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## Was There an Eternal Singularity before Time Began?

February 6, 2023



## #STRask - Stand to Reason

Question about how to respond to someone who says the laws of causality and logic depend on time, that there was an eternal singularity, and time and logic only began at the Big Bang.

\* How would you respond to someone who says the laws of causality and logic depend on time, that there was an eternal singularity, and time and logic only began at the Big Bang?

## **Transcript**

(upbeat music) (bell dings) - Welcome to the #STRSQPodcast with Amy Hall and Greg Cockel, welcome Greg. - Thank you, hi Amy. - All right, here's a question from Robert Sarels.

And he wants, he has a question about an atheist claim. - Okay. - Law of causality and laws of logic depend on time.

There was an eternal singularity because matter and energy cannot be created per first law of thermodynamics. Time was locked inside the singularity. At Big Bang, time and laws of logic began.

How would you respond? - Well, of course, I'd have to hear this again 'cause there's a couple of things going on there, but I'm not sure what it even, this is, first this is an assertion, okay? This is a assertion that's being made. And lots of times people, both sides of discussions, make assertions thinking that the assertion is an argument. You can, if you state your view clearly, and especially if you give an illustration of your view, that woo's some people into thinking they've made a case.

So every religion is a legitimate road to God. After all, all roads lead to Rome. Every path leads to the top of the mountain.

Okay, now all those two characterizations were, were illustrations of the claim that's

been making. They want support to the claim. They just clarified the claim.

Neither gives us any reason to believe that all roads lead to Rome and all paths do lead to the top of the mountain, the metaphors, or that all religions are equally valid. So we just need to distinguish between a claim and an argument. In this particular case, all we have is a claim.

A statement of the way things are. And I started to write some of this down, and we'll go back to it in a minute, but one I recall that time is locked into the Big Bang. I'm not sure what he means by time being locked in the Big Bang, unless he means that time cannot start until there is a Big Bang.

- So what he's saying here is the law of causality and logic, those laws depend on time. But there was no time in the singularity. It didn't begin until the Big Bang.

So he's just saying the time that the singularity was eternal, and since the law of causality depends on time, you don't, my guess is what he's saying here. It's not specifically stated, but there's no need for a cause. - Okay, so that, why would I, I'm not sure, so I'm gonna ask questions because this is confusing.

Why, what does it mean to say the singularity, which in this case is a reference to the Big Bang, is eternal? - It was an event. It happened at some point in the past. That's why the universe has an age because there was a beginning of the universe.

So to say that the singularity was eternal, I'm not even sure what that means. Well, time is locked in it. I don't even know what that means either.

I mean, how, maybe you'll physicalize time. And so therefore time is somehow built into the singularity of its physical, but I don't even know what it means to say time is physical. What we have that is physical are measures of times, clocks are physical.

Physical processes are obviously physical, but time is duration. And duration, it strikes me, can be measured, can be quantified, there can be a metric to it, but duration itself is in physical. We can take our thoughts and write them down.

So my thoughts can be quantified in physical form, but that doesn't mean I thought are physical. A big problem so far with this is that there's a tremendous amount of lack of clarity in this claim, what exactly is being claimed. Now, I think part of the concern is, is the way time is characterized by physicalists as being something physical.

So time had a beginning at the Big Bang. Before the Big Bang, there was nothing. Well, that's an assumption of physicalists.

If physicalism is true, there can't be anything happening before there's anything physical because physical things are all of reality. So that would follow from the assumption of

physicalism, but why presume physicalism? The entire argument for the existence of a non-physical creator is that you have an effect, you have a happening, let's just call it that, a happening, which is the beginning of the universe, that invites the question, what caused it? Because it appears to be an effect. To say nothing caused it is contrary to the metaphysical notion that effects have causes.

All right, to say, well, time is locked into the singularity, fancy, mancy language doesn't even make any sense to me. How is time locked into a singularity? That's simply, I think, a sophisticated way of saying before there was a Big Bang, nothing was happening. But of course, that's an assertion that presumes physicalism.

If there was a God before the singularity, then God could have been doing things. He could have been thinking things. And so the way this is stated sounds suspiciously circular.

