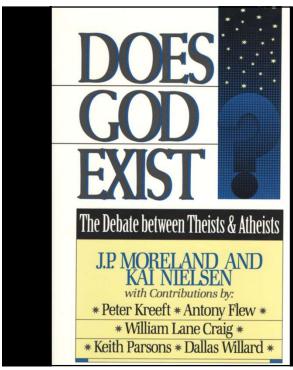
Burden of proof is not a fallacy as such. However, sometimes one can try to illicitly shift the burden onto his opponent.









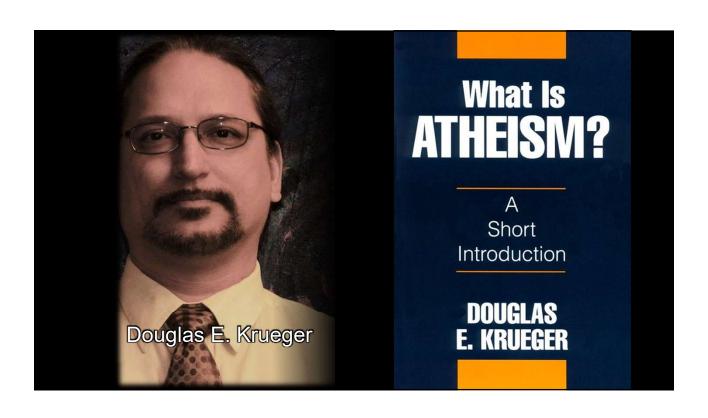


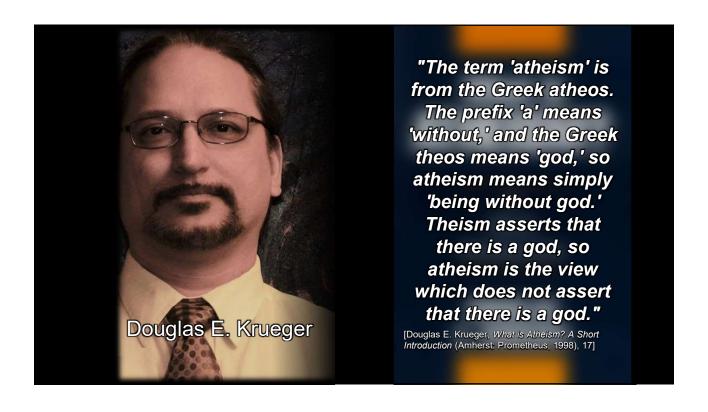


"After all, 'atheism' means simply the lack of belief in God (and not, as is commonly supposed, the denial of God's existence)."

[J. P. Moreland and Kai Nielsen Does God Exist? The Great Debate (Nashville: Thomas Nelson Publishers, 1990): 179 republished as Does God Exist? The Debate Between Theists and Atheists (Buffalo: Prometheus Books, 1993): 179]



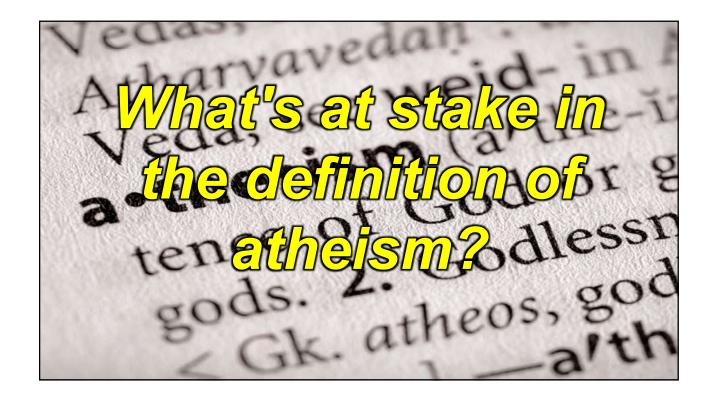


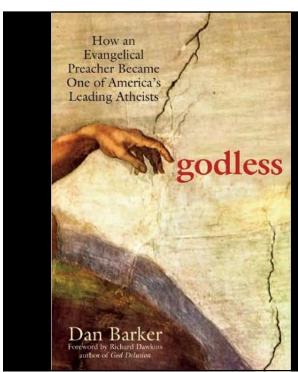


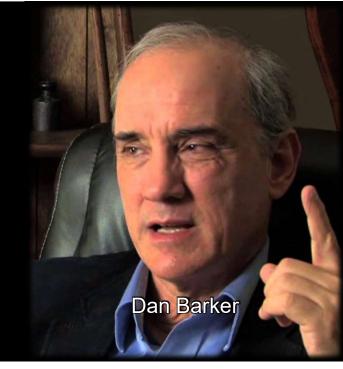
Notice that Krueger moves from the alpha megating 'god' (which would mean 'without god' or 'not-god')—
to the alpha negating the assertion (which means the absence of the assertion of god instead of the absence of god).

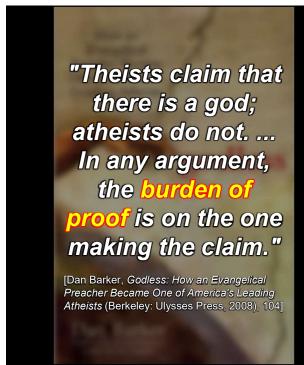
"The term 'atheism' is from the Greek atheos.
The prefix 'a' means 'without,' and the Greek theos means 'god,' so atheism means simply being without god."
Theism asserts that there is a god, so atheism is the view without does not assert that there is a god."

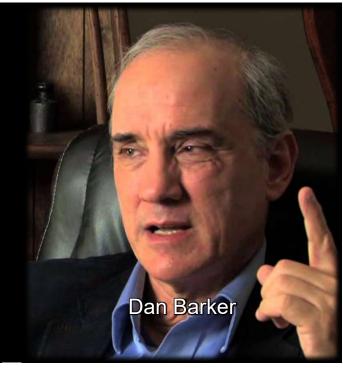
[Douglas E. Krueger, What is Atheism? A Short Introduction (Amherst: Prometheus, 1998), 17]

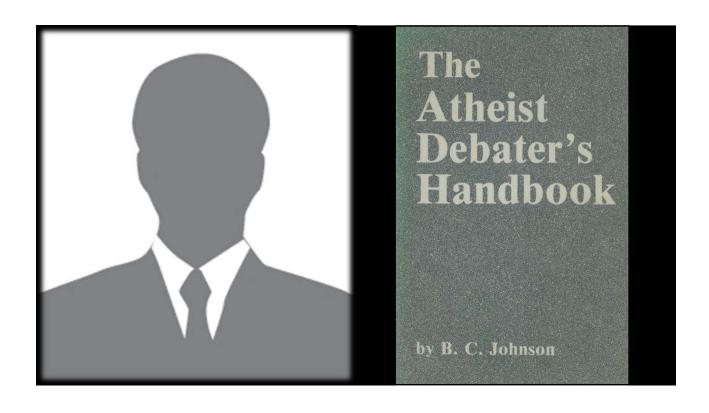










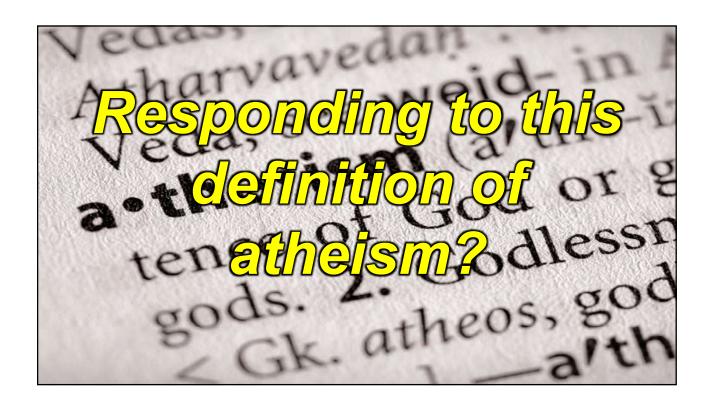


"Theists believe in God, while atheists do not have such a belief. Many theists insist that it is the responsibility of the atheist to offer evidence justifying his lack of belief in God. But is the theist's demand rational? Must the atheist justify his lack of belief in God? Or does the burden rest with the theist?"

