The Existence of God
The Kalam Cosmological Argument

Richard G. Howe, Ph.D.

Professor Emeritus, Southern Evangelical Seminary

Past President, International Society of Christian Apologetics

The Kalam Cosmological Argument

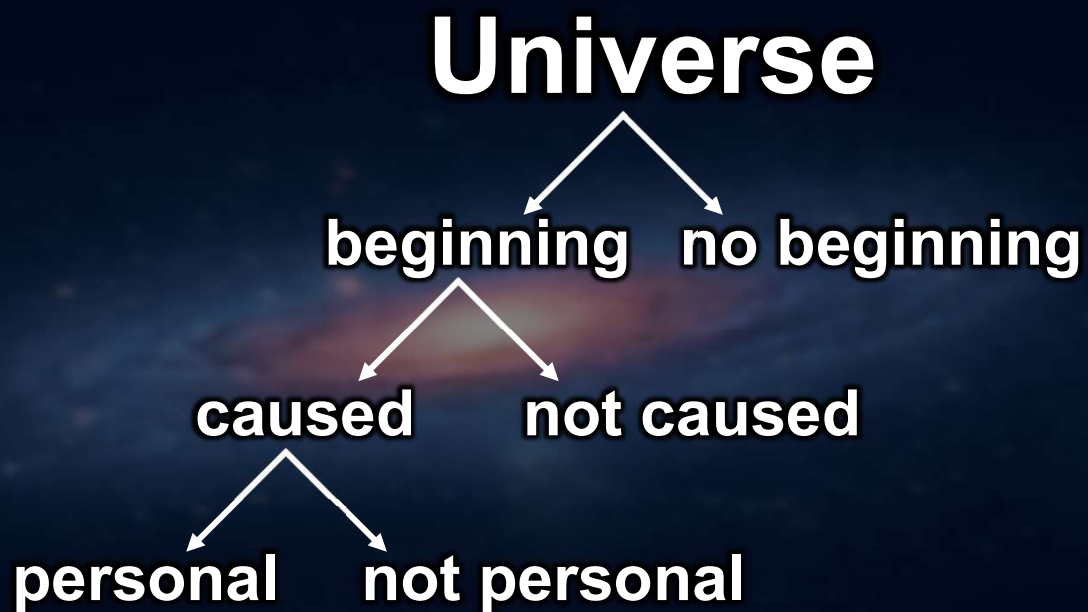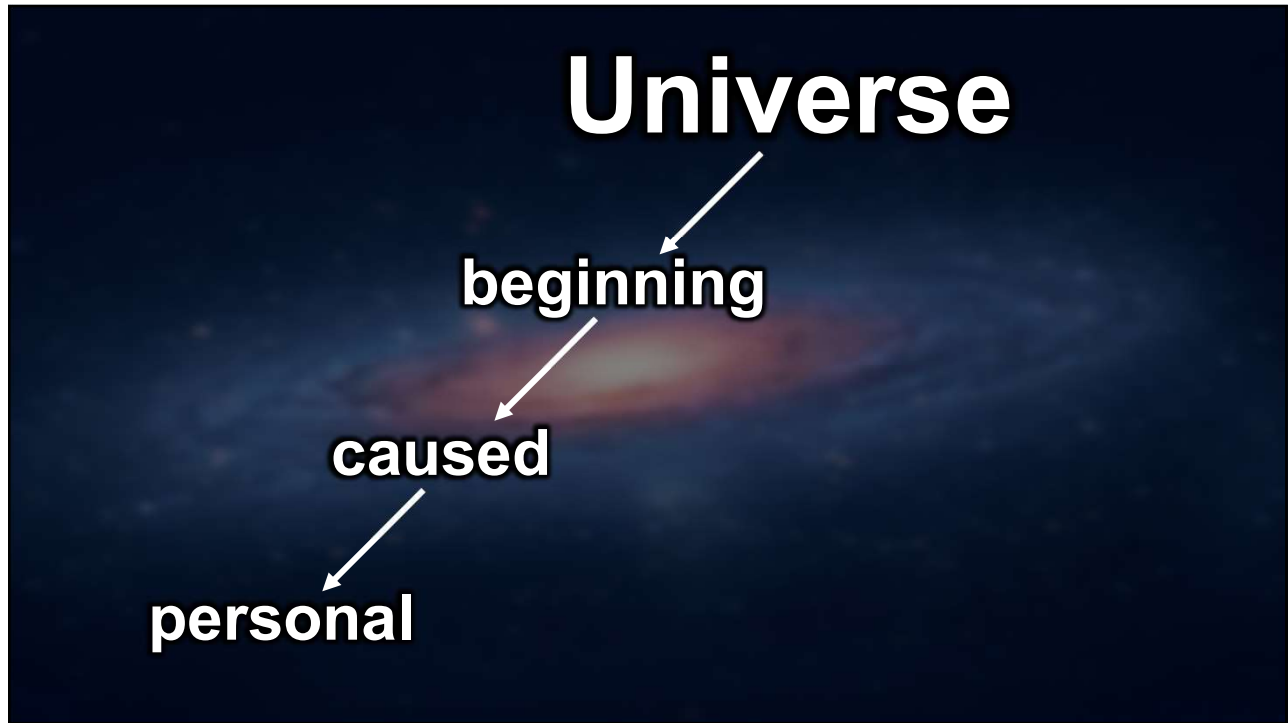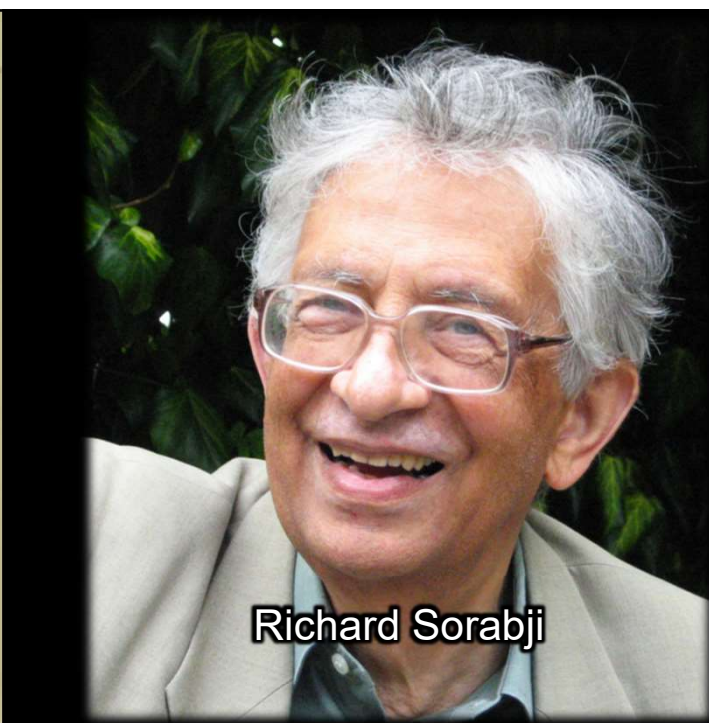The Kalam Cosmological Argument

the universe's coming-into-existence

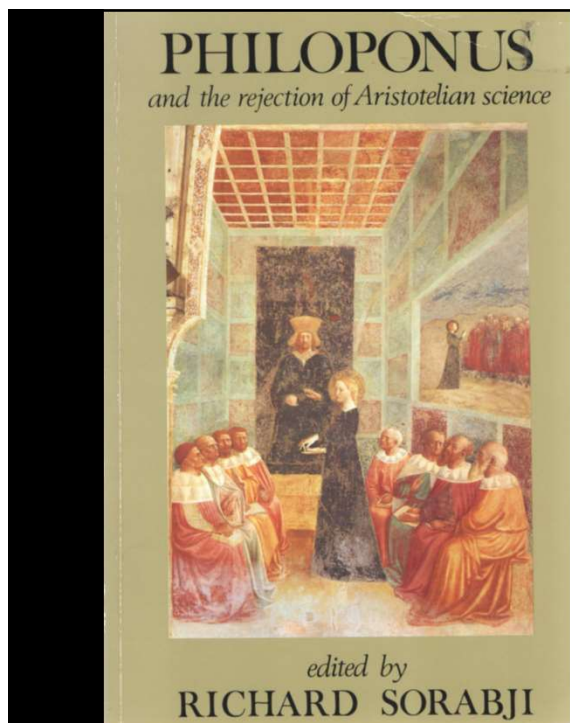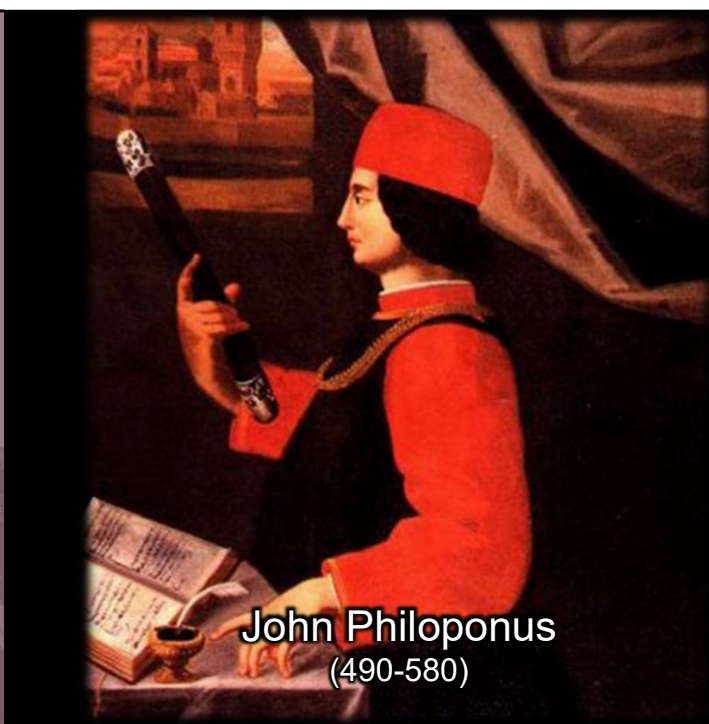the universe's current existing

Universe

beginning   no beginning

caused   not caused

personal   not personal

Universe

beginning

caused
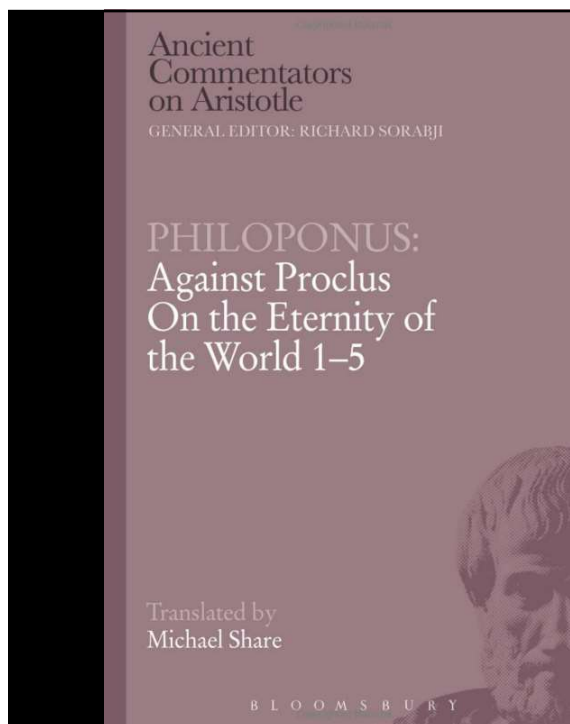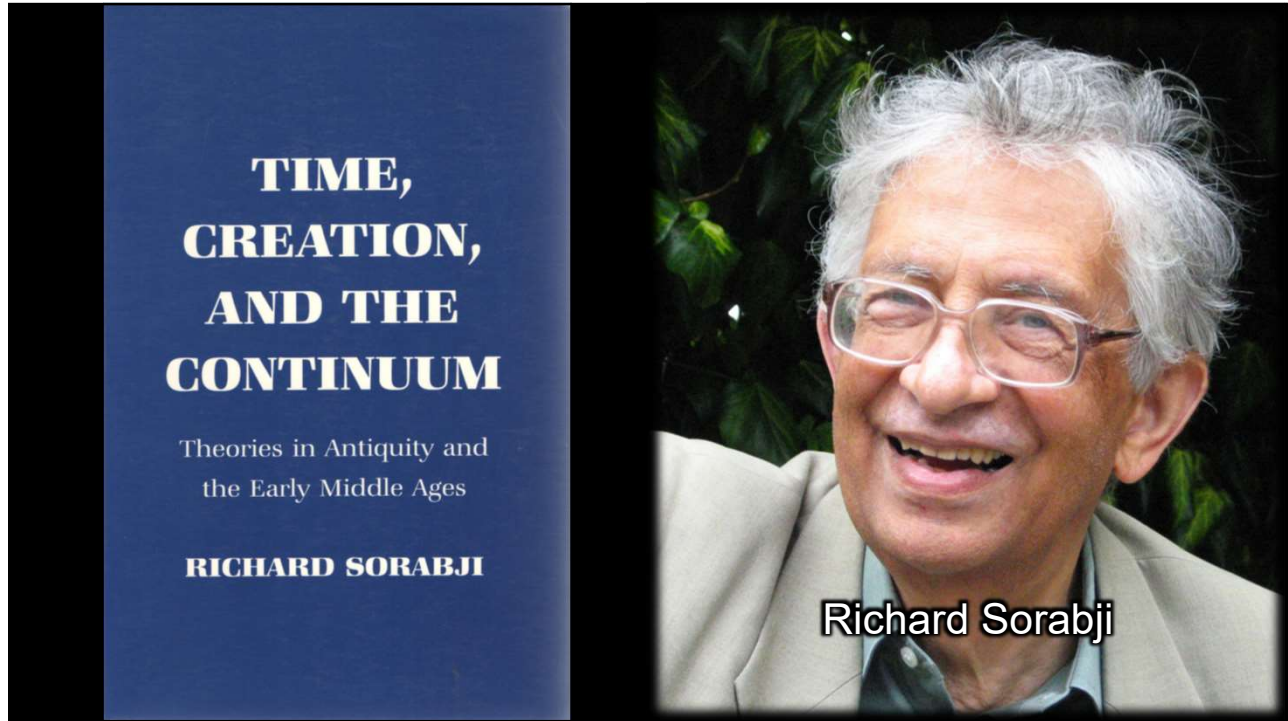
personal

The earliest defense of a Kalam type of argument is by John Philoponus in his work Against Proclus' On the Eternity of the World [de Aeternitate Mundi contra Proclum].