It's not clear to me that a case has been made. Common sense reflection on the nature of events, which reflection, by the way, is key to the whole scientific enterprise, is that when things happen, there are reasons for their happening. And we try to figure out what those reasons are, that's discovery, right? Okay, the apple falls to the ground.

Why did that happen? You know, gravity, okay. Well, what's gravity? So we have these things we discover and why it's pushing for what's behind it. Why would we just simply presume that the singularity, called the Big Bang, is simply a brute fact and is the beginning of everything else.

I'll tell you why he would do that. It's because that's what materialism, physicalism, requires if you make the initial presumption that materialism is true. Metaphysical materialism is true.

But that's the very thing at debate here. Is physicalism adequate to explain the universe or do we need an additional element that has explanatory power for singular events like the beginning of all the physical stuff or the beginning of life or the beginning of consciousness. These are all kinds of singularities of sorts.

They're different kinds of Big Bangs, so to speak. And these are questions that deserve an answer. Instead of being shut down essentially with obscure statements like, well, time was inside the Big Bang, inside the singularity.

Well, I would admit that if the Big Bang is the first event of history, then temporal history started at the Big Bang. But that doesn't mean there can't be other events taking place that are not physical prior to that. And when you have events taking place in a sequence, you have time passing.

If you, I'm gonna say that again, 'cause people, this might be hard. If you have events taking place in a sequence, even if they are non-physical events, you have time passing.

So now I was past tense thinking about the circular nation, the notion element of this argument.

And now I'm thinking about the nature of time passing. So those are thoughts that are not physical. They can be manifest in physical form.

I can write them down. I could have things going on in my brain, but the thought itself is not physical. And the thought, there was a thought before and there was a thought after.

So my thoughts were temporal. They were in time. I don't need anything physical to exist, at least in principle, for me to have non-physical things happening in a sequence.

And if non-physical things are happening in a sequence, then time is passing. Because you have tense facts that apply to reality. Now, of course, if you're a physicalist, you're not gonna have any tense facts that are non-physical because those things don't exist, but that's a presumption.

You're not demonstrating that it is the case that non-physical things don't exist. You're just trying to refine your physicalistic model by taking those things like time, for example, and confining them to your physicalistic model. The beginning of the universe, though, suggests there was a cause.

And it can't just be dismissed by this kind of, what I would consider philosophic hand-waving that's being done in this statement. Now, maybe I've missed something and I'd like you to read the statement one more time, but that's what this sounds like to me. - The law of causality and laws of logic depend on time.

- Okay, let's just stop for there for a minute. I might be willing to grant that because if you have cause and effect, of course, the law could still be there and there'd be no time. There could still be these things because these are abstract objects, okay, the laws of causality or whatever.

But in any event, okay, what they do is they are only manifested in a temporal circumstance. Cause effect, past, present, okay? Let's go on. - There was an eternal singularity because matter and energy cannot be created per first law of thermodynamics.

- Actually, that isn't what the first law of thermodynamics says, okay? And it is in our view that, that, well, let's just, let's, I'll just leave it at that for right now. - Well, it seems to me, it seems to me that that's just a claim. If the claim that matter and energy cannot be created within its own system, that's true, whether or not that's labeled that or not.

But isn't that just an assertion that God can't create anything? - It's an assessment of matter. Yes, it's an assessment of matter within the system, okay? And so if, what's interesting is, if your claim is that this is a kind of an absolute metaphysical claim that it

can't possibly be otherwise, then you run right into the second law of thermodynamics because the first would require, if it can't be created, whatever matter is here has always been here, okay? But if it's always been here, then we would be at heat death right now in the universe. Everything would have stopped moving because we would have all the energy that is available for use would have been used up and the universe would have cooled down.

And this is not controversial. So then the second law would be in opposition to the first law if he's applying the first law accurately. Why aren't we then, why isn't everything just dead? Because of the maximum entropy, we'd have reached maximum entropy.

Anyway, the next. - Time was locked inside the singularity. At Big Bang, time and laws of logic began.

- Well, maybe we said enough about this, but it just seems so odd if people think about it, most philosophers consider the laws of logic not to be accidental, but necessary. They are true in any universe. In fact, you can't even talk about anything.

