The Problems of Divine Location and Age

Abstract

I develop two problems, which I call *the problem of divine location* and *the problem of divine age*, to challenge the theist belief that God created the universe. The problem of divine location holds that it is not clear where God existed before he created the universe. The problem of divine age holds that it is not clear how old God was when he created the universe. I explore several theist responses to these two problems, and argue that all of them are problematic under the existing conceptions of space and time in physics. The philosophical magnitudes of these two problems are equal to that of the problem of evil.

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1. Introduction

William Paley's argument from design is one of the most intuitively appealing arguments for the existence of God (de Cruz and de Smedt, 2010). It begins with an observation about the world. A watch and the universe are similar in that they are both complex. They could not have been created of their own accord. Just as a watch was created by an intelligent designer, so the universe was also created by an intelligent designer. The intelligent designer of the watch is a human being, and the intelligent designer of the universe is God.

The following objections have been raised against the argument from design in the philosophy of religion literature. Who created God? Is the analogy between a watch and the universe adequate? Of all the different deities that different religions worship, which deity is the intelligent designer who created the universe? Why did God create bad complex things, such as psychopaths and cancer cells? Finally, evolutionary theory has a competing account of why there are complex things in the world. It is not an aim of this paper to explore these objections. I instead only bring readers' attention to William Rowe (2007: 54-67) for a summary of these objections and the replies to them.

This paper aims to pose a new challenge to the conclusion of the argument from design that God created the universe. Let me call the conclusion *the creation hypothesis*. The more we think about the creation hypothesis, the more intriguing and puzzling it is. Anyone who embraces it should be able to answer the following two disconcerting questions. Where was God before he created the universe? How old was he when he created the universe? These two questions lead to the problems that I call *the problems of divine location and age*. The problem of divine location holds that it is not clear where God was before he created the universe. The problem of divine age holds that it is not clear how old God was when he

created the universe. Like the problem of evil in philosophy of religion, these two new problems present serious challenges to the theist belief that God exists.

This paper is structured as follows. In Sections 2 and 3, I sketch and rebut several theist responses to the problem of divine location and to the problem of divine age, respectively, under the existing conceptions of space and time in physics. In Section 4, I critically evaluate the theist suggestion that God exists outside of space and time. In Section 5, I compare the problems of divine location and age with the problem of evil. It will become clear that the philosophical magnitudes of all these three problems are equal. Like the problem of evil, the problems of divine location and age have the potential to trigger voluminous debates between theists and atheists.

The debates over the problems of divine location and age will throw light not only on the theoretical issue of whether God exists, but also on the practical issue of whether we should teach the argument from design in science classrooms. Some theists contend, as noted by many writers (Peterson, 2002; Hasker, 2009; Pennock, 2011), that the argument from design should replace evolutionary theory in school curricula. If the creation hypothesis is problematic, however, as this paper argues, then the argument from design does not deserve a place in science texts.

2. The Problem of Divine Location

Recall that the problem of divine location holds that it is not clear where God existed before he created the universe. To exist is to exist in a certain place. For example, South Korea exists in Asia. South Korea needs a place in order to exist. It is odd to say that South Korea exists but exists in no place. To say so means that it exists but does not exist. Similarly, it is odd to say that before God created the universe, he existed but existed in no place. To say so means that he existed but did not exist. So if he existed before he created the universe, he must have existed somewhere. Where was he located? This section aims to refute several possible theist responses to the problem of divine location.

It is unconvincing that God existed in the universe before he created it. After all, it is not clear how God could exist in the universe, when the universe itself did not even exist. To say that God existed in the universe before he created it seems to involve the contradiction that God both existed and did not exist.

It is also unconvincing that God existed in heaven before he created the universe. After all, this line of response to the problem of divine location invites further questions of the same kind: Who created heaven? If God did, where was he before he created heaven? So we are back to the problem of divine location. A moral is that any place one might name would be a place created by God, so any answer to the question will always return us back to the problem of divine location.

