

§ 8. Doctrine of Creation

Lecture 4

The Notion of “Bringing Something Into Being”

We’ve been talking about the biblical data concerning the doctrine of creation and in particular creation *ex nihilo*. Now as we begin our systematic summary of this doctrine we want to define more closely the notion of creation.

Intuitively, creation involves God’s bringing something into being so that if God creates some entity e at a time t then e comes into being at t . We can analyze this notion as follows:

e comes into being at t iff . . .

(“if and only if,” that’s what “iff” means. It’s not a typo. It means “if and only if.” So we’re going to state necessary and sufficient conditions for e ’s coming into being at t .)

The first condition is, one, that e exists at t . Obviously if e comes into being at t then e must exist at t .

Secondly, t is the first time at which e exists. e did not exist prior to time t . t is the first time at which e exists.

Condition three would be that e ’s existing at t is a tensed fact. I’ll say something more about that third condition in a moment.

So e comes into being at t if and only if: e exists at t , t is the first time at which e exists, and e ’s existing at t is a tensed fact.

This gives an analysis of creation. If we wanted to add that this creation is *ex nihilo* then we need to add a fourth condition here, and that is that e does not have a material cause. That will give you then creation out of nothing. This is creation. If you had a fourth condition that e has no material cause, that will give you creation out of nothing.

This is what it is for something to come into being at a time t .

So to say that God creates e , we can give necessary and sufficient conditions for that as well. God creates e at t if and only if God brings it about that e comes into being at t . God creates e at t if and only if God brings it about that e comes into being at t , and for e to come into being at t is for e to exist at t , t is the first time in which e exists, and e ’s existing at t is a tensed fact.

So God’s creating e involves e ’s coming into being which is an absolute beginning of existence for e . It is not a transition from non-being to being. Rather, it is an absolute beginning of existence. In creation there is no entity on which the creator acts to bring about its effect. So it follows that creation is not a type of change since there’s no

enduring subject that goes from non-existence to existence. Rather, it is an absolute beginning of existence for the object that is created.

The doctrine of creation involves an important metaphysical feature which is typically underappreciated, and that is clause three here – that e 's existing at t is a tensed fact. I think that creation entails (or commits one to) a so-called tensed theory of time, or this is sometimes called an A-theory of time. That is to say, it is a theory of time that involves the objective reality of temporal becoming – things really do come to be and pass away. By contrast, if you adopt a tenseless theory of time (which is sometimes called the B-theory of time) then things don't really ever come into existence or go out of existence, rather things are just four-dimensional extended objects. They are not only extended in three dimensions of space, but they are also extended in the fourth dimension of time. They would begin to exist only in the sense that the extension along that temporal dimension would be finite in the earlier-than direction. If you follow the entity out in the earlier-than direction, along that dimension of time you'll come to a stopping point. But the universe on such a view doesn't come into being at that point. Whether it's finite in the past or infinite in the past, the four-dimensional entity just exists tenselessly. It doesn't really come to be.

So this third clause, I think, (that e 's existing at t is a tensed fact) is critical to capturing the idea of creation. In the absence of three, God's creation of the universe could be interpreted along the lines of a tenseless theory of time to merely postulate that the universe is ontologically dependent upon God and is finite in the earlier-than direction. I think that fails to capture the intuitive idea of creation which involves God's bringing something into being.

START DISCUSSION:

Student: Are you saying then that in order for this to be accurate, time itself is part of that beginning? That's what starts the process?

Dr. Craig: I think what would be implied here would be if you think that God created time as well as the objects in the universe then time would itself have a beginning. That's right. So you could say that, say e is time. Time would exist at a moment t . t would be the first moment at which time exists. And in cosmology this is typically identified with $t=0$ – the time of the Big Bang, or the time of the initial singularity. So t would be the first time at which time exists, and time's existing at t would be a tensed fact. You could apply this analysis to the beginning of time itself. That's an advantage of this analysis because if you, say, have a different analysis where you say something like this, " e begins to exist at t if there is a time prior to t at which e does not exist," then that will lead to a self-contradiction if you apply it to time. Because in that case, you'd say time begins to exist at t if there is a time prior to t at which time does not exist. And that is self-contradictory.

So this analysis, I think, is superior in capturing the idea of “beginning to exist” because it will apply not only to physical objects but to time itself.

Student: And is that, as it stands, indicate that? Indicate that time did begin with *e*. Not necessarily what you put up there but it would fit into that.