John Philoponus
(490-580)

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PHILOPONUS:
Against Proclus
On the Eternity of
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(490-580)

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On Aristotle On the Soul 1.3–5
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A Treatise Concerning the Whole and the Parts
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The Kalam Cosmological Argument was championed in Medieval Arabic Philosophy by:

al-Kindi
(801-873)

Abu Yusuf Ya'qub ibn Ishaq al-Kindi in his work On First Philosophy.

Abu Hamid Muhammad ibn Ta'us Ahmad al-Tusi al-Shafi'i, generally known as al-Ghazali, in his work *Incoherence of the Philosophers*.

al-Ghazali
(1058-1111)

It was championed in Medieval Jewish Philosophy most notably by Saadia ben Joseph (Saadia Gaon) in his work *The Book of Beliefs and Opinions*.
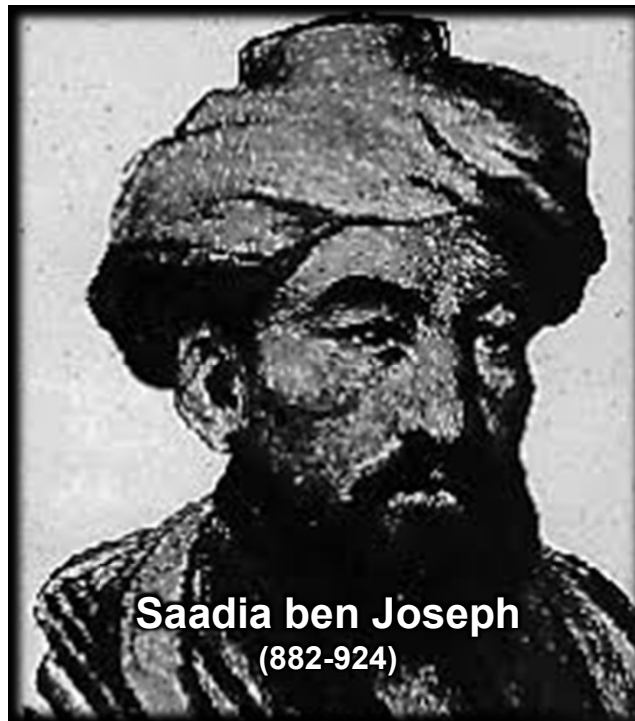
Saadia ben Joseph
(882-924)

It was championed in Medieval Christian Philosophy most notably by Bonaventure (John of Fidanza) in his *Commentary on the Sentences.*

Bonaventure
(1217-1274)
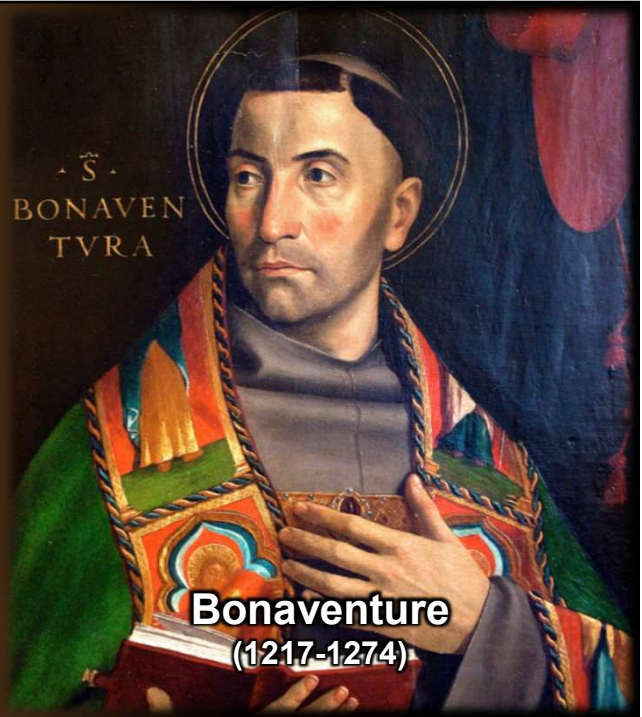
The most notable contemporary defender of the argument is William Lane Craig in his work The Kalam Cosmological Argument.
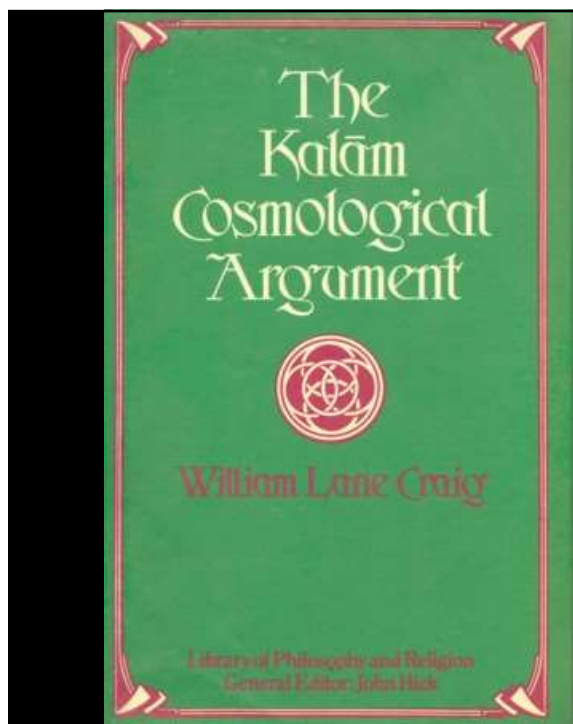
William Lane Craig
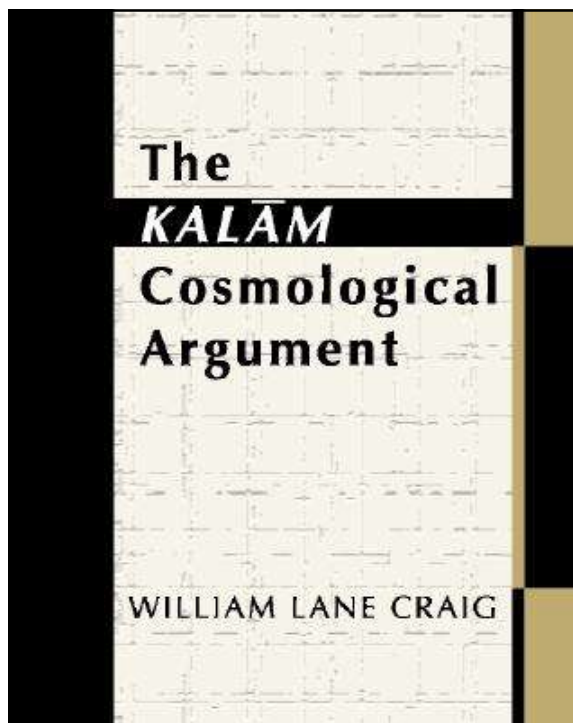
William Lane Craig

William Lane Craig

Premise 1: The Universe began to exist.

Premise 2: Whatever begins to exist has a cause of its existence.

Conclusion: Therefore, the universe has a cause of its existence.
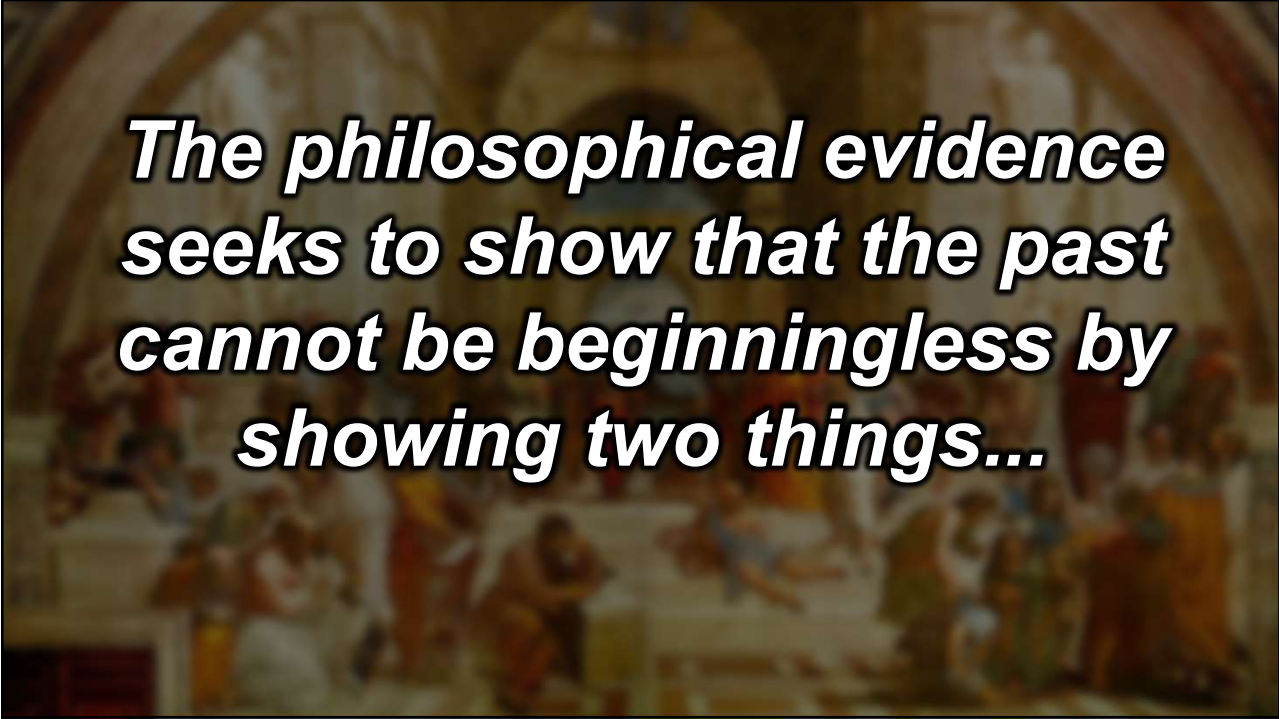
The argument is valid, which means that if the premises are true, then the conclusion is necessarily true.

In order to defend the truth of the conclusion, one must give evidence for the truth of each premise.

Premise 1: The Universe began to exist.

The Philosophical Evidence
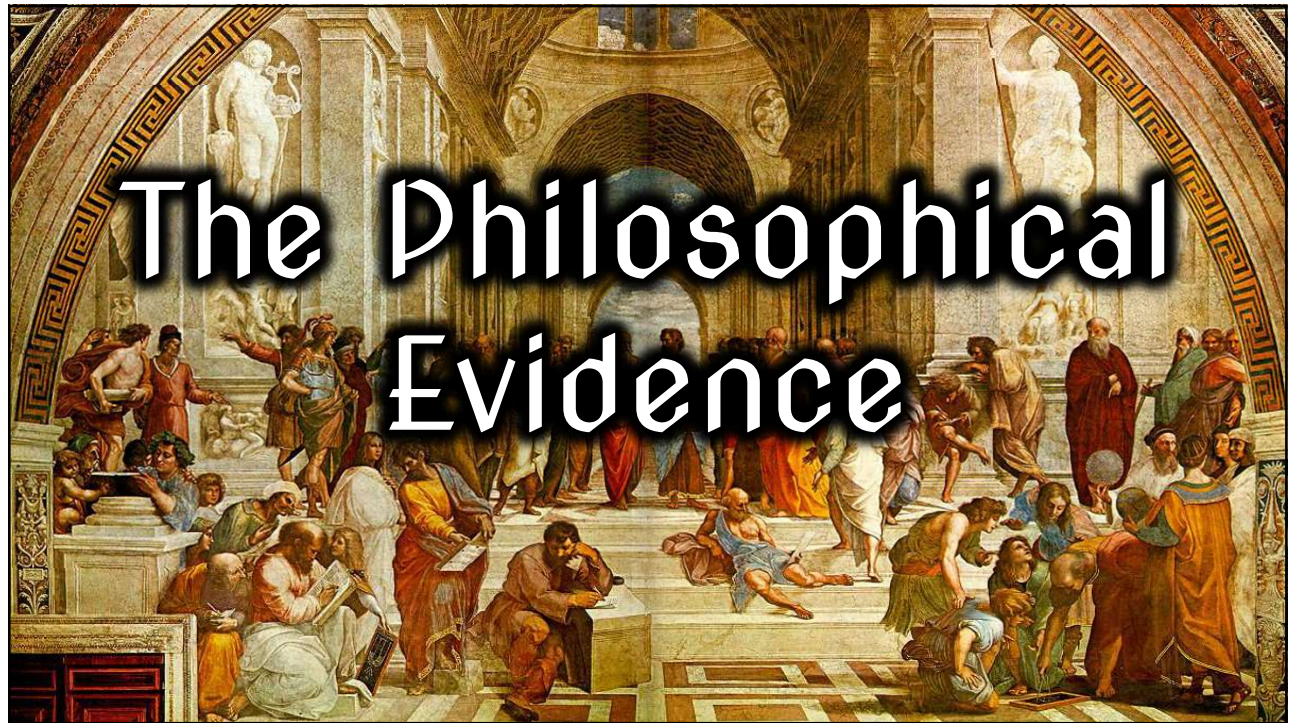
If the universe did not have a beginning, then the past up until now would be actually infinitely long.