If you can't distinguish one thing from another, that's the law of identity, which is the law of logic. A thing is itself and not something else. A equals A, okay? That's going to be true in any universe.

So it's a metaphysical notion that is a metaphysical. It's above the physical. Now you may have, have to have things in order to distinguish them from each other.

So you may have to have some things in order for the laws of logic to be manifest, okay? But there's more than one law of logic. A equals A, all of identity. You cannot have either A or not A. That's the law of excluded middle.

Wait, that's two things. You've got to have the law of identity in place before there can be a second law of logic, okay? So these things have to be in place to distinguish each other even before you have a creation. You don't need the physical world for the laws of logic to exist to be distinguished each other.

Now, I know that people are listening going, man, you lost me about three years ago. I got it, all right. This is a sophisticated kind of challenge that is dealing with philosophic notions.

And so it's just not going to appeal to a lot of people. And it's also one of those things that take a while to kind of unwrap. But what I've tried to do is give some thoughts to show some assumptions that are being made.

And also some kind of oddities that it's not even clear that the statements are coherent or even scientifically accurate. In any event, the whole thing is a claim and it seems that there are problems with the claim. And if I don't show any problems to the claim, the

person making the claim is going to have to give a lot more information justifying why anybody should take the claim itself seriously.

That's kind of my summary of the tangle that we've just been talking about. And even if we're not talking about causality, wouldn't they have to answer the question of contingency? I mean, the contingency argument would apply regardless of the situation with causality. - That's the concept of dependency.

Either something is, owes its existence solely to itself or it owes its existence to something else that is self-existent. That's the contingency argument in a thumbnail. That's the philosopher.

- Liveness? - Yeah, liveness. And so there you have an argument for the existence of God, not based on the beginning of the universe. That's the Kalam argument that's being taken exception with here.

But you have an argument for the existence of God that's based on just the fact that there are contingent things and they can't explain themselves. They can't explain themselves. I think what the atheist here wants to do is to make the universe non-contingent, the physical world just is.

It's a brute fact, and I don't even-- - Wouldn't you have to argue that it's a necessary type of thing? And nothing physical is a necessary type of thing. - That's right. That's right.

In all our observation, physical things are contingent. And which is why you have metaphysical laws that help make sense of that observation about the world. But when he wants to take metaphysical laws that he's asserted can only be manifest in a physical world.

And I rebutted that by showing that you could have two metaphysical laws. You could have the law of identity existing. If you have the law of excluded middle because the law of identity distinguishes one from the other.

I think it's itself and not that other thing distinguishes it. But you could have those things without a physical world. And so none of this goes through.

I wanna make one last observation, maybe have more to say, but we're talking about the cosmological argument. And this is an attempt to find fault with it. The column cosmological argument, which doesn't address his complaint, doesn't address other forms of it, the Leibnizian contingency argument.

But that's only one of a number of arguments for the existence of God, okay? And I noticed this about J. Warner Wallace's book, God's Crime Scene, where he talks about all of these particular things that are parts of reality, like free will, like the existence of the

universe, like the order of the universe, like the laws of logic, all kinds of different things that are features of the universe that need an explanation. And in every single case, there are alternate explanations for what we observe. This is an attempt at one of them.

What's interesting in a point that Jim makes is, is that we have an explanation that's a good explanation regarding any individual thing. And those were in the running. This is, we're not making stuff up.

But it's the same explanation that ends up solving everything. It answers the question of the origin of the universe. It answers the issue of the design of the universe.

It answers the issue of morality. It answers the issue of freedom of the will, and on and on and on. And I think that makes, that lends tremendous credibility to our answer to these challenges, because one answer is a good answer for every one of these challenges.

We don't have to go all these different ways. - Well, thank you, Robert. Your questions took the entire episode.

We appreciate it. - Oh my goodness. - We appreciate hearing from you.

If you'd like to send us a question, send it on Twitter with the hashtag #STRAsk or you can go through our website. Just look for our #STRAsk podcast page and you'll find a link there. And just keep your questions short, just a couple of sentences.

It's usually on Twitter, it's 280 characters, I think, now. For now. - And as you've seen, we do not keep our answers short, but the questions need to be short.

- Well, thank you for listening. This is Amy Hall and Greg Cocle for a stand to reason. (bell dings)

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