Theists might suggest that our minds are finite, so we cannot know where God was before he created the universe. It is, however, self-defeating for theists to appeal to our limited cognitive capacity. After all, if we cannot know where God was due to our limited cognitive capacity, we should also not be able to know either that God created the universe, that he loves human beings, that he is omniscient, and so forth due to our limited cognitive capacity. To go further, if we were more intelligent than we are now, we might not believe that God exists. Thus, appealing to our limited cognitive capacity has the devastating consequence on theist beliefs.

Theists might argue that the problem of divine location commits the fallacy of the loaded question. The traditional example of this fallacy is to ask someone “Have you stopped beating your wife?” when he has never beaten his wife before. The best thing that you can do when someone asks you a loaded question is to reject the question altogether, without

answering it, on the grounds that its presupposition is false. It follows that the best thing that theists can do when someone asks them "Where was God before he created the universe?" is to reject the question altogether, rather than answering it, on the grounds that its presupposition is false. The false presupposition is that there was space or something larger than God before he created the universe.

What is the reason for thinking that the problem of divine location makes this false presupposition? Let's go back to the example of South Korea. To ask where South Korea is located presupposes that there is space, or something larger than South Korea. If space or something larger than South Korea did not exist, we could not even ask where South Korea is located. Similarly, to ask where God was before he created the universe presupposes that there was space, or something larger than God, before he created the universe. By hypothesis, however, there was nothing except God before he created the universe. Therefore, the presupposition is false.

Moreover, even if we cannot even talk about the location of something, that thing might exist. Suppose that someone asks you where the universe is located now. You would be at a loss for what to say. Given that the universe is all that there is, you cannot answer that question. Even though you cannot answer the question, the universe exists. The same point applies to the universe, which was smaller than a quark, approximately 14 billion years ago. The Big Bang theory claims that everything was tightly packed into an infinitely dense point called *the singularity*, and that the singularity expanded at incredibly high speed. Where was the singularity located? We cannot answer this question, given that the singularity was all that there was. Even so, it existed. Similarly, given that God was all that there was before he created the universe, we cannot answer the question of where God was before he created the universe. Even so, he existed.

The preceding defense of the creation hypothesis sounds appealing, but it has a problem. The Big Bang theory also claims that space was created along with the big bang, and that there was no space prior to the birth of the universe. In the absence of space, motion is impossible, for motion is nothing but a change of positions in space. Thus, God could not even move his finger. Creating the universe is a much more daunting task than moving one's finger. So if God could not even move his finger, then there is no reason for thinking that he could create the universe.

3. The Problem of Divine Age

Recall that the problem of divine age holds that it is not clear how old God was when he created the universe. This problem can be made sharp by the use of the analogy of a watchmaker and a watch. It seems to involve a contradiction to say that a watchmaker had not aged at all when he made the watch. To say that he had not aged at all indicates that he did not exist, and to say that he made a watch indicates that he existed. Similarly, it seems to involve a contradiction to say that God had not aged at all when he created the universe. To say that he had not aged at all indicates that he did not exist, and to say that he created the universe indicates that he existed. A thing begins to age at the moment it comes into existence. So if God existed, he must have had a nonzero age when he created the universe. How old was he? As we will see in this section, it is even harder to tackle the problem of divine age than the problem of divine location form the theist point of view.

Theists might propose that God and the universe came into being at the same time. This proposal, however, is unconvincing. To say that X created Y requires the belief that X existed before Y. For example, to say that a watchmaker created the watch requires the belief that the watchmaker existed before the watch. If we believe that the watchmaker and the watch came into being simultaneously, we would not say that the watchmaker created the

watch. Analogously, if we believe that God and the universe came into being at once, we would not say that God created the universe.

Theists would, however, object that the universe-maker is importantly different from the watchmaker. God is omnipotent while the watchmaker is not. God did not need to exist prior to the birth of the universe, whereas the watchmaker had to exist prior to the creation of the watch. On this account, God could create the universe while he himself was in the process of being created.

The preceding proposal, however, has two problems. First, why should we choose the hypothesis that God and the universe popped into existence concurrently over the rival hypothesis that only the universe popped into existence? Ockham's razor dictates us to choose the latter hypothesis over the former.