The philosophical evidence seeks to show that the past cannot be beginningless by showing two things...

It is impossible for there to be an actual infinite.

It is impossible for an actual infinite to be traversed.

First Argument for Premise 1

1. If the temporal past had no beginning, then the temporal past up to the present moment would constitute an actual infinite.
2. It is impossible for there to be an actual infinite.
∴ The temporal past must have had beginning.

Second Argument for Premise 1

1. If the temporal past had no beginning, then, up to the present moment, an actual infinite has been traversed.
2. It is impossible for an actual infinite to be traversed.
∴ The temporal past must have had beginning.

DEFINING SOME TERMS

NEXT FEW SLIDES

✎set✎

A set is a collection of things, either real or hypothetical, concrete or abstract.
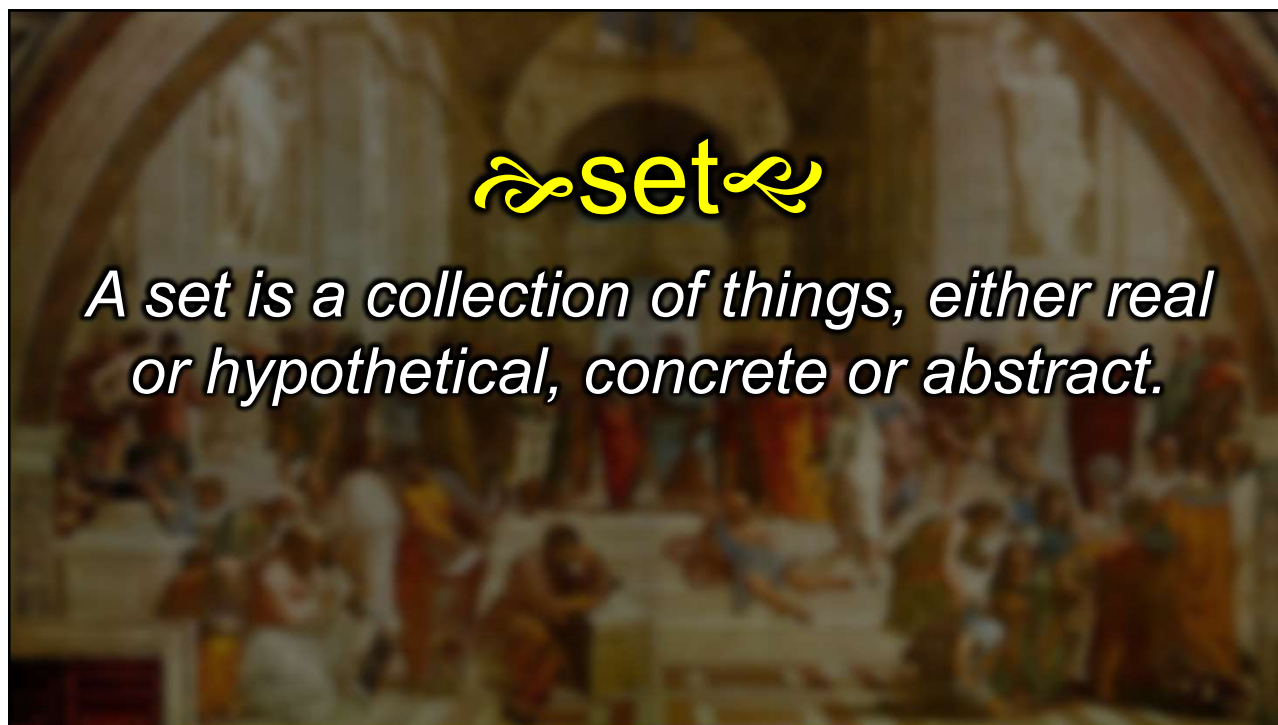
❧set❧

For our purposes, there are two types of sets: finite and infinite.

❧finite set❧

A finite set is a set that contains a finite number of members.

finite set

An example of a finite set would be the set of all children of Berton and Hilda Howe.

{Don, Tom, Robert, Richard, David}

Richard

Don

Tom

Robert

David

David, Richard, Robert, Tom, Don
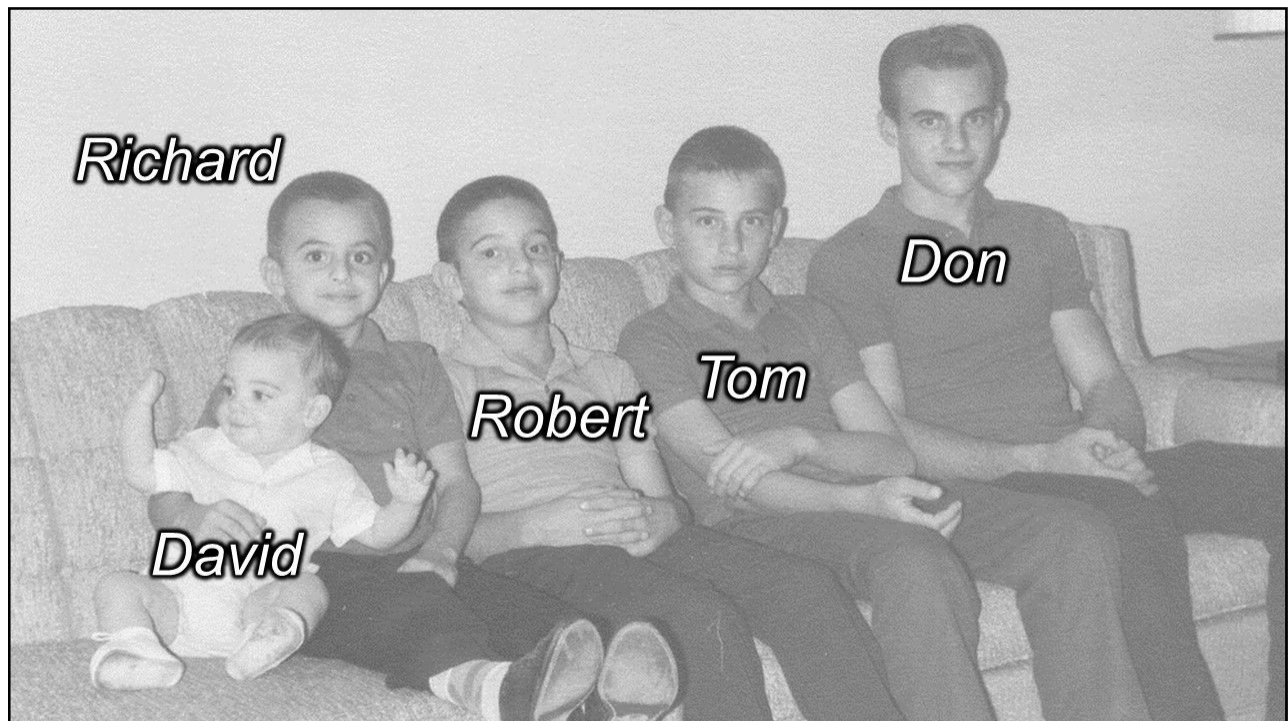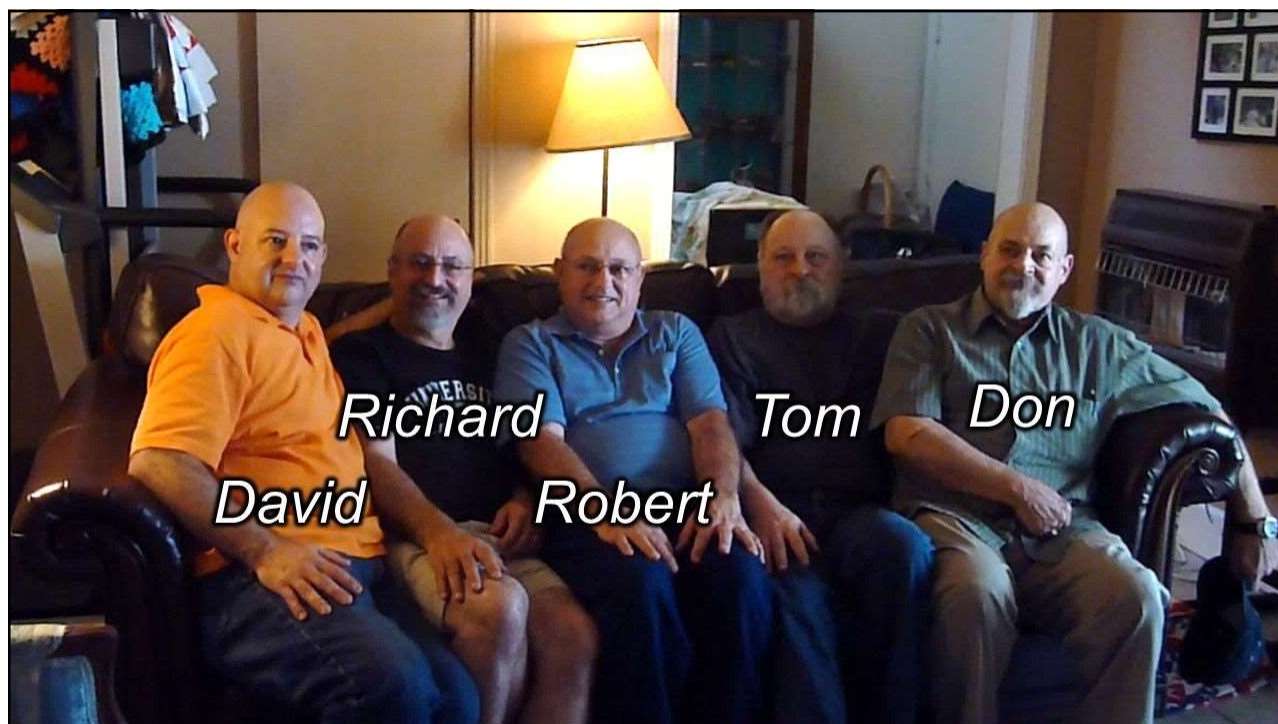
❧finite set❧

A rule of thumb for finite sets is: The whole set is always larger than any proper subset of itself.

✂proper subset✂

All members of the proper subset are members of the set.

There are members of the set that are not members of the proper subset.

✂proper subset✂

For example, take the set of all the children of Berton and Hilda Howe.

∝proper subset∝
{Don, Tom, Robert, Richard, David}

∝proper subset∝
{Don, Tom, Robert, Richard, David}

{Don, Robert, David}

❧proper subset❧
{Don, Tom, Robert, Richard, David}

{Don, Robert, David}

❧proper subset❧
{Don, Tom, Robert, Richard, Daniel}

❧proper subset☙

{Don, Tom, Robert, Richard, David}

{Don, Robert, Daniel}

❧infinite set☙

A finite set is a set that contains an infinite number of members.

❧infinite set☙

There are two kinds of infinite sets: a potential infinite set and an actual infinite set.

❧potential infinite set☙

A potential infinite set is a set whose members are increasing without limit, but the number of which is always finite.

∾potential infinite set∾

{1 + 1 = 2 + 1 = 3 + 1 = 4 + 1 = 5 +1 = 6 + 1 = 7 + 1 = 8 +1 = 9 . . . } + 1 = ∞}

∾potential infinite set∾

{1 + 1 = 2 + 1 = 3 + 1 = 4 + 1 = 5 +1 = 6 + 1 = 7 + 1 = 8 +1 = 9 . . . + 1 ≠ ∞}

☙actual infinite set❧

An actual infinite set is a set that contains an actual infinite number of members, as, for example, the set of all whole numbers greater than zero
{1, 2, 3, ...}

German mathematician Georg Cantor defined an infinite set as "a set in which a part is equivalent to the whole. This means that it can be put in a one-to-one correspondence with proper subset of itself."