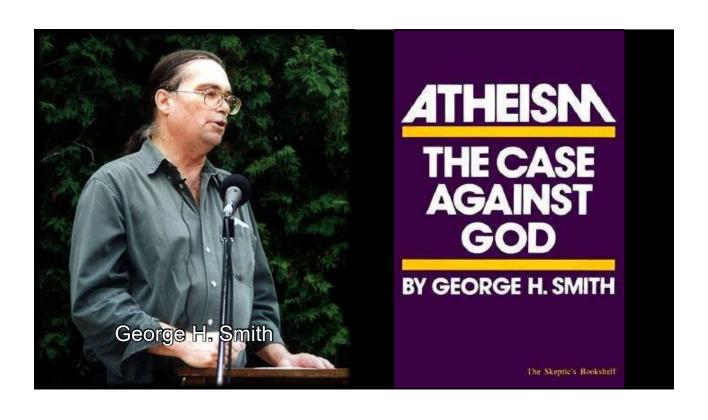
[B. C. Johnson, The Atheist Debater's Handbook (Buffalo: Prometheus Books, 1983): 11]

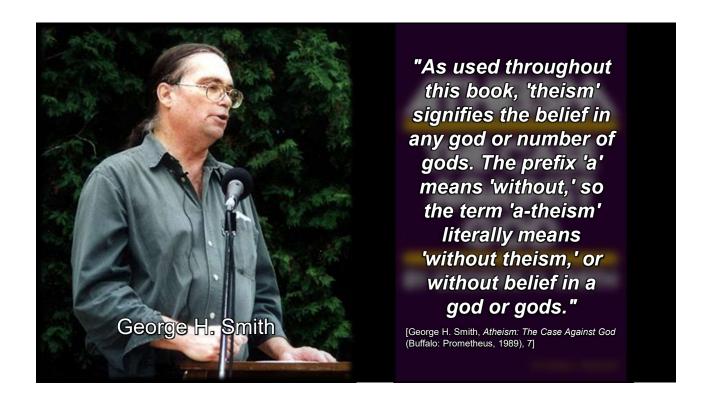
The Atheist Debater's Handbook

by B. C. Johnson









Granted that the suffix "ism" constitutes a belief system, Smith still illicitly has the negation "a" negating "belief" rather than negating "God."

Thus, rather than

"no belief in a God"

it should be

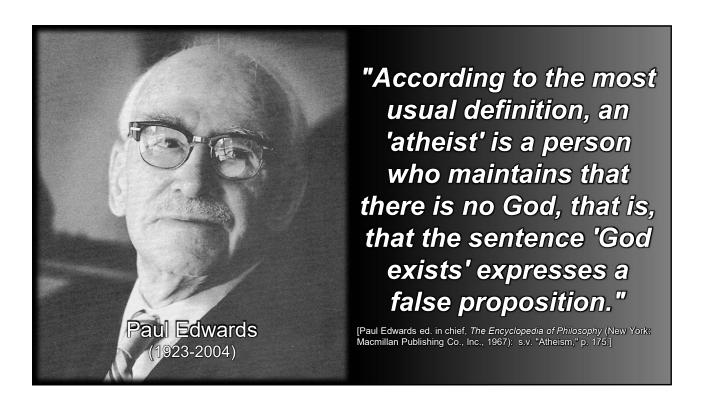
"a belief in no God."

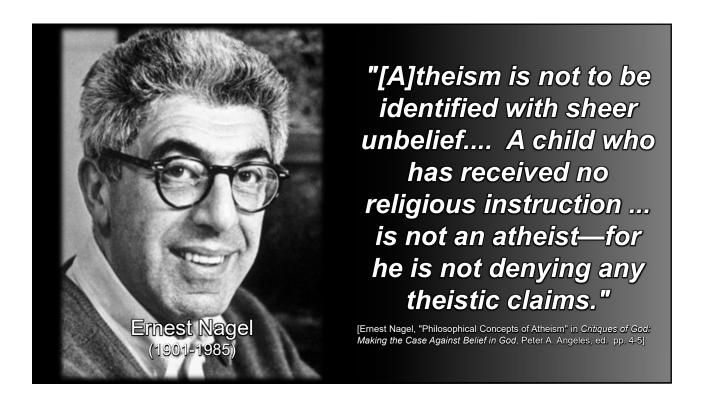
"As used throughout this book, 'theism' signifies the belief in any god or number of gods. The prefix 'a' means 'without,' so the term 'a-theism' literally means 'without theism,' or without belief in a god or gods."

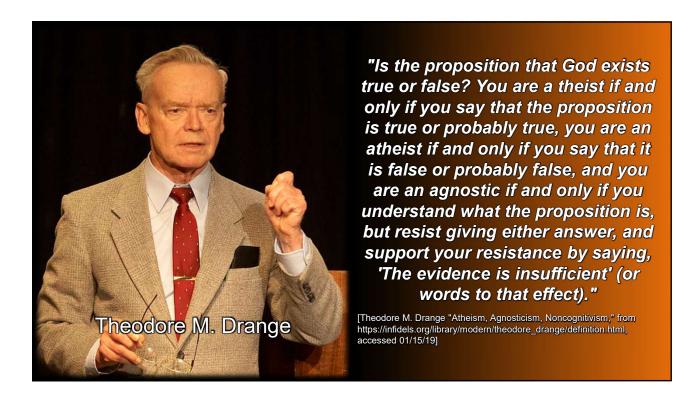
[George H. Smith, *Atheism: The Case Against God* (Buffalo: Prometheus, 1989), 7]

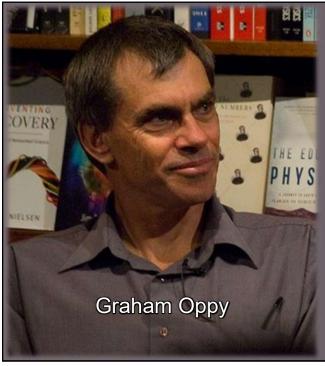


Second, this definition conflicts with the standard academic definition of atheism.



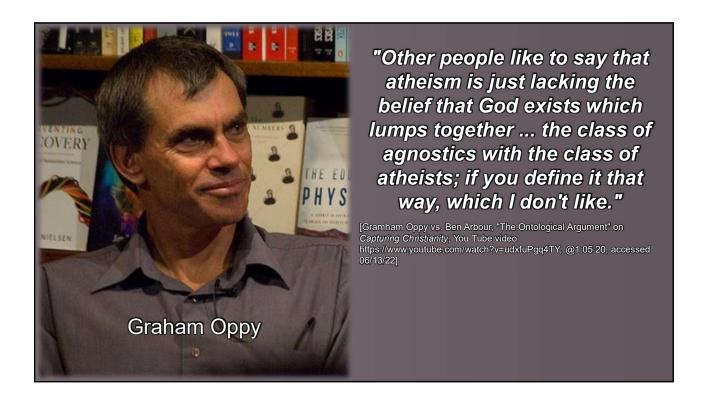






"Properly, we should define theism as the view that there's at least one god and atheism as the view that there are no gods, and monotheism then as the view that there is exactly on God and we call that one God with a capital 'G'. Atheists then are people who believe that there are no gods and particular in our context, they believe that God doesn't exist.

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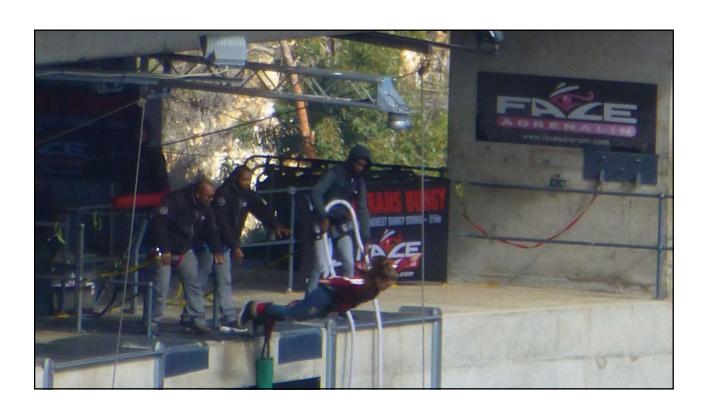




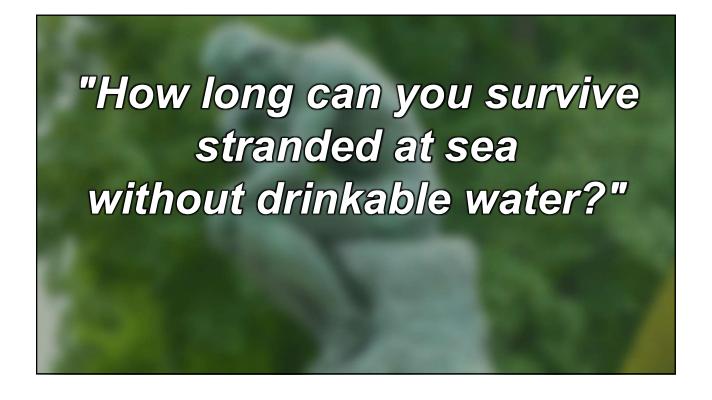


You commit this fallacy when you illicitly mix or cross categories or ascribe an attribute or property to a thing or concept which could not possibly have that attribute or property.