Dr. Craig: It would fit this analysis. The analysis itself is neutral as to whether anything ever does begin to exist. It just is wanting to give us an understanding of when we say, *God creates e at t*, what does that mean to say that God creates *e* at *t*? Well, I think what it means is that God brings it about that *e* comes into being at *t*, and *e* comes into being at *t* if these conditions are met.

Student: I would think relativity would indicate a tenseless theory of time since different observers are going to see the same object come into being at different times from their point of view. Then I don't see how it really fits with a tensed theory of time where something would come into being at an absolute time.

Dr. Craig: This is a claim that is often made by proponents of a tenseless theory of time. I think the failure of this argument is due to not realizing that the special theory of relativity is susceptible to a variety of physical interpretations, and the tenseless interpretation (or space-time interpretation) that was advocated by Hermann Minkowski in 1908 and then later adopted by Einstein is only one possible interpretation of the theory. In Einstein's original 1905 paper he did not presuppose the four-dimensionalist tenseless perspective. On the contrary, he assumed that we were dealing with ordinary three-dimensional objects enduring through time. It's a tensed theory. In addition to that, the Dutch physicist Hendrik Lorentz enunciated a different interpretation of relativity according to which there is an absolute reference frame and an absolute time even if these are undetectable to us due to relativistic distortions of our clocks and measuring rods in uniform motion. So there are at least three different interpretations of the equations of relativity theory, and the equations are identical in all three. These are different physical interpretations of the equations: the original Einsteinian (which is tensed), the Minkowskian (which is the tenseless view), and the Lorentzian (which is compatible with a tensed version of time). Now, I don't want to get too far off the track going into this but if you are interested look at my book, *Time and Eternity*, published by Crossway where we go into this in much greater detail.

Student: It's my understanding that most modern scientists are Minkowskians and believe in a tenseless view.

Dr. Craig: Yes.

Student: With that being the case then the *kalam* cosmological argument is really just not applicable to them since they believe that nothing actually began to exist. So why then do

scientists like Stephen Hawking go to such great lengths to try to explain there's no beginning to the universe if it really doesn't matter to them?

Dr. Craig: Although I think that an adequate understanding of creation and beginning of existence involves a tensed theory of time, nevertheless there are tenseless, or B-theorists, who would feel very uncomfortable about saying something begins to exist at a time t without a cause. Imagine on a tenseless theory of time that a horse begins to exist at, say, 3 p.m. in the afternoon in this room. Even on a tenseless view, it would seem very strange that prior to that time there is no horse in this room and then at that time there is suddenly a horse in the room even if that horse is a four-dimensional object. Where did it come from and why? So even on a B-theory of time I think you can run a cosmological argument based on the beginning of the universe, but I think the argument will be much, much more powerful on a tensed, or A-theory, of time because then you've got something literally coming into existence – coming into being. And if there's no cause it literally comes into being from nothing which is, as I've often said, worse than magic. So the short answer would be: I think you can still do the cosmological argument on B-theory, but it's more powerful on the A-theory.

Let me just say one final thing. The reason I think that most physicists have the tenseless view is because this is what they've been taught in their textbooks. Since Minkowski your typical physics textbook presentation of the theory of relativity will be a four-dimensionalist's space-time interpretation, especially since general relativity came on the scene. So this is an almost unquestioned, unreflective result of physics textbooks and the presentation of the theory. But if you start reading literature on the philosophy of time and the philosophy of physics, you realize – well, wait a minute, you can't read the physical interpretation just off the shirtsleeve of the mathematical equations. The same is true with quantum theory. The equations of quantum theory are susceptible to nine or ten different interpretations physically, at least. With relativity, I'm aware of at least three. So one shouldn't be too impressed by just counting noses among contemporary physicists with regard to what theory of time they accept.

Student: The criterion you've stipulated presupposes that causation is a relation between substances whereas moderns tend to conceive of causation as a relation between events.

Dr. Craig: It doesn't really mention causation. What it mentions is creation, and I think we'd want to say that somebody creates something. Wouldn't you? That would seem strange to put in events as the subject and object of creation. Events don't create things, even if they cause things.

Student: I think we can probably integrate the tensed and tenseless theory together by looking at . . . God created the heavens and Earth for man. There is a communication – one is an initiator and one is a recipient. And for God, everything is tenseless, but to

bridge the communication he brings it into a tensed understanding so that we can know the beginning is the beginning of our communication that the time sets in.