[George Cantor, *Contributions to the Founding of the Theory of Transfinite Numbers*, trans. with an Introduction by Philip E. B. Jourdain (New York: Dover Publications, 1915), pp. 55-6]
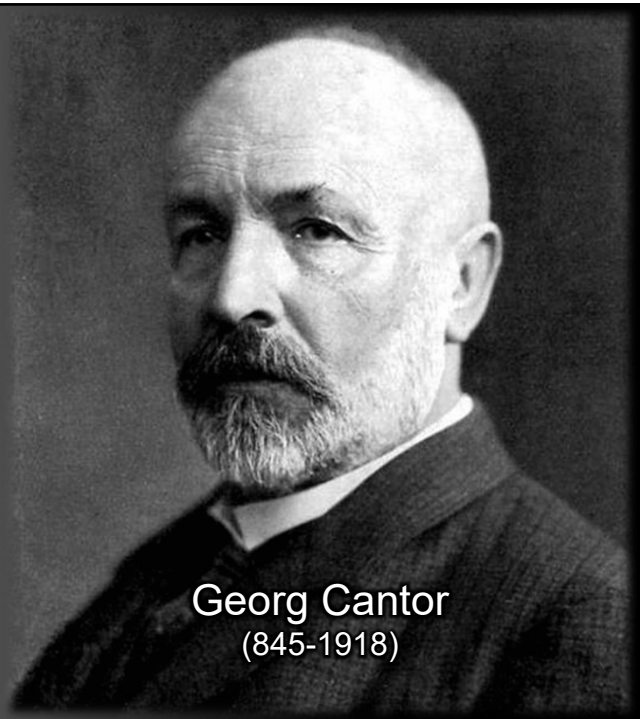
Georg Cantor
(845-1918)

❧one-to-one correspondence❧

Two sets can be shown to be equivalent if their members can be put in a one-to-one correspondence with each other.

❧one-to-one correspondence❧

For example, the set of all odd whole numbers greater than zero can be put into a one-to-one correspondence with the set of all even whole numbers greater than zero.

꙰one-to-one correspondence꙰

1, 3, 5, 7, ... ⟶ ∞

2, 4, 6, 8, ... ⟶ ∞

This shows that the two sets are equivalent.

It is impossible for there to be an actual infinite.
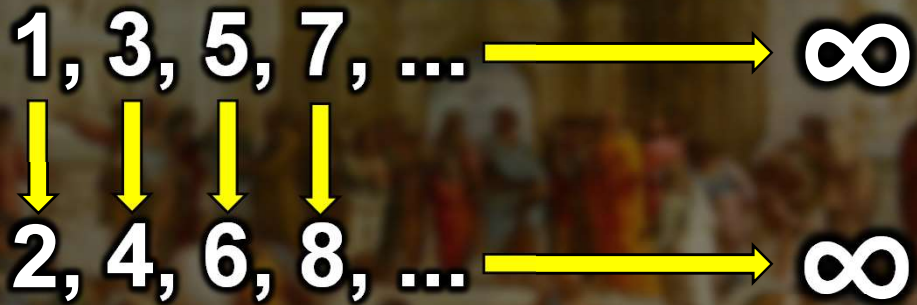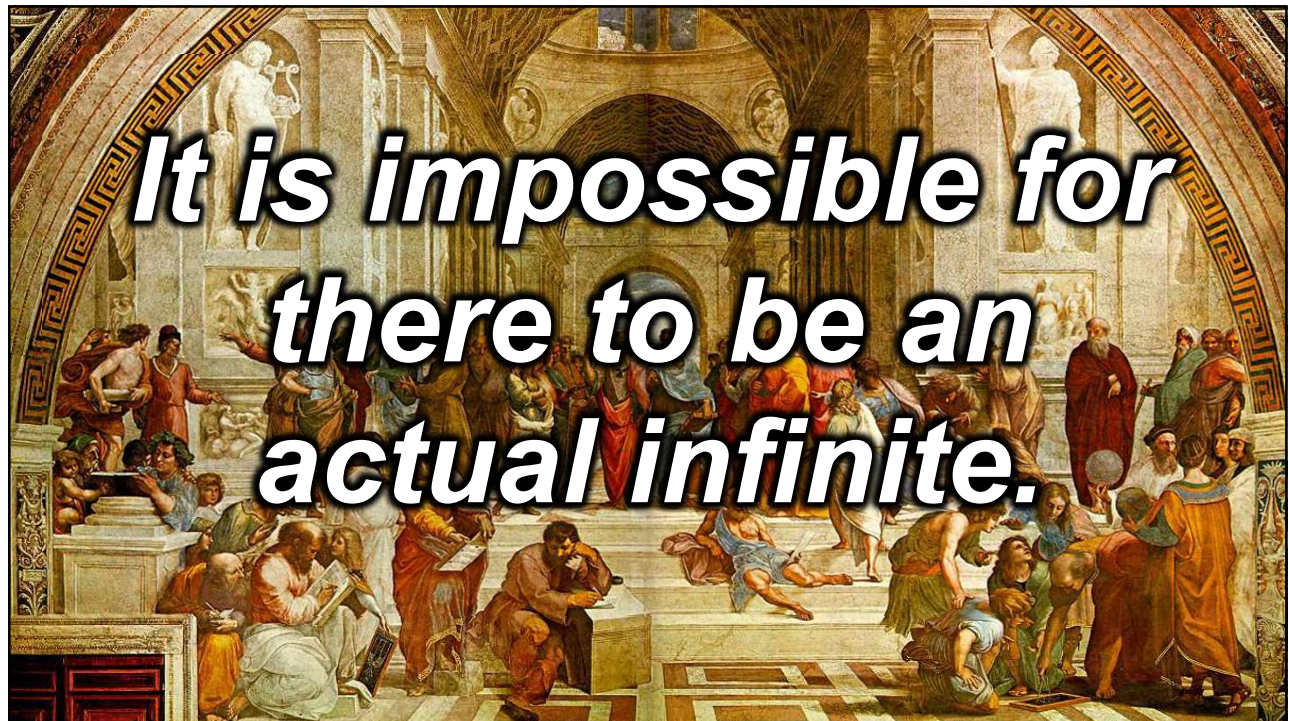
reduction ad absurdum argument

lit., "reduce to the absurd"

☙one-to-one correspondence❧

1, 3, 5, 7, … ⟶ ∞

2, 4, 6, 8, … ⟶ ∞

This shows that the two sets are equivalent.

ϣone-to-one correspondenceϤ

1, 3, 5, 7, ... ⟶ ∞
1, 2, 3, 4, ... ⟶ ∞

This shows that the two sets are equivalent.

	1	2	3	4	5
1	$\frac{1}{1}$	$\frac{2}{1}$	$\frac{3}{1}$	$\frac{4}{1}$	$\frac{5}{1}$
2	$\frac{1}{2}$	$\frac{2}{2}$	$\frac{3}{2}$	$\frac{4}{2}$	$\frac{5}{2}$
3	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$	$\frac{4}{3}$	$\frac{5}{3}$
4	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{4}{4}$	$\frac{5}{4}$
5	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{3}{5}$	$\frac{4}{5}$	$\frac{5}{5}$

∽one-to-one correspondence∾

$$^1/_1, \ ^2/_1, \ ^1/_2, \ ^1/_3, \ ^3/_1, \ ... \longrightarrow \infty$$

$$1, \ \ 2, \ 3, \ 4, \ \ 5, \ \ ... \longrightarrow \infty$$
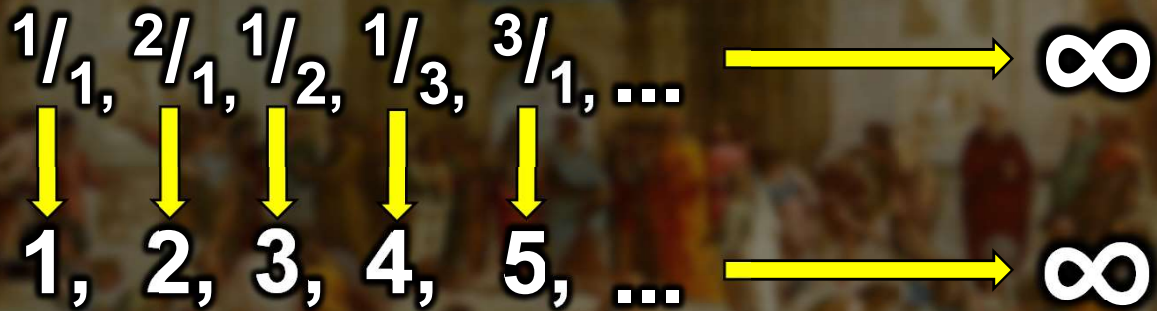
This shows that the two sets are equivalent.