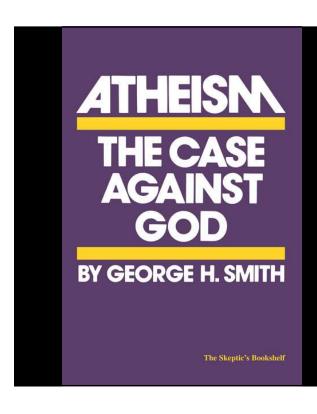






"How long can you survive stranded at sea for about two weeks?"







Assuming for the moment that the universe requires a causal Assuming for the moment that the universe requires a causal explanation, does the positing of a first cause provide us with that explanation? How does the concept of god function as an explanatory concept in this instance? A supernatural first cause, a god, supposedly caused the universe to exist. Consider the nature of this "explanation." Does it provide one with a conceptual grasp of the issue being considered? Does it provide a causal explanation in any meaningful sense? No, it does not.

To posit god as the cause of the universe still leaves two crucial questions unanswered: What caused the universe? How did it cause the universe? To say that a god is responsible for the existence of the universe is vacuous without knowledge of god's nature and the method used in creating existence. If god is

tne existence or tne universe is vacuous without knowledge of de's nature and the method used in creating existence. If god is to serve as a causal explanation, we must have knowledge of god's attributes by virtue of which he has the capacity to create matter from nonexistence, and knowledge of the causal process involved in creation, by virtue of which god is designated as a cause

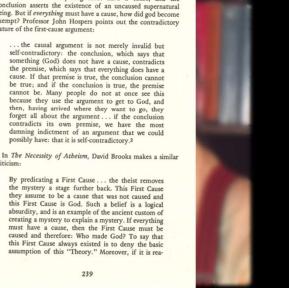
cause.

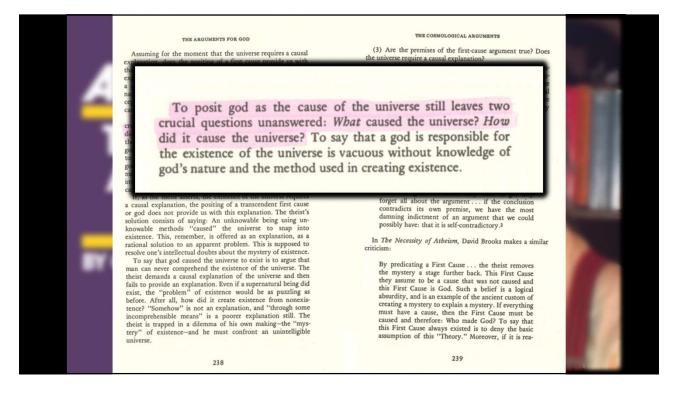
If, as the theist asserts, the existence of the universe requires a causal explanation, the positing of a transcendent first cause or god does not provide us with this explanation. The theist's solution consists of saying: An unknowable being using unknowable methods "caused" the universe to snap into existence. This, remember, is offered as an explanation, as a prisonal echitum to an aparent problem. This is unposed to

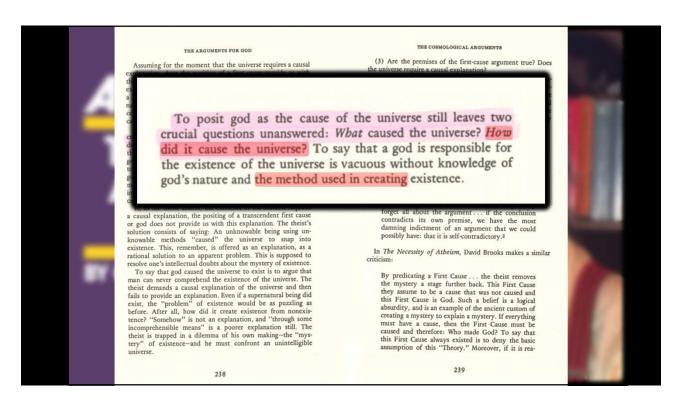
rational solution to an apparent problem. This is supposed to resolve one's intellectual doubts about the mystery of existence. To say that god caused the universe to exist is to argue that man can never comprehend the existence of the universe. The man can never comprehend the existence of the universe. The theist demands a causal explanation of the universe and then fails to provide an explanation. Even if a supernatural being did exist, the "problem" of existence would be as puzzling as before. After all, how did it create existence from nonexistence? "Somehow" is not an explanation, and "through some incomprehensible means" is a poorer explanation still. The theist is trapped in a dilemma of his own making—the "mystery" of existence—and he must confront an unintelligible universe.

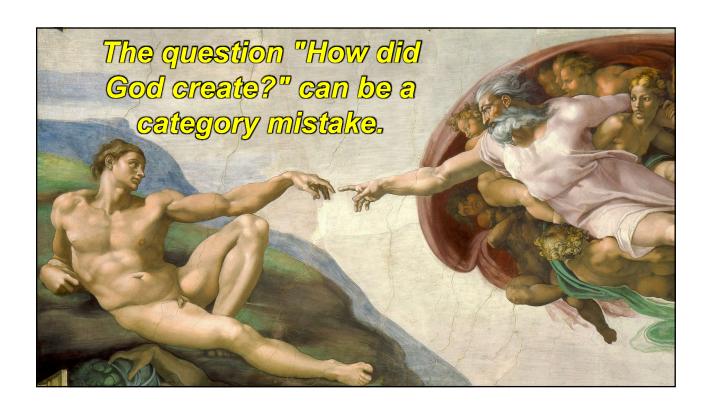
(3) Are the premises of the first-cause argument true? Does

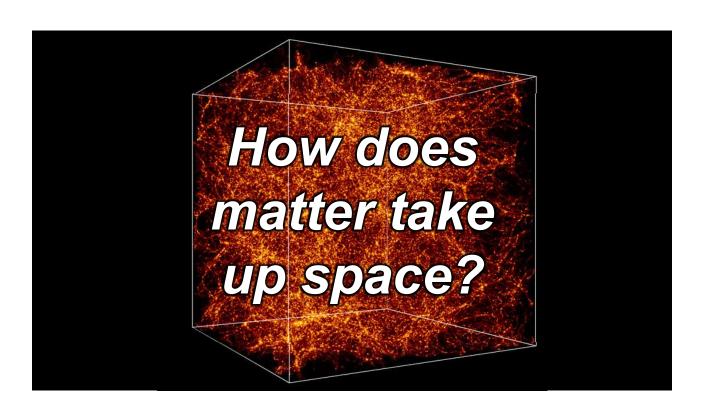
(3) Are the premises of the first-cause argument true? Does the universe require a causal argument as a whole, one contra-diction immediately stands out. The first premise of this argu-ment states that everything must have a cause, and the conclusion asserts the existence of an uncaused supernatural being. But if everything must have a cause, how did god become exempt? Professor John Hospers points out the contradictory nature of the first-cause argument:

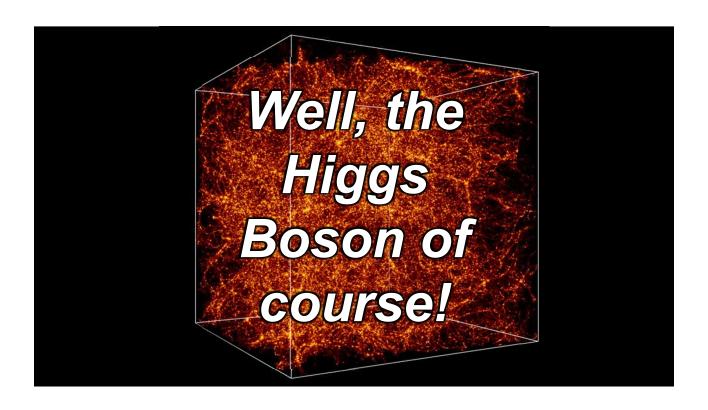


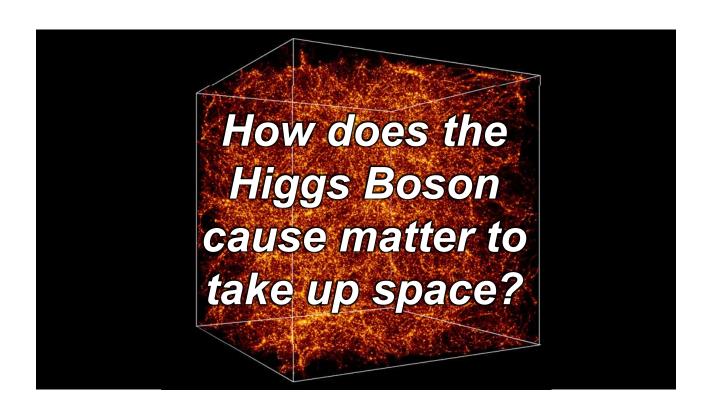




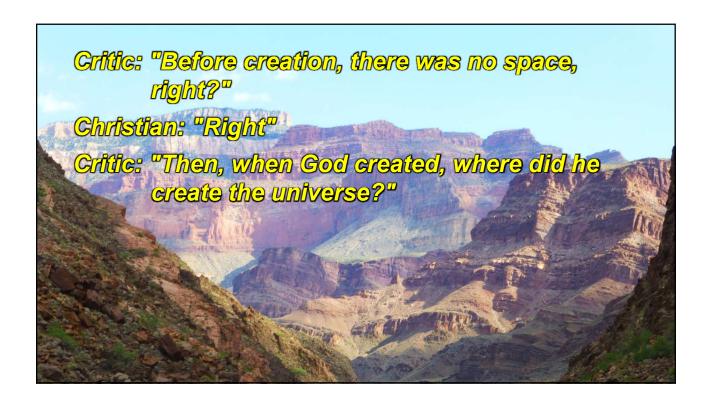




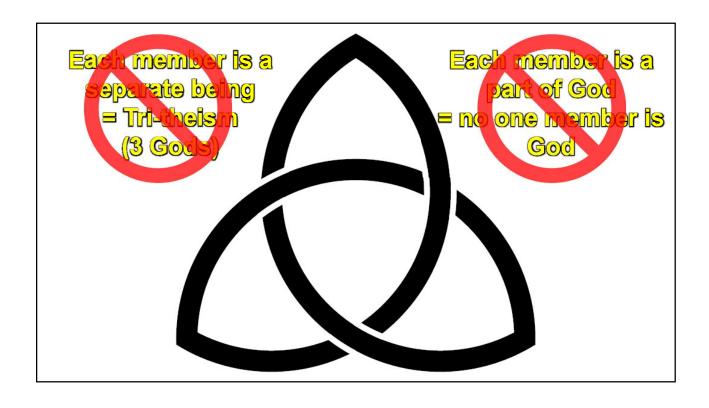


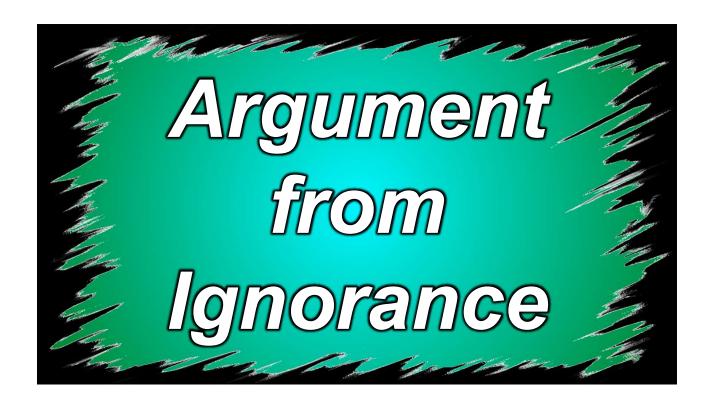








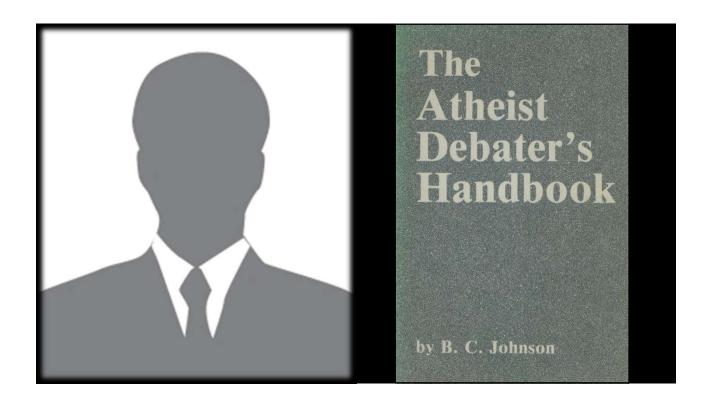




Argument from Ignorance ✓

You commit this fallacy when you illicitly affirm the truth of something on the basis of the lack of evidence to the contrary.

"X must be the case since it has not been or cannot be shown that X is false."



"The atheist need only demonstrate that the theist has failed to justify his position. ... If there is no evidence that He exists, then one can claim to know that God does not exist."

[3. C. Johnson, The Atheist's Debater's Handbook (Buffalo: Prometheus Books, 1988), 14, 15]

The Atheist Debater's Handbook

by B. C. Johnson

"We can properly claim to know that many things are not so if reasons have not been offered to support the claim that they are so. The Atheist Debater's Handbook

by B. C. Johnson

"For example, I am able to claim that I know my friend Frank is not at home precisely because there is no reason to believe that he is at home. There is no noise coming from his house, the lights are out at a time when he is usually awake, his bed is empty, and so forth."

The Atheist Debater's Handbook

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Note the difference between an argument from ignorance (a fallacy) and an argument from silence (not a fallacy).

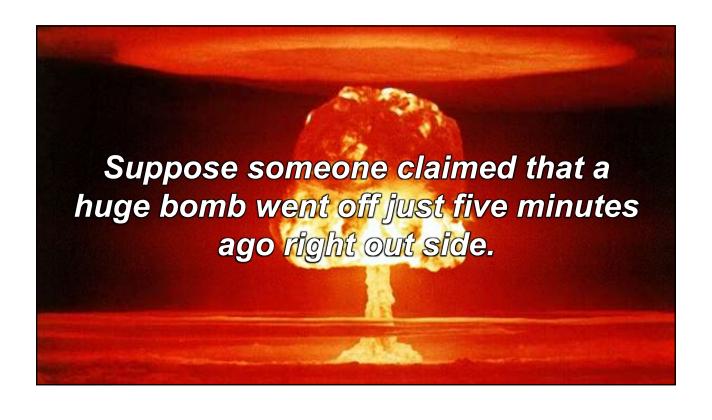
If someone claims X is the case and X would reasonably lead us to expect Y, then the absence (or silence) of Y is evidence that X is not the case.

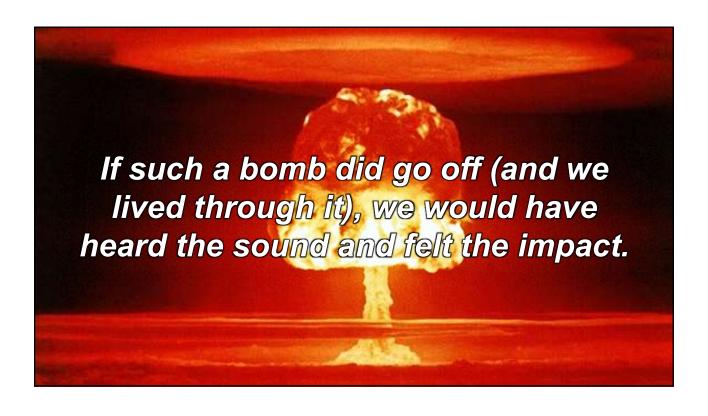
This is the difference between

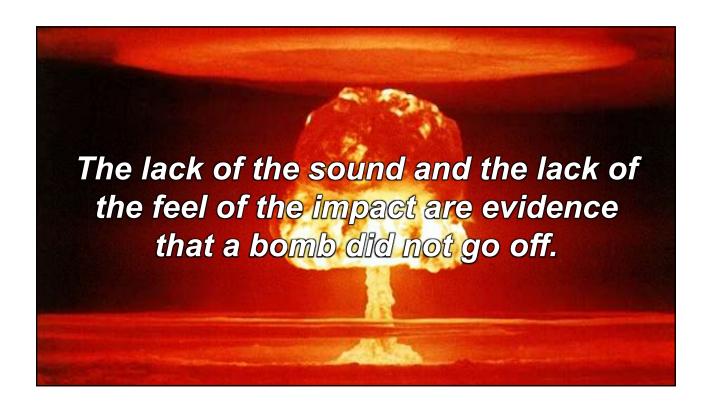
"lack of evidence"