Dr. Craig: Your point of view is one that is not infrequently defended today by certain philosophers and theologians. The idea would be that God's existence is a sort of tenseless existence whereas the time in which we live is tensed. My difficulty with those views is I cannot bring them into coherent relation with each other. I've argued this in the same book, *Time and Eternity*, if anyone is interested. It seems to me that in virtue of his omniscience God would know tensed facts like what's happening right now in the universe. But if he knows that then that locates him with respect to the now. He knows that, *We are now holding our Defenders class*, in contrast to, *The Japanese attack on Pearl Harbor is over*. He knows that. So his omniscience, it seems to me, would locate him in time. The other factor would be one that you mentioned – is that God's causal relationship with the universe is very difficult to understand if he is tenseless but time is tensed. Because how could God be tenselessly causing events in 2050 if those events do not in any sense exist? Remember, they're not up there on the timeline ahead waiting for us to arrive. If objective becoming is real there are no events in 2050 and there is no time called 2050. Those are just future potentialities. So how can God be tenselessly related to them? It's very hard to see. But I don't want to say that your view is indefensible or not widely represented. This is one alternative, an alternative that I'm not persuaded by. But there are folks who would defend that view. I'd refer you back to our discussion of the attributes of God and divine eternity. That's what this is closely connected with – how God relates to time.

In fact, let me just share one other thing that nobody has mentioned but I might as well since you brought up God's relationship to time. You may remember that the view that I defended was this kind of hybrid view that God is timeless without creation but temporal since creation. So God existing alone without creation is timeless, but God's existing with creation is temporal. Well, this definition would cause a problem for that because it would follow that God therefore begins to exist! God exists at time t . t is the first time at which God exists. And God's existing at time t would be a tensed fact. And yet, intuitively, on my theory, God doesn't begin to exist at t ; he begins to be temporal at t , but he doesn't begin to exist at t . So, in more sophisticated renditions of these conditions, what I also add is that t is the first time at which e exists and e does not exist timelessly. That would then eliminate the problem because God would exist timelessly without creation and then he would exist in time at the moment of creation.

Student: Can you clarify the difference between timeless and tenseless?

Dr. Craig: Very, very good question. Thank you. On a tenseless view of time, there is a dimension or reality called time which is ordered by relations of earlier-than and later-

than. This serves to distinguish this dimension from dimensions of space. Space is not ordered by anything like earlier-than and later-than relations. So on a tenseless theory of time, if we imagine that the universe begins to exist at $t=0$ and then it expands and, say, for the sake of argument then it re-contracts again, time is that internal dimension that runs from $t=0$ to the final moment. That is time. So anything that exists in space-time will have spatio-temporal coordinates. It will have three spatial coordinates and it will have a coordinate with respect to this dimension of time. But notice on this tenseless theory all moments of time whether past with respect to X or simultaneous with respect to X or future with respect to X are equally real. Things don't come into being and pass away. They are just there in a tenseless sense. Right? They are not timeless. They are ordered according to this temporal dimension. They have a time coordinate, but they're tenseless in the sense that they are not absolutely past, present, or future. On this view, past, present, or future is an illusion of human consciousness. Events in 2050 are present for the people in 2050 but they're future for us. And for people at 2075 they're past. So there really is no absolute past, present, or future on this view and hence no tenses in an objective sense. The "now" in time would be comparable to the "here" in space. For us in Atlanta, Atlanta is here. But for the people in Cambridge, Atlanta is there and Cambridge is here. It is just perspectival. And so there are no objective tenses on this view. Now, if God does not exist in space-time but he's out here and he is causally creating all of the events in space-time then God would be timeless. Right? He's not in space-time; he doesn't have a temporal coordinate. So God would be timeless. But things that can be ordered according to that temporal dimension would be in tenseless time.

Now, let me ask if that helped. Is that clear? OK, good. So that highlights the difference between these two theories of time.

END DISCUSSION

What I'm suggesting is that this theory of time doesn't adequately capture the idea of creation. Why? Because on this view in a sense the creation is co-eternal with God. God never exists alone. There's "always" this ("always" in quotation marks) tenselessly existing space-time reality with God. God is not ever alone, and so he doesn't really bring the universe into being. He doesn't really create the universe. At the very most you would just say that the universe depends on God ontologically for its existence. It would be conserved in being but not created in being. We'll talk about conservation in the future as we deal with doctrine of creation – what is it to conserve something in being as opposed to create something? My argument here is that creation involves inherently the idea of bringing something into existence, and that can only happen on an A-theory (or tensed theory) of time, not on a tenseless theory.¹

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