Since all this follows from the definition of an actual infinite, consider the implications for something concrete.
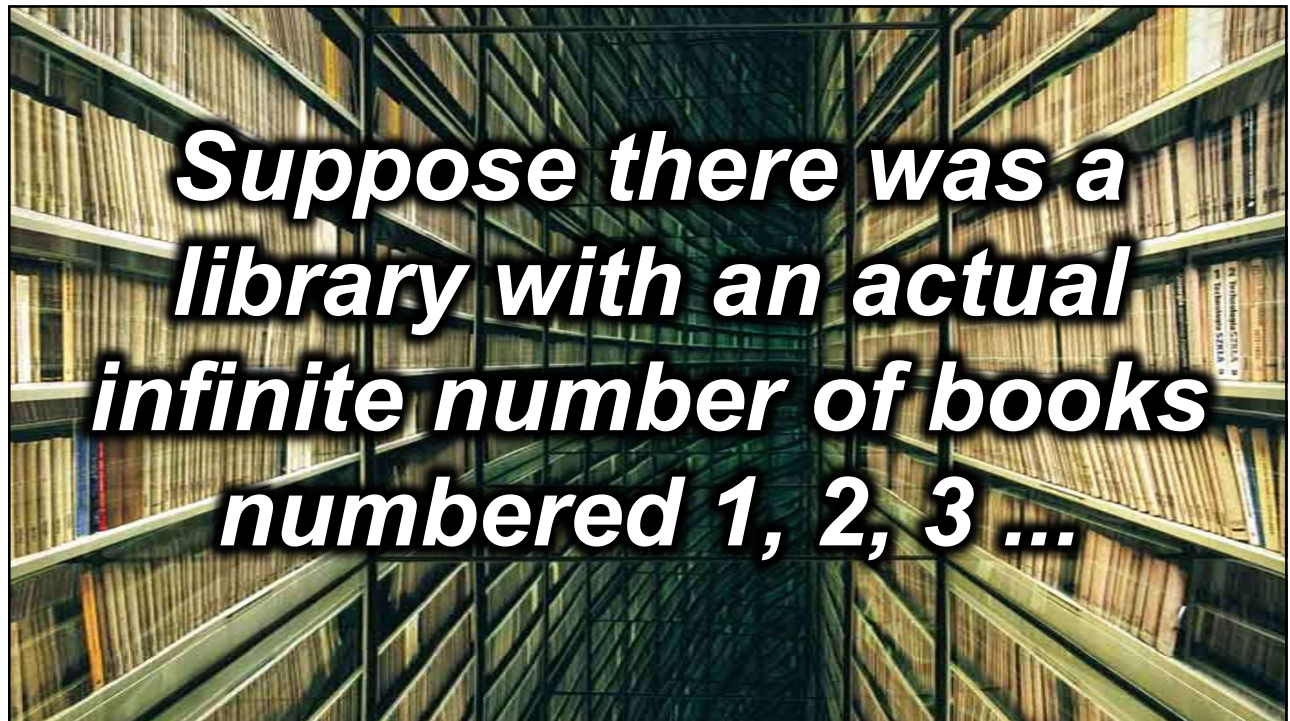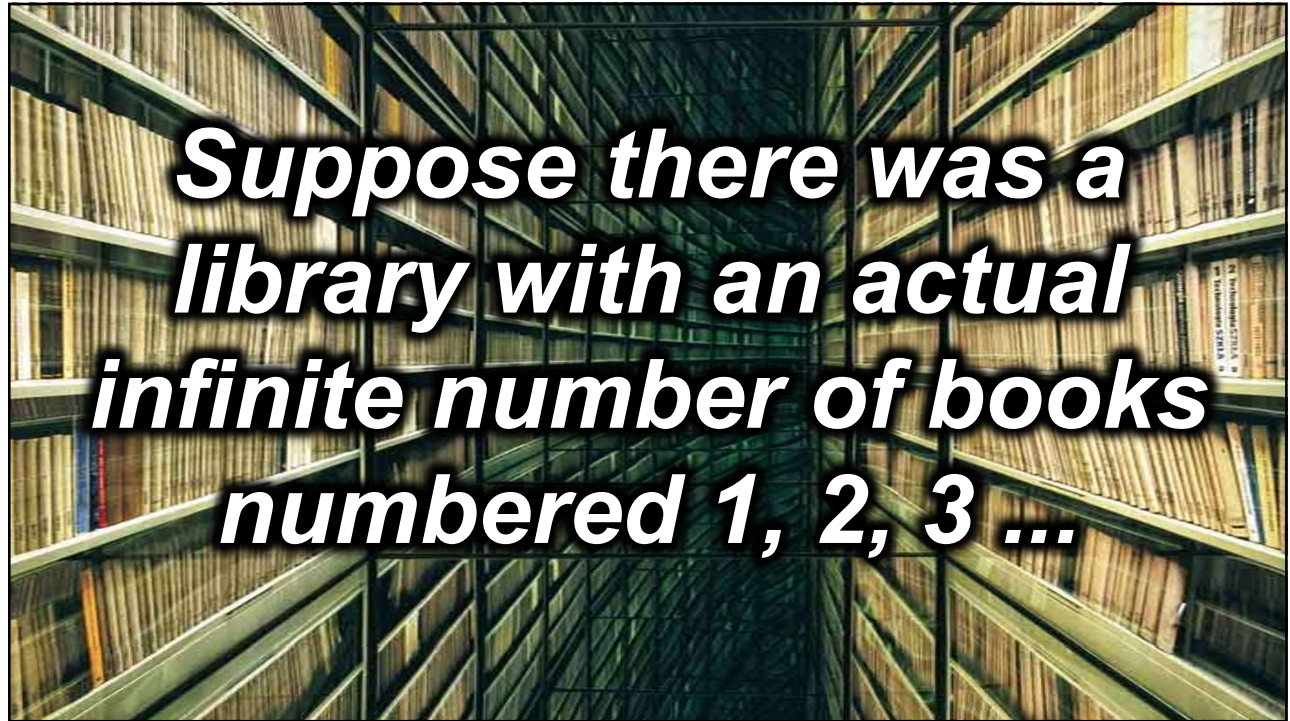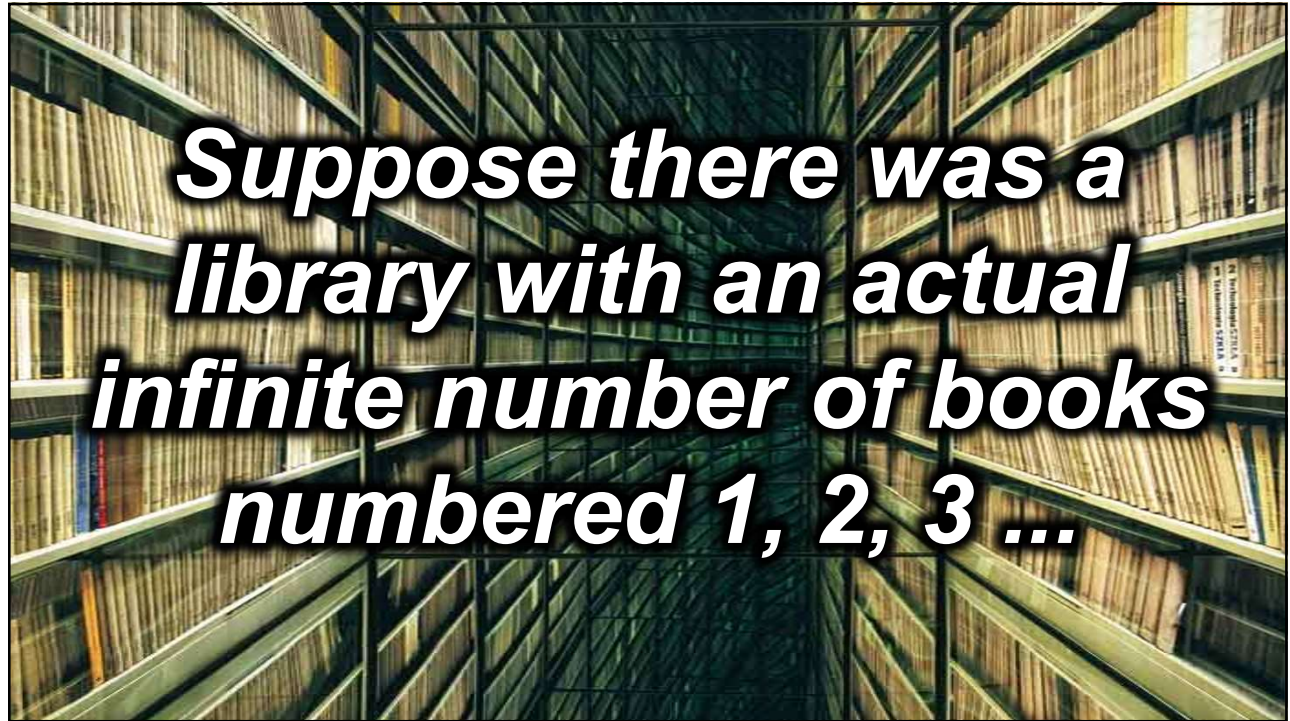
Suppose there was a library with an actual infinite number of books numbered 1, 2, 3 ...
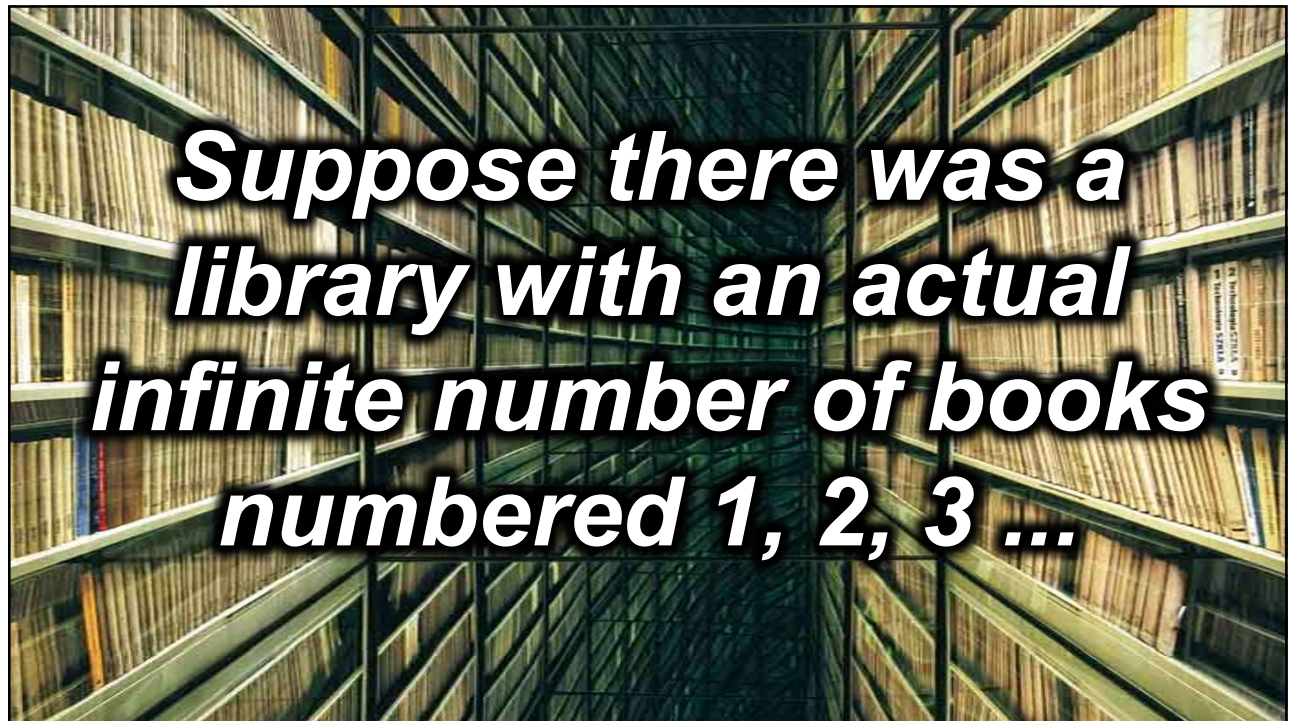
Suppose there was a library with an actual infinite number of books numbered 1, 2, 3 ...

It is impossible for an actual infinite to be traversed.

0, 1, 2, 3, 4, 5, 6, 7, ...

X
Now

... -7, -6, -5, -4, -3, -2, -1, 0

X
Now

Zeno's Paradoxes

Zeno of Elea
(490 BC - 430 BC)