Second, the Big Bang theory asserts that time was created along with the big bang. This assertion goes well with the Einsteinian conception of time that the flow of time depends upon physical processes, and hence time stops if there are no physical processes. It is an incoherent notion that time flew for five minutes when every physical process was frozen. Before the big bang, there were no physical processes, and hence time did not pass. Since there was no flow of time before the big bang, God must now be roughly 14 billion years old. This corollary does not sit well with the view that God is an eternal being, and hence that he was infinitely old when he created the universe. Consider that God is infinitely intelligent, i.e., his intelligence does not have a limit. Why would his age have a limit, when his intelligence does not? The asymmetry between his intelligence and age cries out for an explanation.

In response, theists might reject the claim that time was created along with the big bang, and accept the Newtonian conception of time that time flows independently of physical processes, and hence that time passes even if all the physical processes stop. On the Newtonian account, it is a coherent notion that time passed for five minutes while every physical process was frozen. Since time passes independently of physical processes, an infinite amount of time already passed prior to the birth of the universe. Hence, God was infinitely old when he created the universe about 14 billion years ago.

This theist move, however, comes at the cost of losing those who believe that a religious view should not rely on an obsolete scientific idea. Other things being equal, a religious view that is compatible with our best current scientific theories, such as the Big Bang theory and the general theory of relativity, is better than a competing religious view which is incompatible with them. For this reason, theists should operate under the Einsteinian framework of time.

Theists might argue that under the Einsteinian framework of time, the problem of divine age commits the fallacy of the loaded question. To ask how old God was when he created the universe presupposes that time had passed before he created the universe. But the presupposition is false under the Einsteinian conception of time. So we should not ask how old God was. If someone asks us the question, we should reject it altogether without answering it.

The Einsteinian conception of time, however, implies that God could not do anything prior to the birth of the universe. He could not even move his finger, for the motion of his finger required the lapse of time. To say that God's finger moved up and down means that there was a time when his finger was up, and that there was a time when his finger was down. Thus, the motion of his finger implies the flow of time. Before the universe was created, however, there was no flow of time, and hence no motion was possible. It follows that God could not do anything to prepare for the birth of the universe.

Theists might retort that God is omnipotent, so he could create the universe even in the absence of the passage of time. He did not need to move his finger. He only needed to make up his mind to create the universe. There is a fundamental difference between moving one's finger and making up one's mind. The former is a physical event, whereas the latter is a mental event. A physical event cannot occur without the lapse of time, whereas a mental event can occur without the lapse of time.

But is it possible for a mental event to occur without the flow of time? To say that God made up his mind to create the universe means that there was a time when he had not make up his mind and there was a time when he made up his mind. How could such change of God's mental state occur without the passage of time? There was no flow of time and hence no change, physical and mental, up until the birth of the universe. Thus, the absence of the flow of time makes it a daunting task even for the omnipotent being to make up his mind to create the universe.

Theists might now propose that God is a physical being, and that there are physical processes in his body just as there are physical processes in a human body. Since there had been physical processes in God's body before he created the universe, time flew all along with him, he was infinitely old when he created the universe, and it was an easy task for the omnipotent being to create the universe.

It is, however, objectionable that God is a physical being. If God is a physical being, he must be subject to the second law of thermodynamics that the entropy of an isolated system tends to increase, i.e., an isolated system tends to go into a disorderly state. Energy from outside of a system is required to keep the entropy of the system down. There was, however, nothing outside of God, and an infinite amount of time passed before the birth of the universe. So the entropy of God's body must have been infinitely high, i.e., God must have been in an infinitely high degree of disorderly state before he created the universe.

In addition, contemporary cosmology (Chen, Hsin, and Niu, 2013) claims that the entropy of the early universe was extremely low, and that it has been increasing ever since. How could God whose entropy was infinitely high create the universe whose entropy was extremely low? Where did all the necessary energy come from that enabled God to create the universe? It is wrong to say that the energy came from outside of God, for there was nothing but God prior to the existence of the universe.