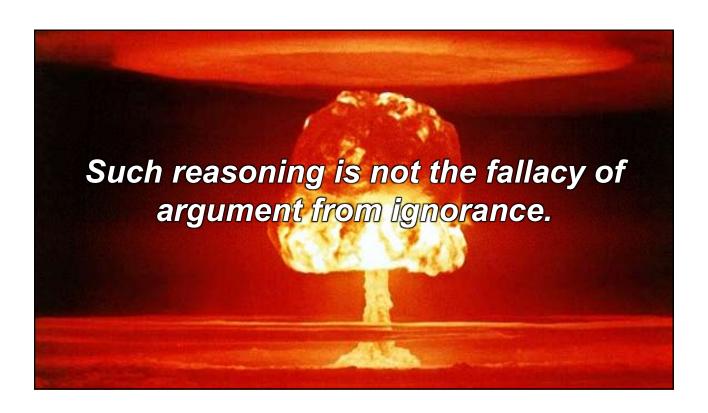
and

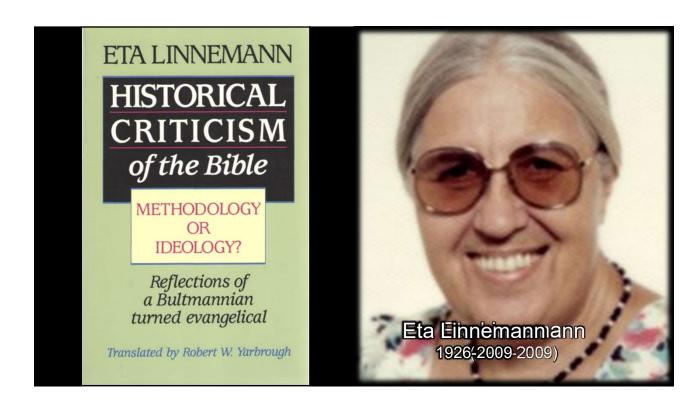
"evidence of lack."

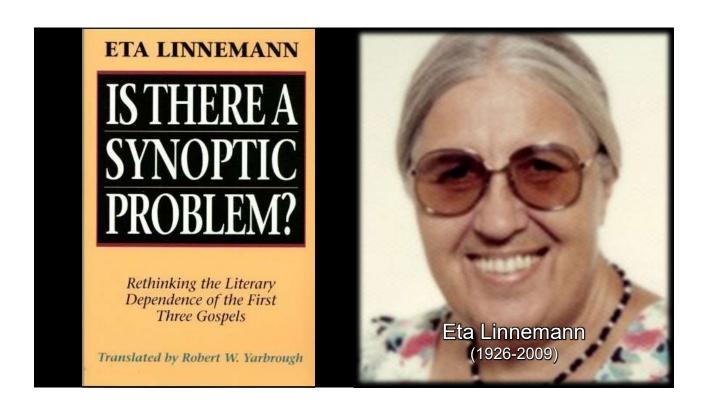


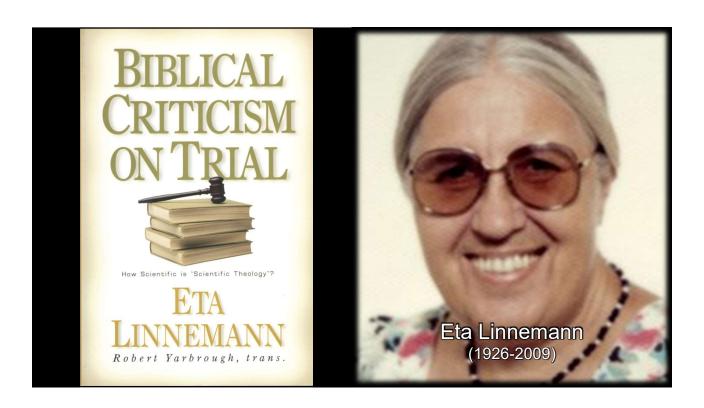






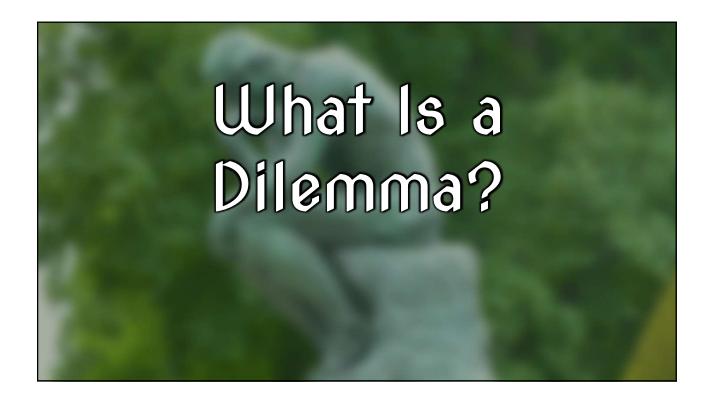






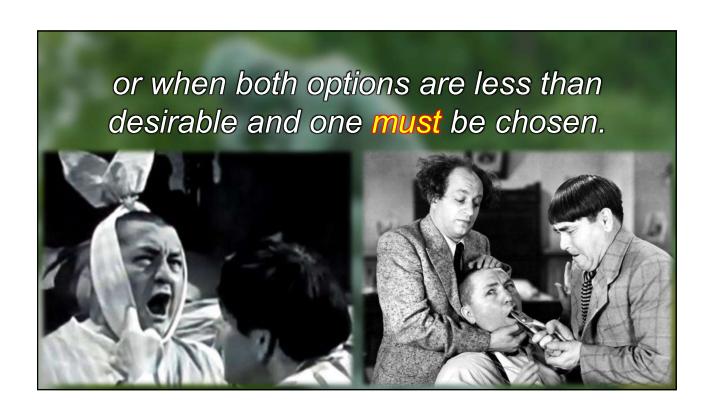


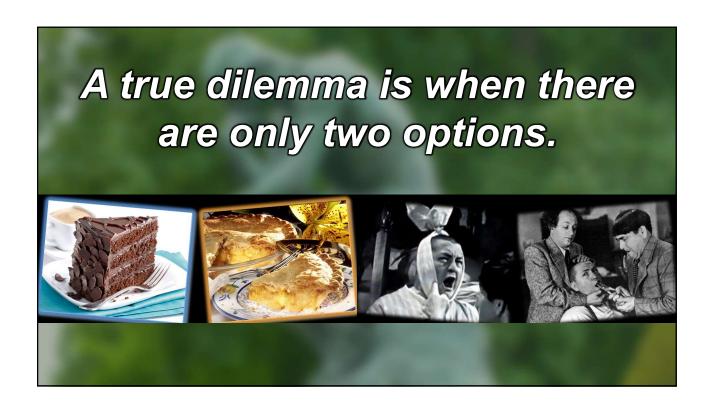




A dilemma is a choice between two options:

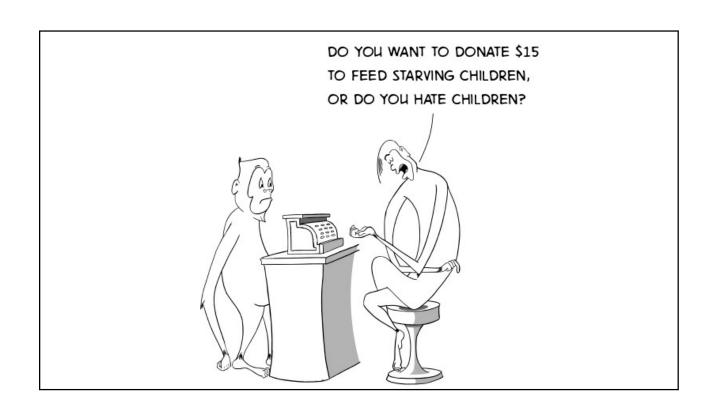




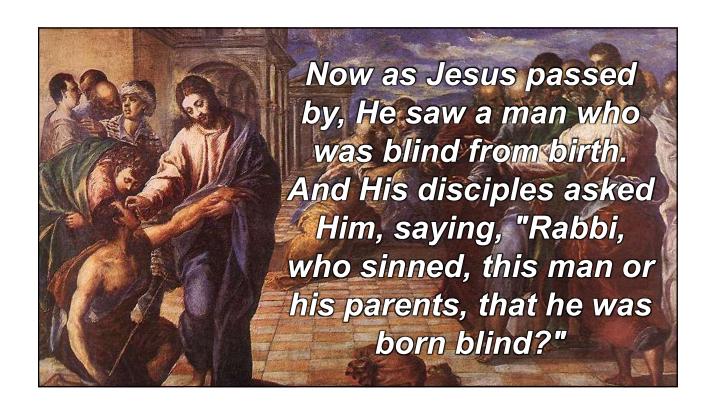


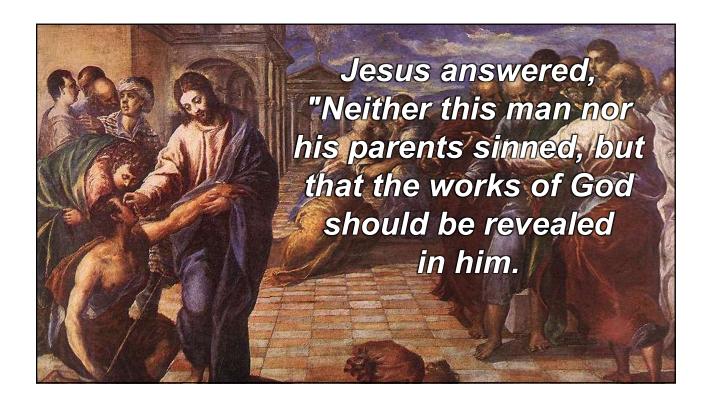


A false dilemma is when one insists there are only two alternatives, when in fact there are more than two.

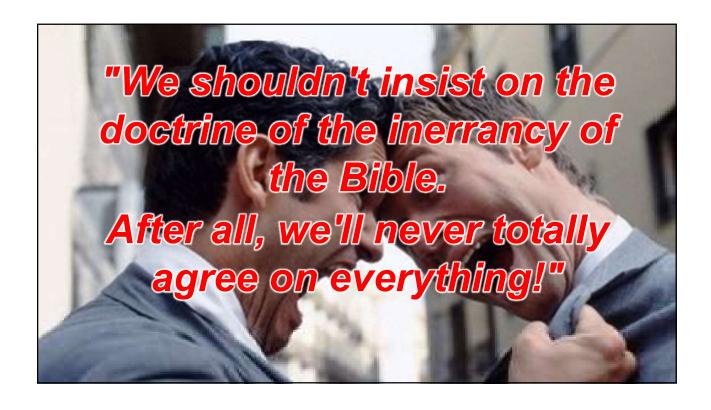












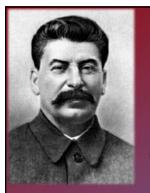


You commit this fallacy when you assert that there is no real difference between the extremes on a continuum.

Here you get lost in the middle ground, the state of continuous and gradual shading between the two extremes, and begin to doubt the existence of real differences between such obvious poles as black and white, strong and weak, and good and evil.

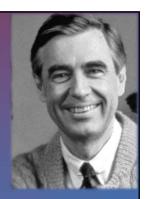
The argument of the beard fallacy is the reverse of the false dilemma fallacy.

The false dilemma denies the middle and illicitly says there are only the extremes whereas the argument of the beard denies the extremes and illicitly says there is only the middle.

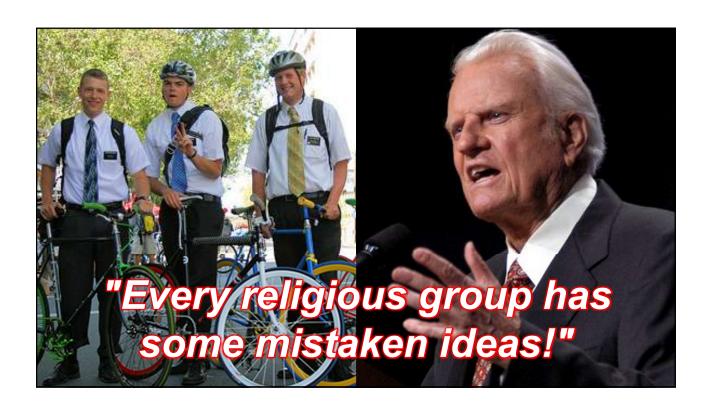


For example, someone might claim:

"Stalin was an evil man and Mr. Rogers was a good man."

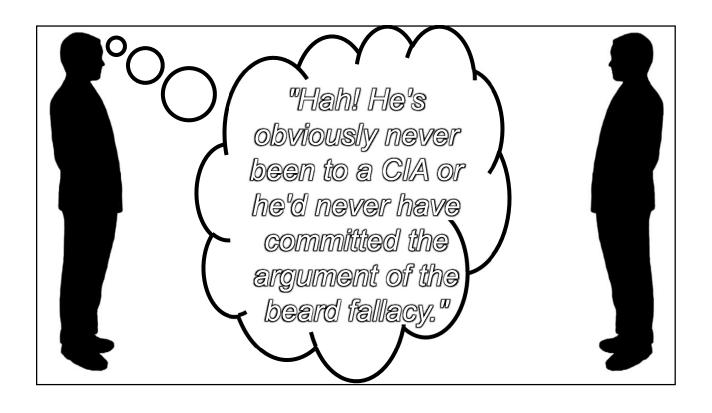


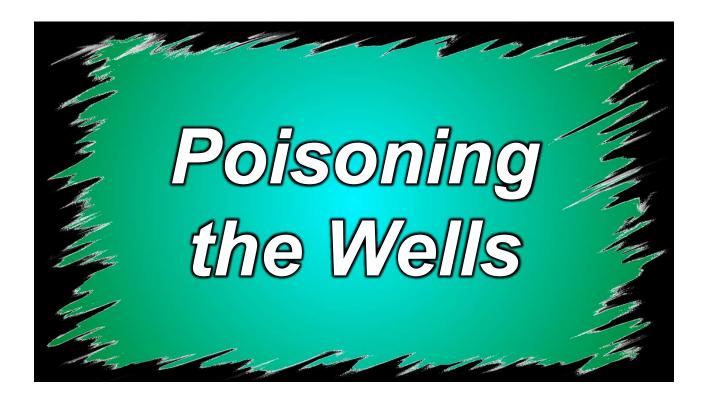
"All saints have some vices and all sinners have some virtues! Therefore you can never call one man good and another evil."



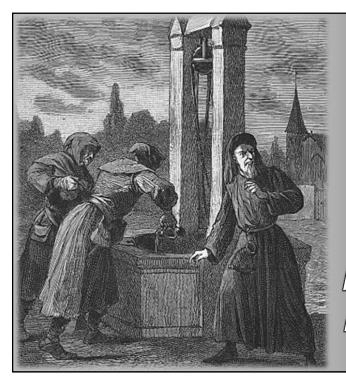




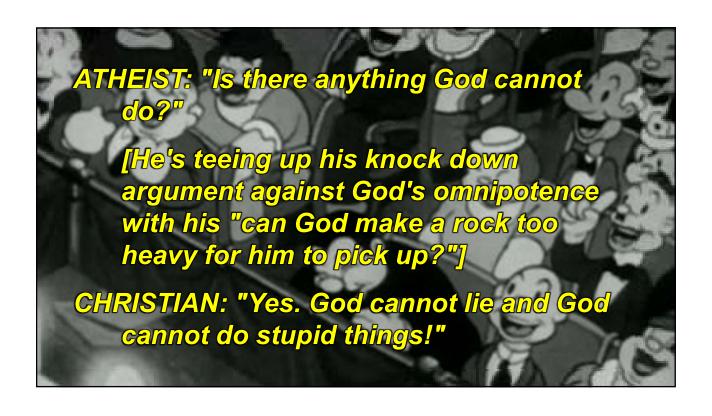


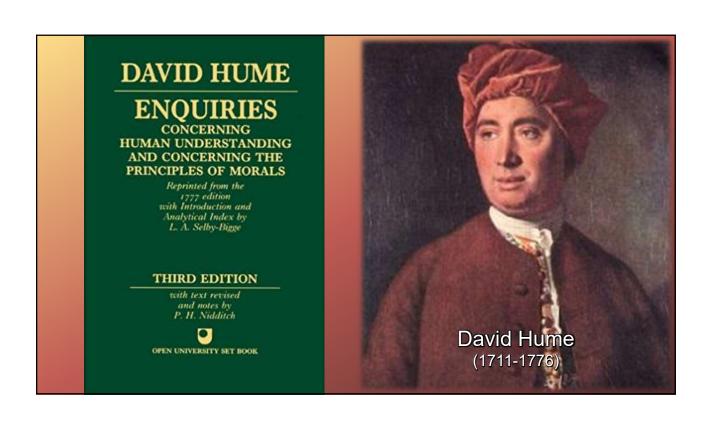


You commit this fallacy when, instead of answering any argument directly, you try (usually in advance of the arguments) to unfairly discredit your opponent as an unreliable source of information or discredit his argument as in some way suspect.