Super Tasks and Infinity Machines
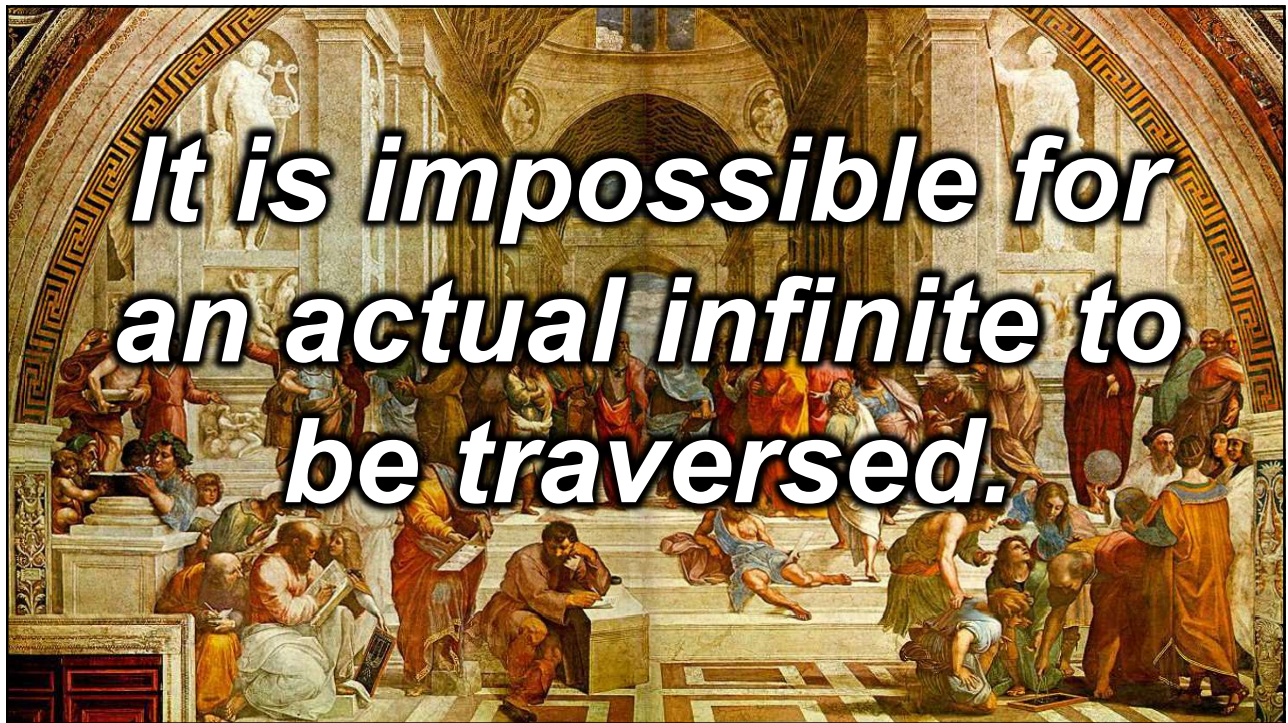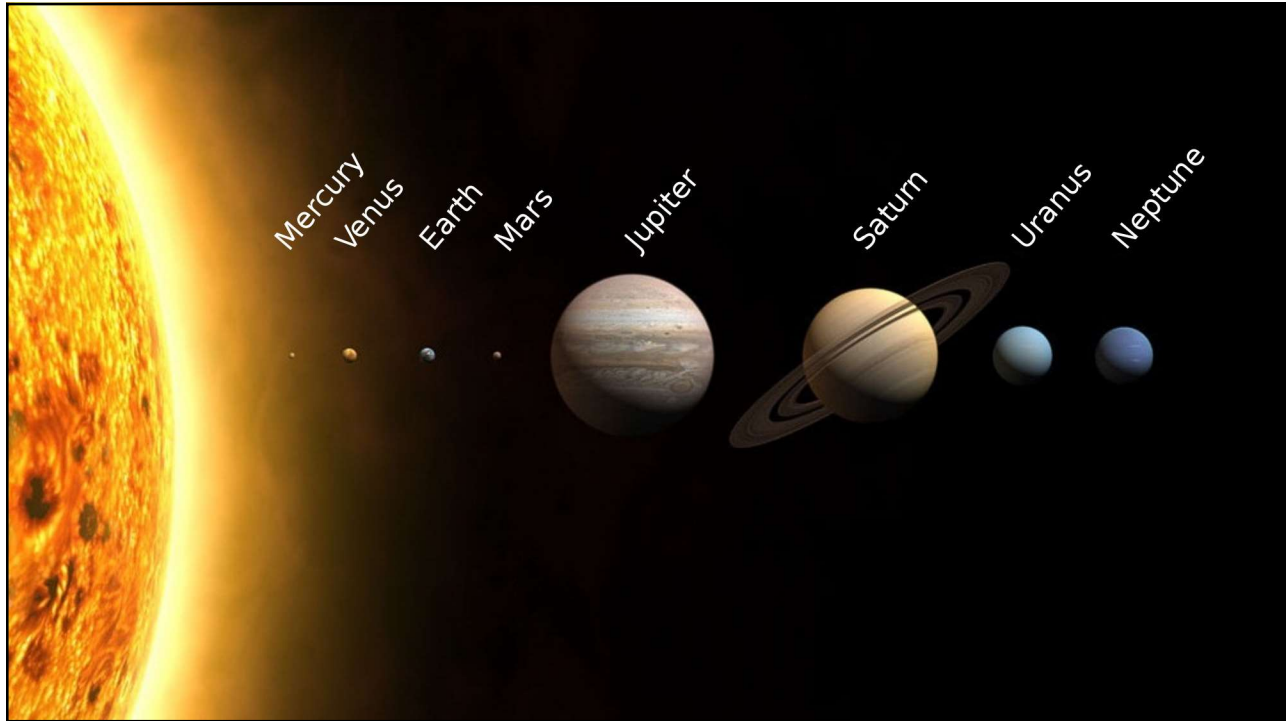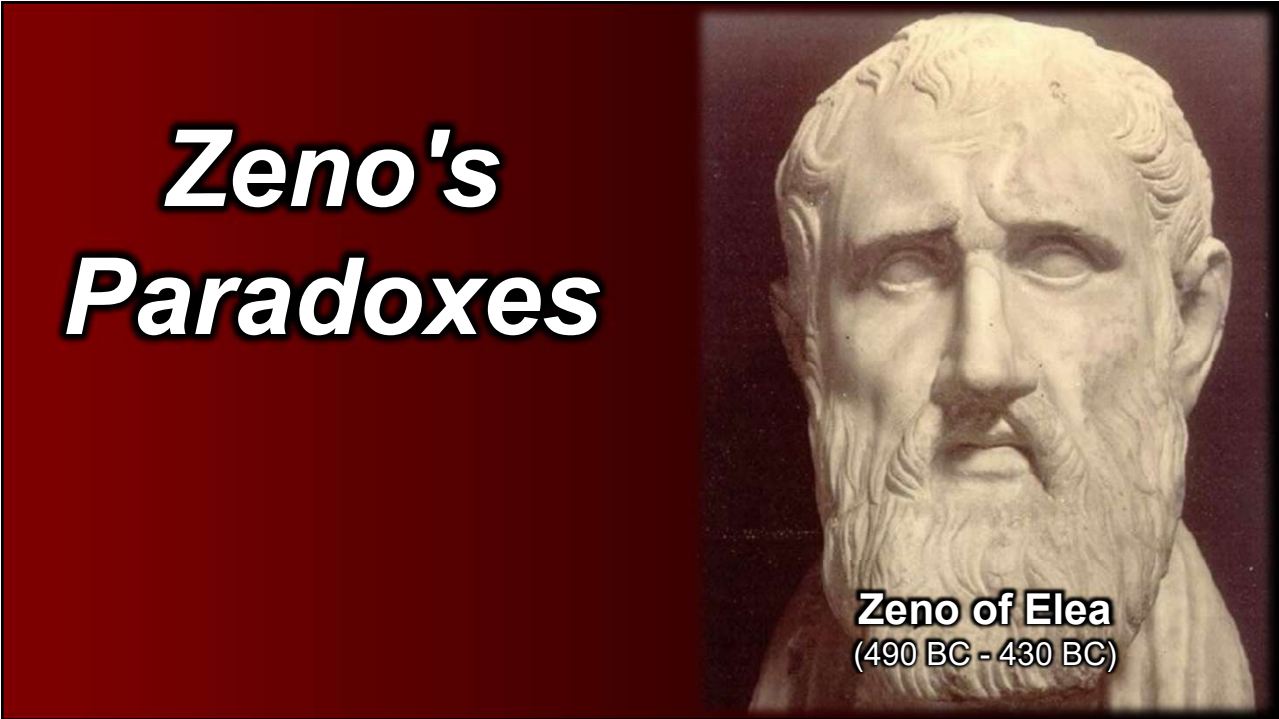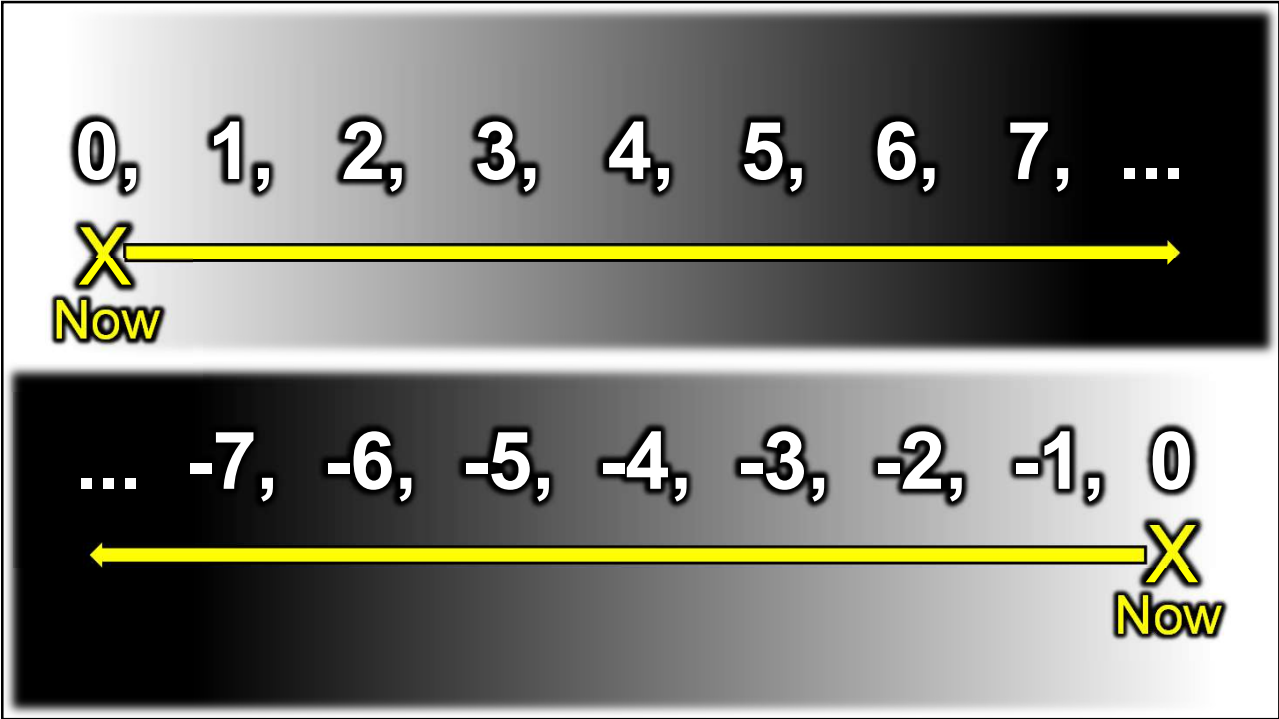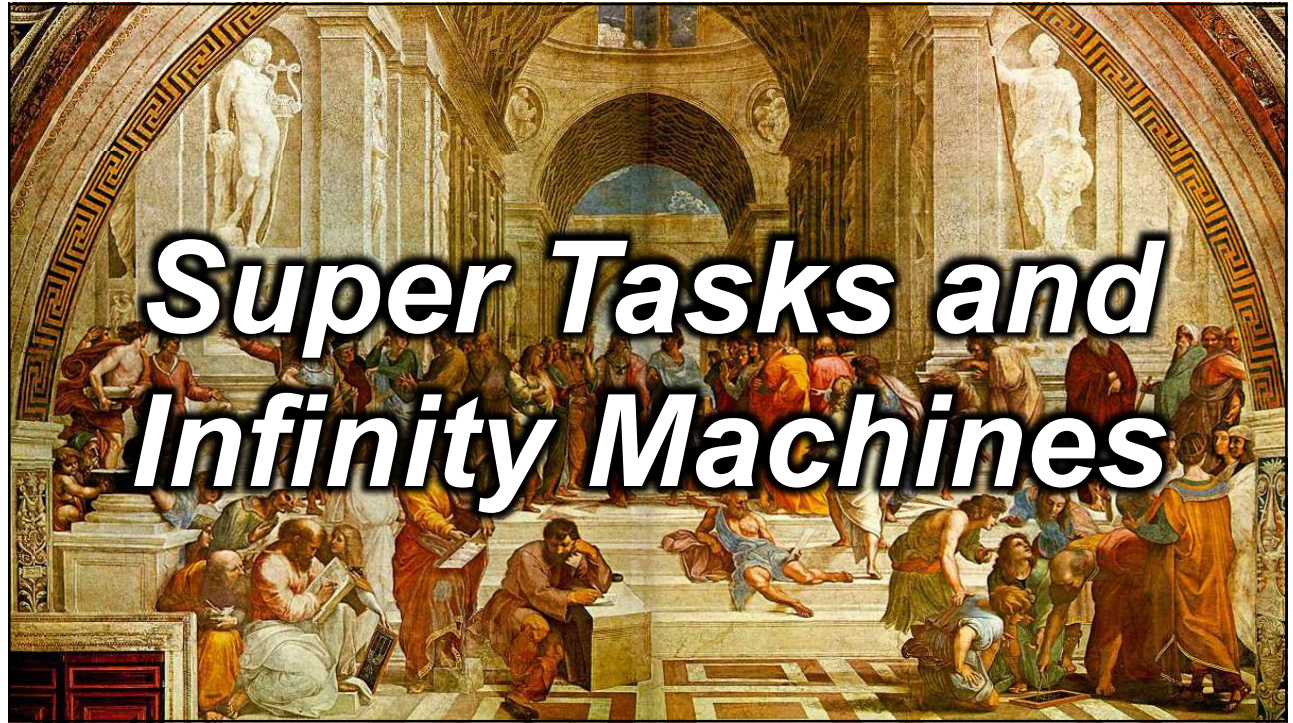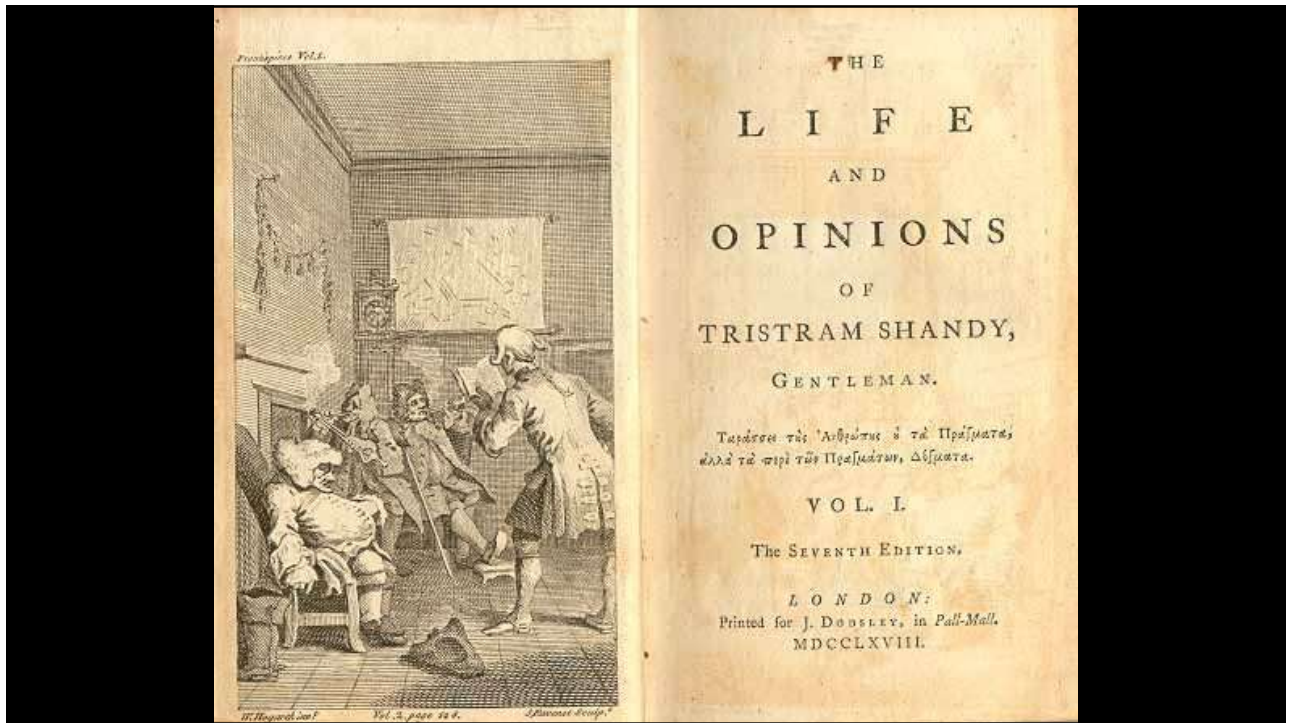
Premise 2: Whatever begins to exist has a cause of its existence.

Astonishingly, many contemporary atheists completely miss this premise in the argument.

How an Evangelical Preacher Became One of America's Leading Atheists

godless

Dan Barker

Foreword by Richard Dawkins
author of *God Delusion*

Dan Barker

"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: How and Evangelical Preacher Became One of America's Leading Atheist* (Berkeley: Ulysses, 2008), 130]

Dan Barker

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Dan Barker

Letter to a Christian Nation

SAM HARRIS

AUTHOR OF THE NATIONAL BEST SELLER
THE END OF FAITH

Sam Harris

"Everything that exists has a cause; space and time exist; space and time must, therefore, have been caused by something that stands outside of space and time, and the only thing that transcends space and time, and yet retains the power to create, is God."