This objection, however, does not disprove that God, a physical being, created the universe. Theists could retort that God is omnipotent, so he could break the second law of thermodynamics, i.e., he could somehow keep the entropy of his body down without energy from outside. Or theists could reply that God was constantly creating the energy necessary to keep the entropy of his body down, and that as a result, he had enough energy to create the universe whose entropy was extremely low. Or they could say that God did not create the second law of dynamics prior to the existence of the universe. So he was free from the worry that the entropy of his body might increase.

Note, however, that all these assumptions are speculative. There is no way to confirm or disconfirm them with observations. Furthermore, they appeal to a magical power, to the breach of the well-established law of nature, or to the nonexistence of a law of nature in order to divert an objection. Do these speculative assumptions deserve a place in science texts? Admittedly, they are not falsified. It is one thing, however, that they are not proved to be false. It is quite another that they are proved to be true. In other words, they call for justifications. In the absence of any justifications, we ought not to teach to our schoolchildren that God, whose entropy was infinitely high, managed to create the universe whose entropy was extremely low.

A more serious problem with the suggestion that God is a physical being is that it is not clear how any physical being could exist in the absence of space. Recall that according to the Big Bang theory, there was no space prior to the big bang. How could God, the physical being, exist prior to the existence of space? Theists might reply that God is a special being, so he could exist in the absence of space even though he is a physical being. Atheists, however, would object that if the theist reasoning is legitimate, so is the reasoning that God is a special being, so time did not flow even if there were physical processes in his body and time did not flow along with him before he created the universe. In other words, the following two contentions rise or fall together.

(1) The physical being can exist without space.
(2) Physical processes in God's body can occur without the passage of time.

It is wrong to say that (1) is a coherent notion whereas (2) is an incoherent notion. It follows that if theists endorse (1), they cannot say that God was infinitely old when he created the universe.

In this section, I raised difficulties against some possible theist attempts to solve the problem of divine age, appealing to the Einsteinian conception of time. I must admit, though, that future scientists might come up with a new scientific theory replacing both the general theory of relativity and quantum mechanics, and that the new scientific theory might contain a new notion of time.[1] If this happens, my criticisms against the possible theist responses to the problem of divine age will collapse.

4. The Abstract World

My objections against the creation hypothesis, sketched in the previous sections, may prod some theists to pursue a new strategy to the problems of divine location and age. They might appeal to a position called *mathematical realism* or *platonism* in philosophy of mathematics. I flesh out and critically examine this new strategy in this section.

Mathematical realism asserts that mathematical objects, such as numbers, triangles, and functions, exist in the abstract world. So they are abstract entities. Abstract entities are aspatial, atemporal, non-causal, eternal, and unchanging (Balaguer, 2013). In contrast, daily objects, such as stones and cats, are concrete objects. Concrete objects are spatial, temporal, causal, ephemeral, and changing. They exist in the concrete world. The concrete world is the world that I have been referring to as 'the universe' throughout this paper.

Examples would be useful to illustrate the distinction between abstract and concrete objects. It sounds counterintuitive to say, "One plus one *equaled* two" or "Number one exists *here*." By contrast, it does not sound counterintuitive to say, "A cat *was* here. It is *there* now." As these sentences indicate, we do not attribute temporal and spatial predicates to mathematical objects, although we do to concrete objects. The reason behind this linguistic convention is, according to mathematical realism, that mathematical objects are abstract objects, whereas physical objects are concrete objects. Keep in mind that mathematical objects exist outside of space and time, whereas physical objects exist within space and time.

[1] See Seungbae Park (forthcoming) for the prospect of new theories that will replace present theories.

Theists might contend that God is an abstract being, so he exists outside of space and time just like mathematical objects.[2] He exists in the abstract world, even before he created the universe. It is illegitimate to ask how old he was when he created the universe, just as it is illegitimate to ask how old a triangle was. This response to the problems of divine location and age is compatible with both the Newtonian and the Einsteinian conceptions of time, for these two conceptions of time apply to the concrete world, but not to the abstract world.

An immediate objection to the proposal that God exists in the abstract world is to ask who created the abstract world. So we come back to the problem of divine location. I, however, set this problem aside. I instead raise the following two other objections to the proposal.