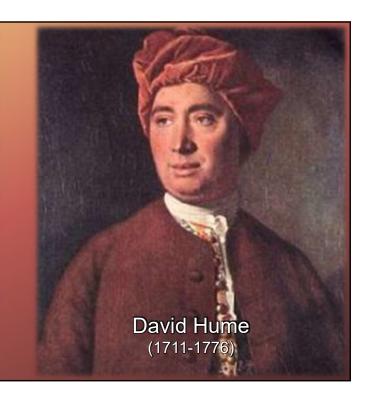
If it can be planted in advance in your hearer's minds that your opponent is unreliable, then, no matter what he says, his hearers will have a prejudice against him.





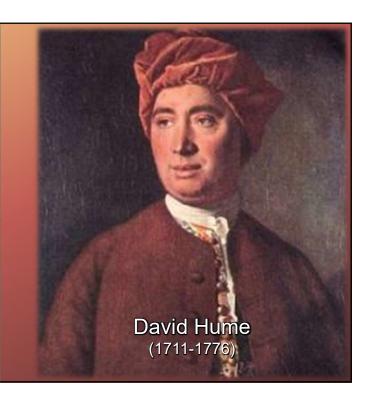
"The passion of surprise and wonder, arising from miracles, being an agreeable emotion, gives a sensible tendency towards the belief of those events, from which it is derived. And this goes so far, that even those who cannot enjoy this pleasure immediately, nor can believe those miraculous events, of which they are informed, yet love to partake of the satisfaction at second-hand or by rebound, and place a pride in delight in exciting the admiration of others. ... But if the spirit of religion join itself to the love of wonder, there is an end of common sense; and human testimony, in these circumstances, loses all pretensions to authority."

Enquiries Concerning Human Understanding, X.

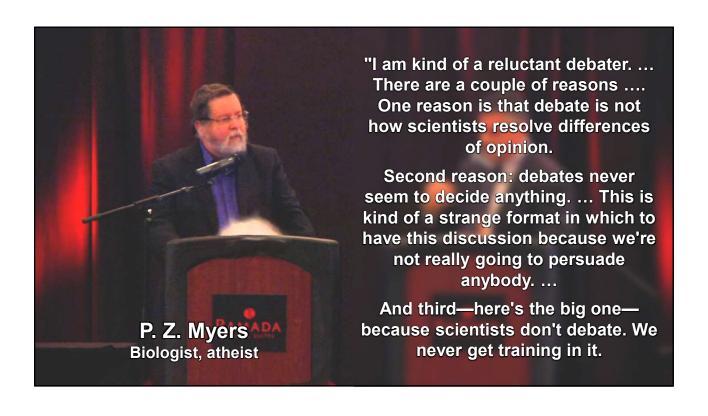


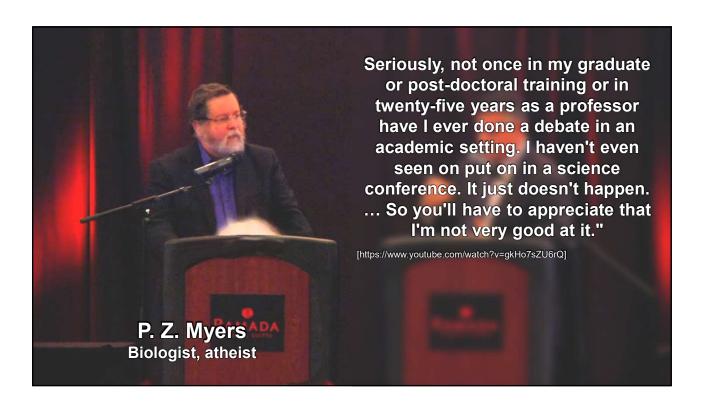
"But if the spirit of religion join itself to the love of wonder, there is an end of common sense; and human testimony, in these circumstances, loses all pretensions to authority."

Enquiries Concerning Human Understanding, X.









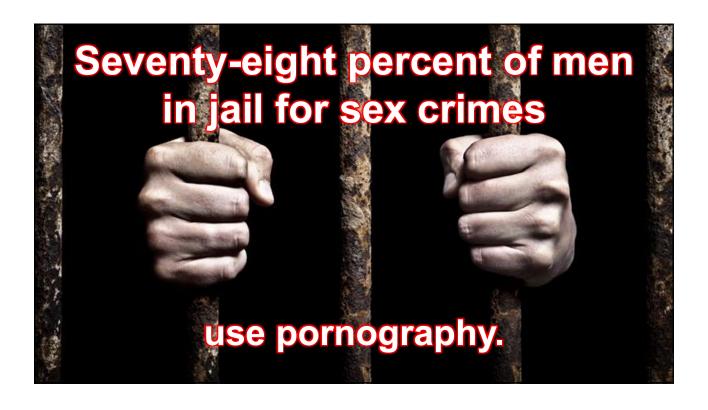
P. Z. Myers' emphasis on how much he was not a debater, that he hadn't studied debate in his training as a scientist, and how he had really never watched debates aims at influencing the expectations of the audience.

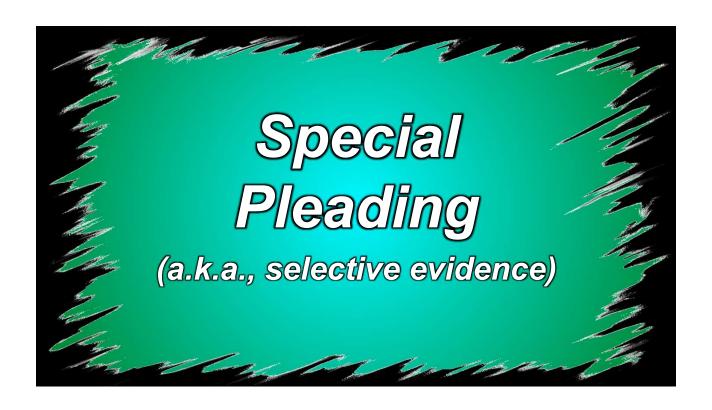
Once the audience sees how weak Myers' arguments are and how weak his responses to Fuz Rana's points are, the audience (perhaps even unconsciously) attributes these weaknesses to Myers' weak debating skills and not to how weak the case for Darwinism is.