[Sam Harris, *Letter to a Christian Nation* (New York: Vintage Books, 2008), 72]

Sam Harris
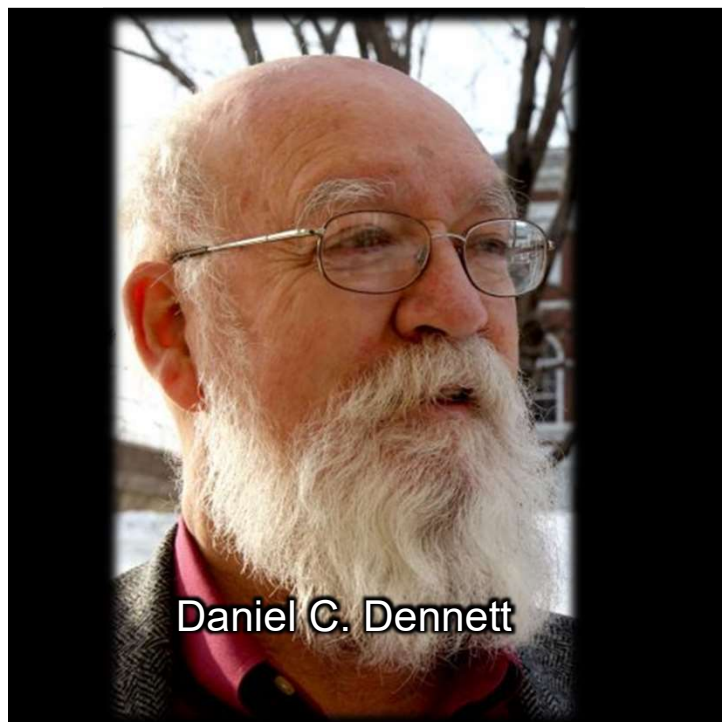
Daniel C. Dennett
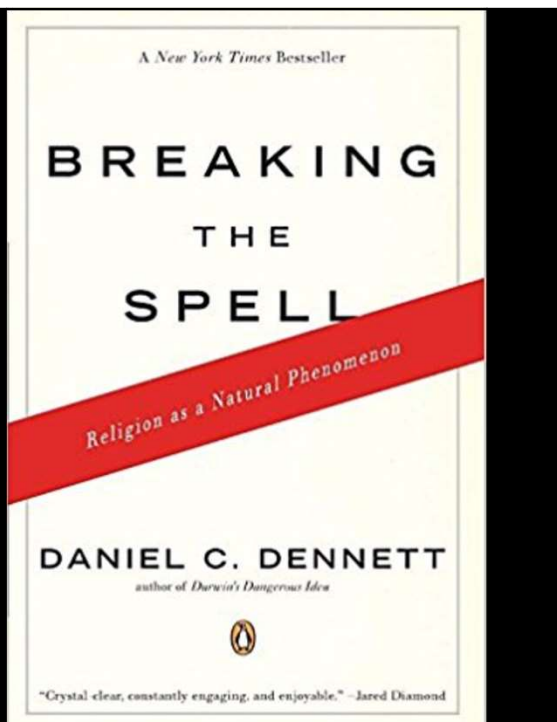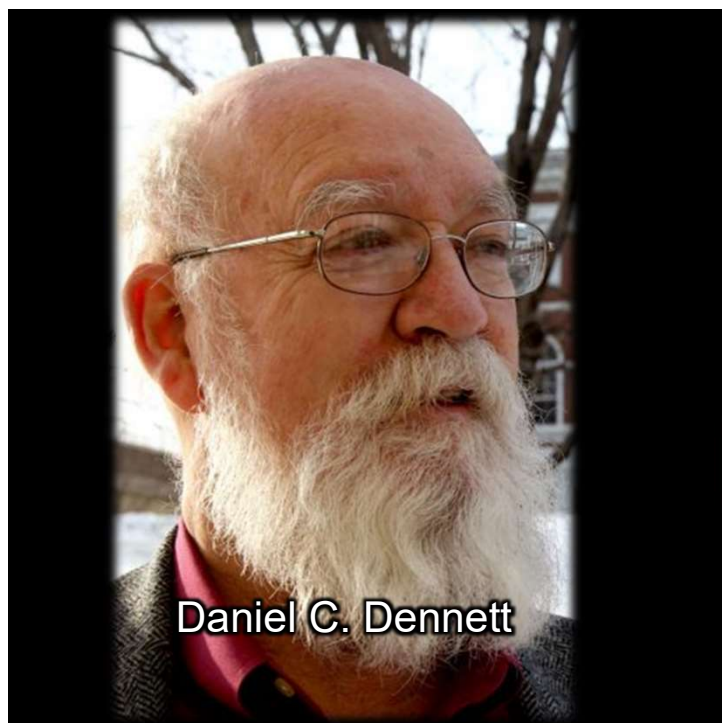
Daniel C. Dennett

"The Cosmological Argument, which in its simplest form states that since everything must have a cause the universe must have a cause—namely, God—doesn't stay simple for long."

[Daniel C. Dennett, *Breaking the Spell*, (New York: Penguin Group, 2006), 242]
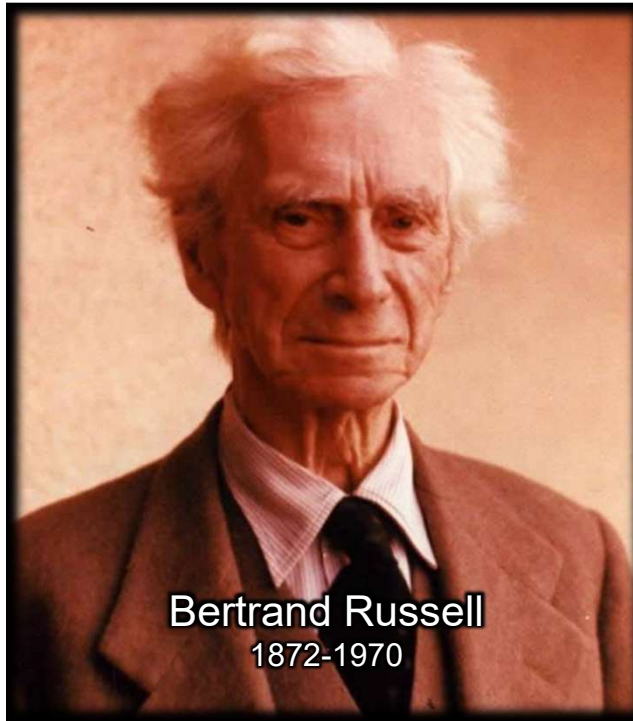
Bertrand Russell
1872-1970
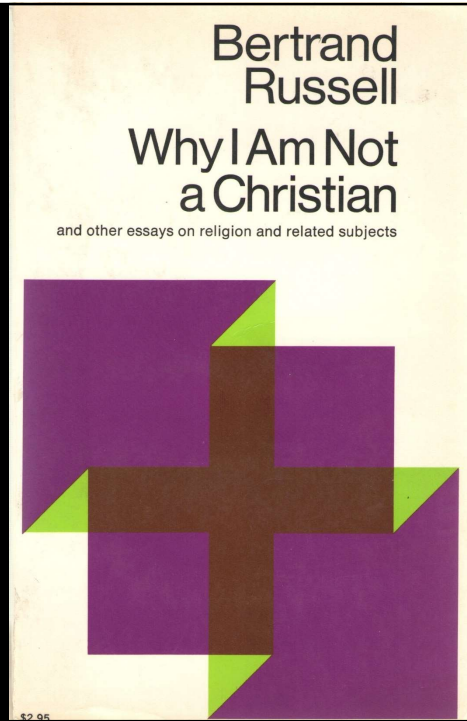
Bertrand Russell
Why I Am Not a Christian
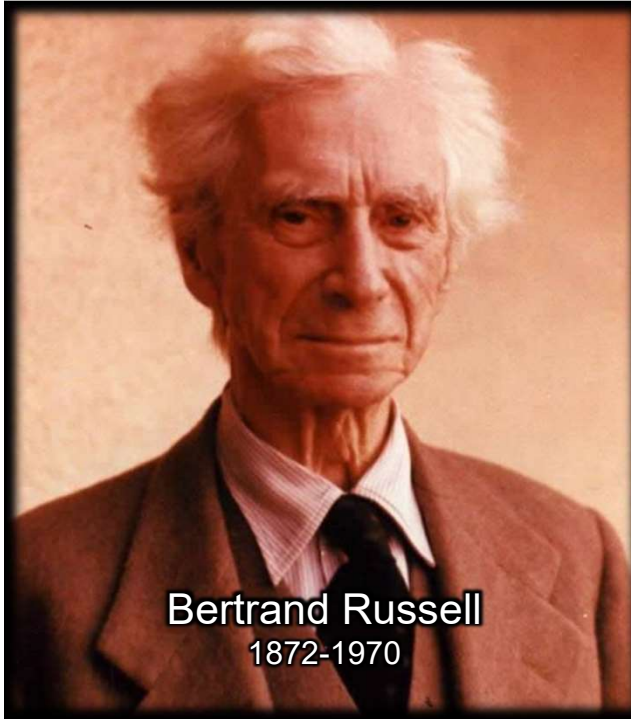and other essays on religion and related subjects