An abstract entity is, by its nature, non-causal. It can have a causal efficacy neither on another abstract entity nor on a concrete entity. It is impossible, for example, for a triangle to collide with a circle and move it. Nor is it possible for a triangle to collide with a stone and break it into pieces. If God is an abstract being, he is a non-causal being, and hence he cannot even move a stone. Thus, the proposal that God is an abstract being clashes with the view that God is omnipotent.

Relatedly, this proposal also clashes with the creation hypothesis. To say that God moved a stone yesterday indicates that he is a causal being, and that he existed in space and time yesterday. Similarly, to say that God created the universe about 14 billion years ago indicates that he was a causal being, and that he existed in space and time about 14 billion years ago. Thus, theists have the burden of explaining how God could create the universe when he exists outside of space and time.

5. Creation vs. No-Creation

The creation hypothesis competes with the no-creation hypothesis that the universe is eternal. On the no-creation hypothesis, the universe has neither a beginning nor an end. It obeys the first law of thermodynamics that mass-energy can neither be created nor be destroyed. Thus, it is impossible for the universe to come into being or go out of being.

The no-creation hypothesis goes hand in hand with Roger Penrose's (2011) view that space and time existed before the big bang, that the universe is in the infinite cycle of expansion and contraction, and hence that there were and will be an infinite number of big bangs. Vahe Gurzadyan and Penrose (2010) claim that they have found observational data confirming the existence of the universe before the big bang. Their cosmological theory should sound agreeable to those who have metaphysical qualms about the idea that something can be created out of nothing. Penrose and Gurzadyan's cosmological theory, however, is controversial in the contemporary physics community.

Even if their cosmological theory is not established yet, we can ask which is better, the creation hypothesis or the no-creation hypothesis. Ockham's razor enjoins us to choose the no-creation hypothesis over the creation hypothesis. The no-creation hypothesis postulates only the existence of the universe, whereas the creation hypothesis postulates the existence of the universe and God. The simple hypothesis is better than the complex one, *ceteris paribus*.

6. The Problem of Evil

The problems of divine location and age provide reasons for thinking that God did not create the universe. After all, if you believe that God created the universe, you owe us adequate

[2] Boethius (1962) suggested that God exists outside of time in the context in which he attempted to reconcile divine foreknowledge with human free will. His suggestion is also subject to the criticism that I raise in this section.

answers to the questions of where God was before he created the universe and how old he was when he created the universe. There is already a similar problem in philosophy of religion that is widely regarded as providing a reason for thinking that God does not exist. It is the problem of evil. This section aims to explicate and compare it with the problems of divine location and age.

The problem of evil holds that it is not clear why evil exists if God exists. Evil is anything that causes suffering. Crimes and natural disasters are some examples of evil. God is omniscient, omnipotent, and benevolent. So he knows that evil exists, he has the power to destroy evil, and he loves the victims of evil. It is not clear why he does not stop or eliminate evil. There are several theist responses to the problem of evil and atheist rebuttals in the philosophy of religion literature. This paper need not explore them. I only call interested readers' attention to Theodore Schick, Jr. and Lewis Vaughn (2010: 508-522) for a summary of the theist responses and the atheist rebuttals.

The problem of evil is so important that any introductory philosophy text addresses it. In my view, the philosophical magnitudes of the problems of divine location and age are equal to that of the problem of evil. The only relevant difference between them is that the problems of divine location and age challenge the existence of God prior to the birth of the universe, whereas the problem of evil challenges the existence of God after the birth of the universe.

7. Conclusion

I have developed the problems of divine location and age, and then defused several possible theist attempts to solve them. Like the problem of evil, however, they remain as strikes against the theist belief that God exists. The future debates over them can be, I believe, as voluminous as the debates over the problem of evil, casting light on the relationship between the existence of the universe and the (alleged) existence of God.

The various contentions that theists and atheists will advance in those debates should be accepted or rejected, I proposed, depending on whether they meet epistemic standards that scientific hypotheses in science texts meet, for some theists claim, as we noted in the introduction of this paper, that the argument from design should replace evolutionary theory in science classrooms. Thus, to put forward a merely speculative assumption should not count as a defense of the creation hypothesis that God created the universe.

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