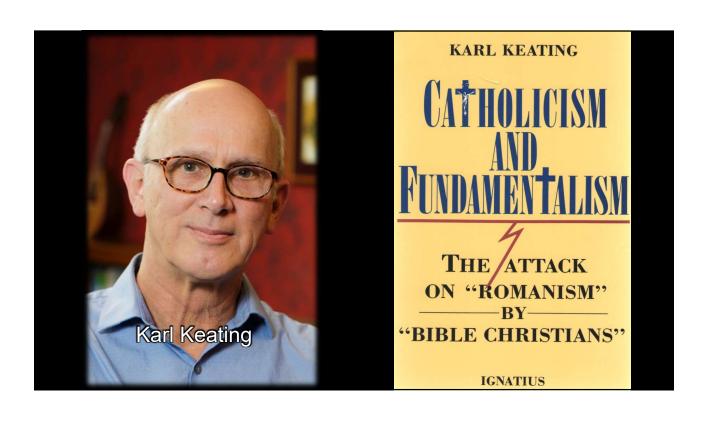


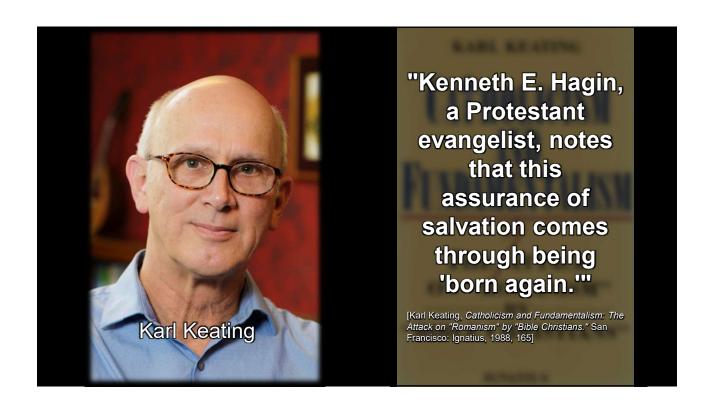


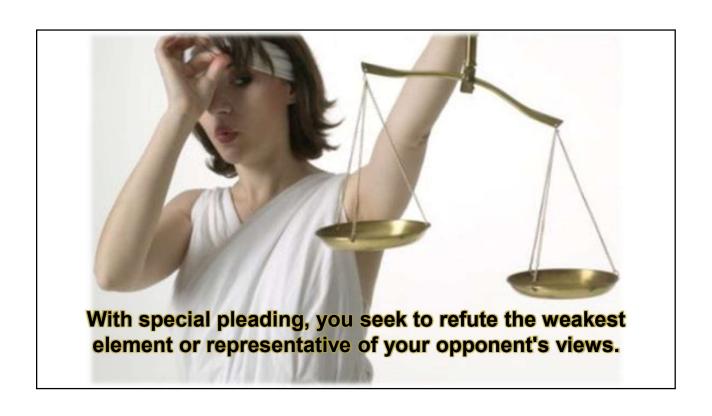




You commit the special pleading fallacy when you cast your opponent's position in its worst possible light and/or ignore your opponent's strong points, or cast your own position in its best possible light and/or your ignore own weak points.

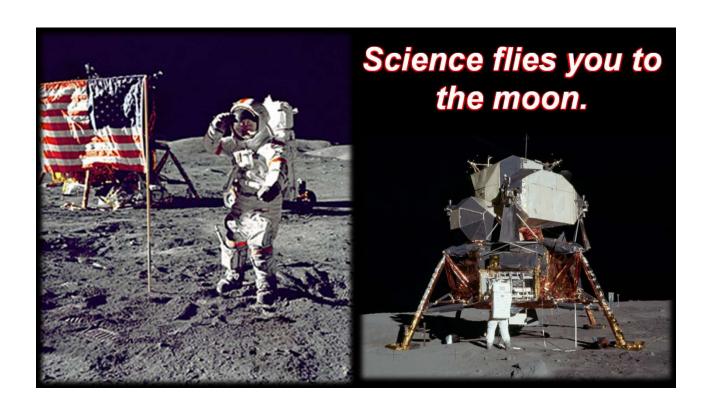


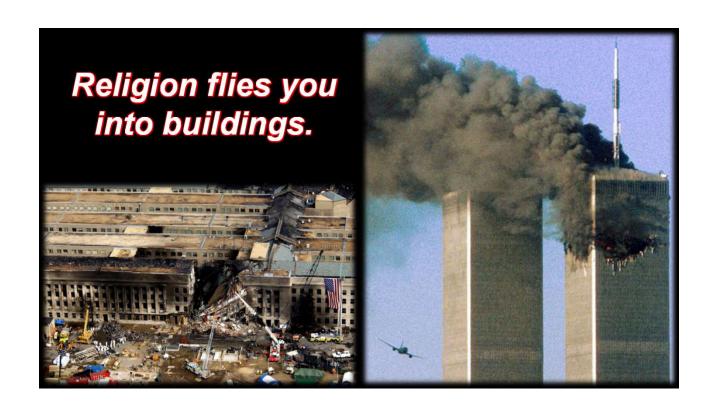








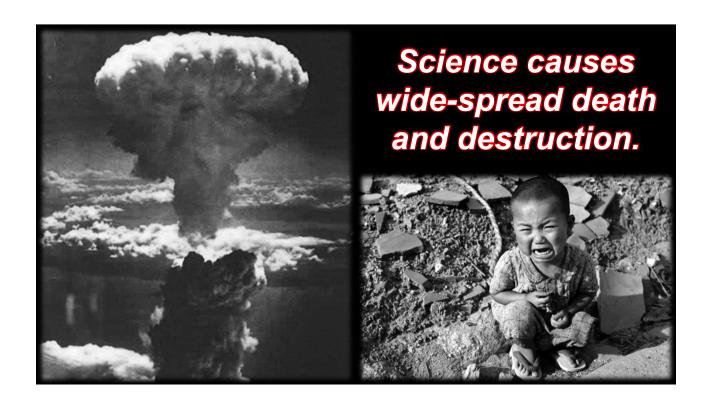






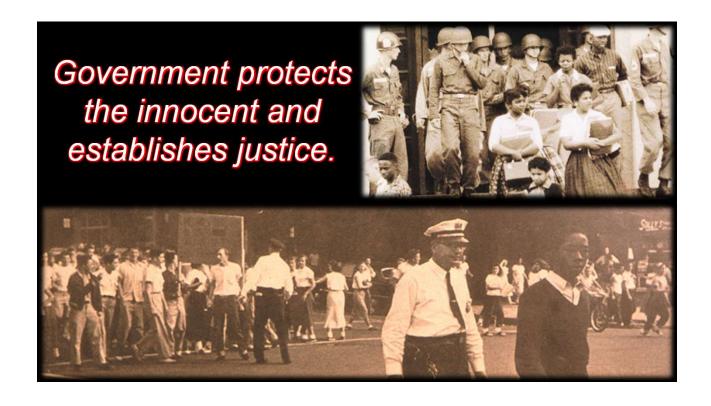
But, by selectively employing the evidence, one could just as easily argue ...





and conclude ...



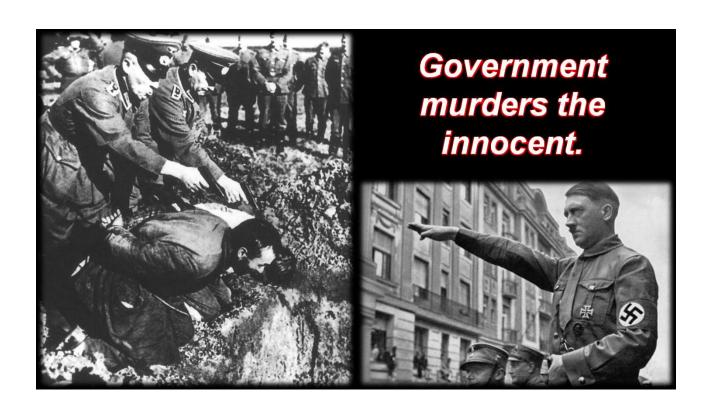




and conclude ...







and conclude ...



Thus, depending on your selection of the evidence, you could argue:





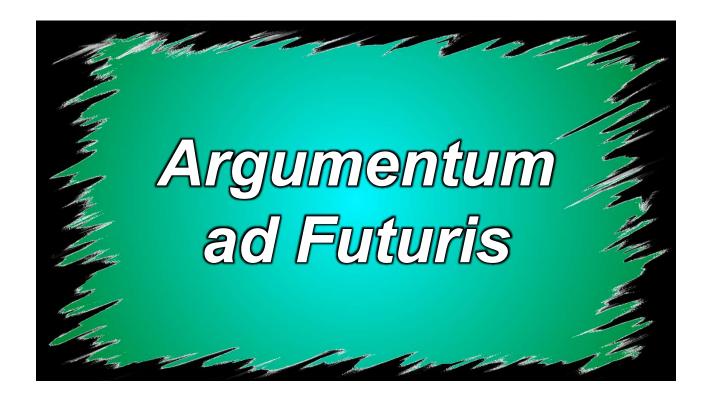
I gave this name to the illicit thinking that it is warranted to dismiss the pleas of innocence from a prisoner by exclaiming "They all say they're innocent!"

Just because it might be true that all (or nearly all) prisoners claim they are innocent, this does not follow that none of the prisoners are actually innocent.

Likewise, just because so many people ("everyone") have a "testimony" or "religious experience," it does not follow that no one's testimony is based on the truth.



You the commit the ad populum (to the people) fallacy when you illicitly appeal to the majority opinion as evidence that an opinion is true.



Also known as an argument to the future, you commit this fallacy when you illicitly argue for your position (or against your opponent's position) based upon speculation about how things might be different in the future.