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Bertrand Russell
1872-1970

"The fallacy in the argument of the First Cause [is that] if everything must have a cause, then God must have a cause."
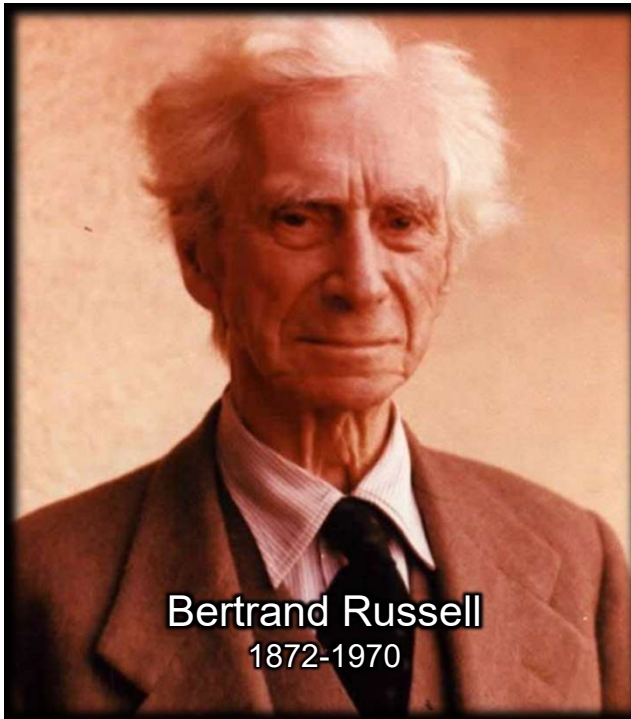
[Bertrand Russell, *Why I Am Not a Christian and Other Essays on Religion and Related Subjects* (New York: Simon and Schuster, 1957), 6-7]
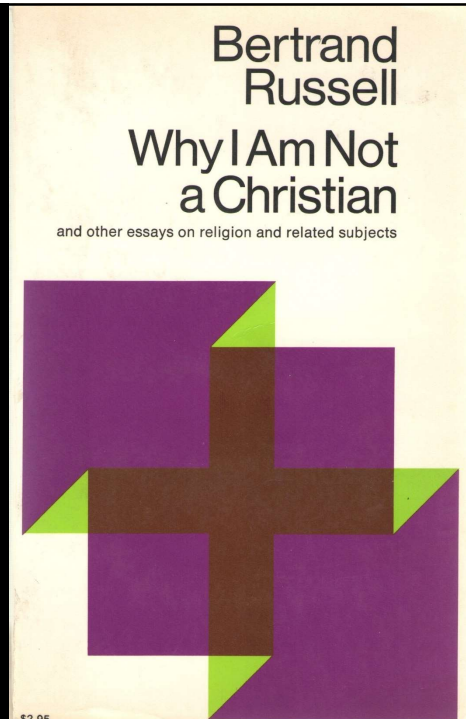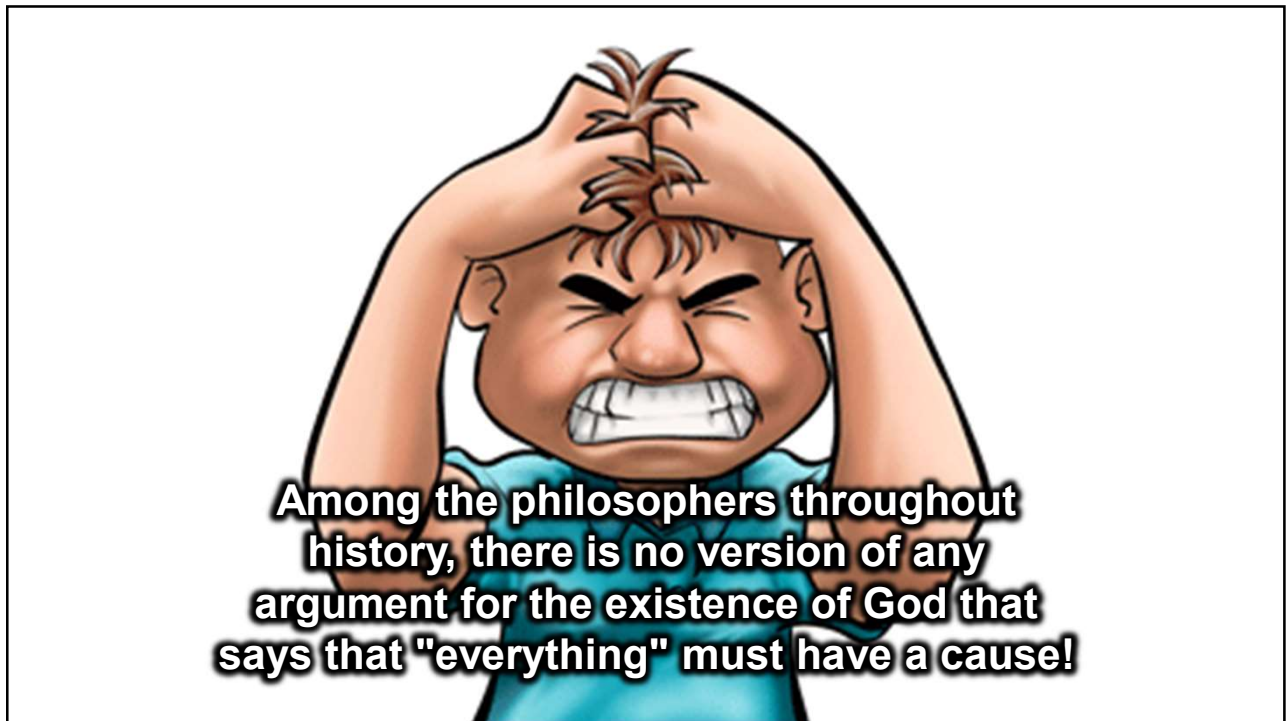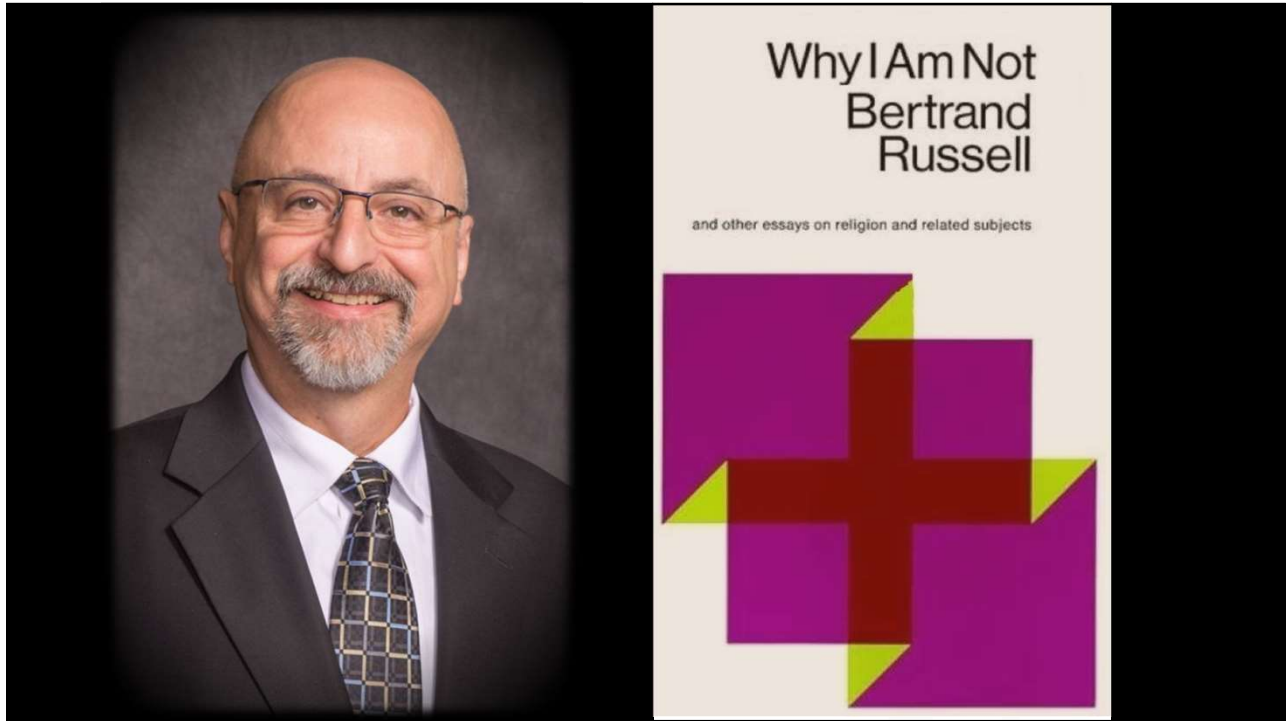
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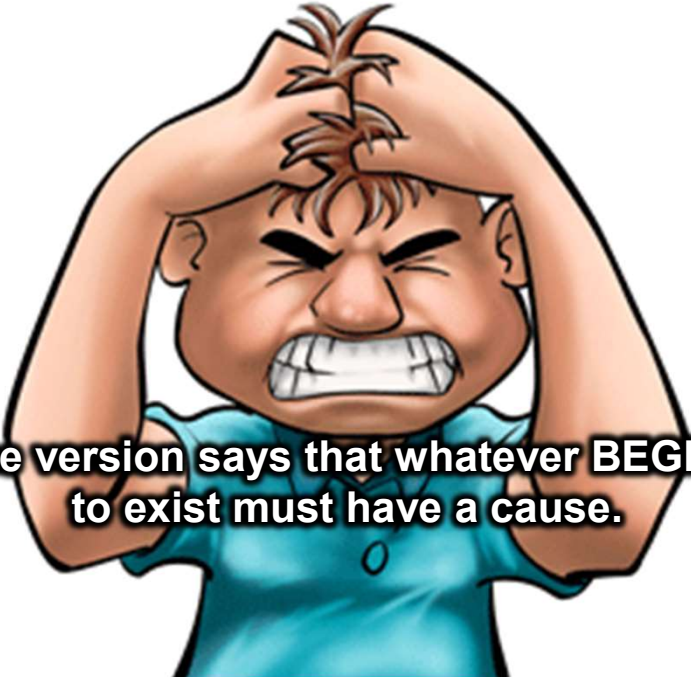
[Bertrand Russell, *Why I Am Not a Christian and Other Essays on Religion and Related Subjects* (New York: Simon and Schuster, 1957), 6-7]

Bertrand Russell
1872-1970

Bertrand Russell

Why I Am Not a Christian

and other essays on religion and related subjects

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Among the philosophers throughout history, there is no version of any argument for the existence of God that says that "everything" must have a cause!

One version says that whatever BEGINS to exist must have a cause.

Another version says that every CONTINGENT being must have a cause.

"Although this argument from empirical facts is not apt to impress philosophers, it is nevertheless undoubtedly true that the reason we—and they—accept the principle in our everyday lives is precisely for this very reason, because it is repeatedly confirmed in our experience.
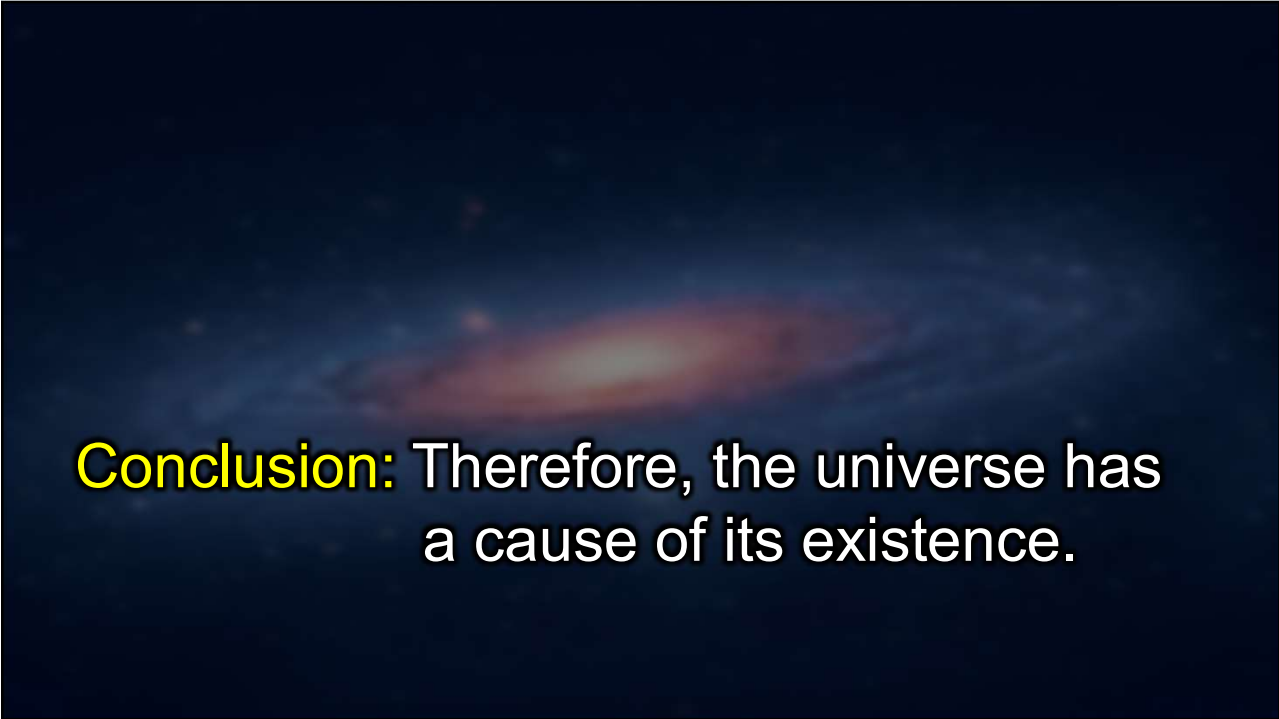
William Lane Craig

"Constantly verified and never falsified, the causal proposition may be taken as an empirical generalization enjoying the strongest support experience affords."

[William Lane Craig, *The Kalam Cosmological Argument* (London: The Macmillian Press, LTD, 1979), 145.]

William Lane Craig

Conclusion: Therefore, the universe has a cause of its existence.

❧Three Alternatives❧

The Universe is uncaused.

Response

This is impossible since everything that has a beginning needs a cause.
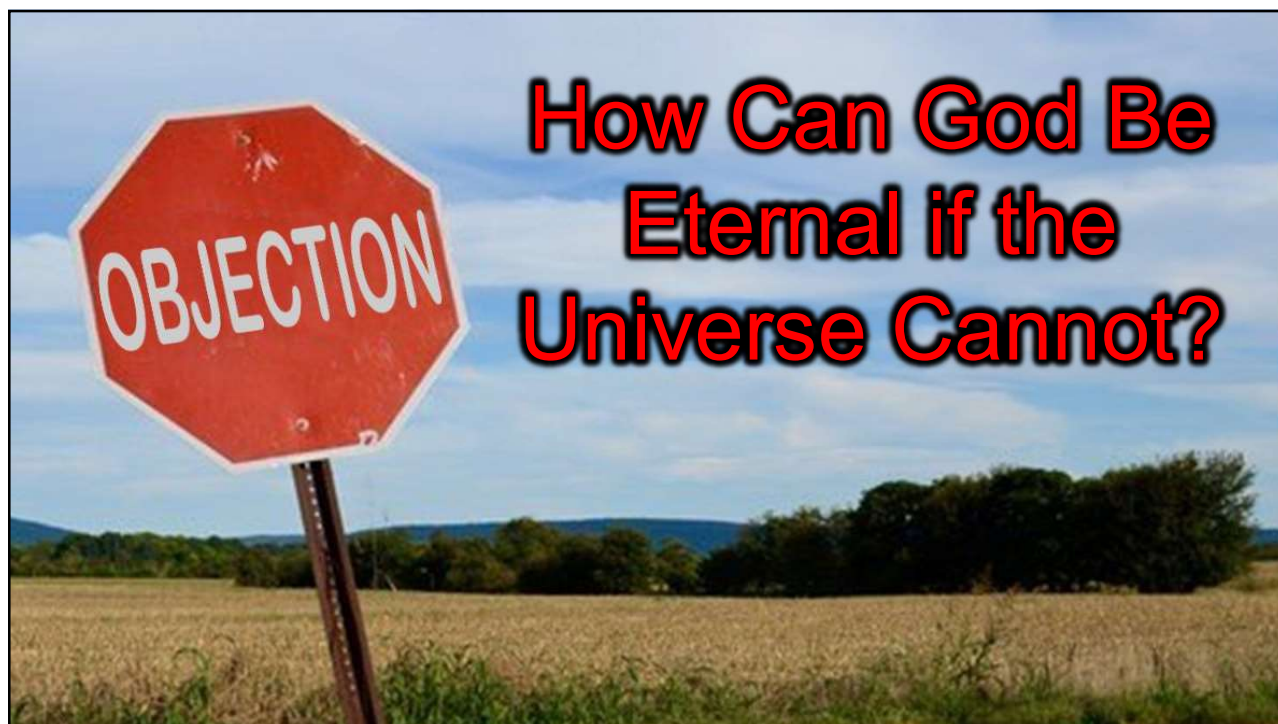
The Universe is self-caused.

Response

This is impossible since to be self-caused is a contradiction.

The Universe is caused.

Response

This is the only reasonable option.

❧Objections❧

How Can God Be Eternal if the Universe Cannot?

Does the Cause of the Universe Still Exist?

Is the Cause of the Universe a personal God?

It belongs analytically to the concept of the cosmological singularity that it is not the effect of prior physical events. … This effectively rules out the idea that the singularity is an effect of some prior natural process.

[Quentin Smith, "The Uncaused Beginning of the Universe," in William Land Craig and Quentin Smith, *Theism, Atheism and Big Bang Cosmology* (Oxford: Clarendon Press, 1993), 120]

Atheist Philosopher Quentin Smith

Is there more than one God?

Is the Cause of the Universe Good or Evil?