

Divine Foreknowledge and Human Free Will: Four Views

Suppose that, prior to creating the universe, God believed that you will drink a cup of coffee on June 25, 2031, at 10:01 a.m. When that time arrives, will you have the *power to refrain* from drinking the coffee? You must answer yes or no. If you answer “no,” then you are denying that you will drink the coffee *freely*. But if you answer “yes,” then you are affirming that, on June 25, 2031 at 10:01 a.m., it will really be possible for you to refrain from drinking the coffee. But if you *can* refrain, then you *can* make a belief God had long, long ago, false. Alternatively, it will be possible for you to do something that changes the past, by changing what God believed long, long ago. But given that God is infallible, you cannot make a belief of God’s false. And no one can change the past, so you cannot change what God believed long ago. This is the problem of divine foreknowledge and human free will, in a nutshell.

I. Key Concepts

Let’s back up and try to get a clearer understanding of the key concepts underlying the problem of divine foreknowledge and human free will: knowledge, omniscience, free will, and determinism.

What is knowledge? According to a traditional analysis, *if one knows that X (e.g., Mars is the fourth planet from the sun), then (a) one believes that X, (b) X is true, and (c) one is justified in believing that X.* Let us briefly consider each of the three clauses of this analysis. First, clause (b): why can one know only truths? Answer: Because knowledge is success in the cognitive realm and success in the cognitive realm involves mentally grasping reality--the way things really are. When you believe something true, your belief reflects or matches the way things really are. (Of course, we sometimes think we know something when we actually don’t. Bill thinks he knows that Ben Franklin was the third President of the U.S., but Bill doesn’t really know this, because it isn’t true. In fact, Franklin was never President.) Second, clause (a): why is belief a component of knowledge? Because the mere fact that something is true doesn’t mean anyone knows it. To know something, one must grasp it mentally and have a certain confidence in it. And that’s what believing is. Finally, clause (c): why must one’s belief be justified? In part, because knowing is different from taking a lucky guess. To have knowledge, one’s belief must be based on good evidence or be well-grounded.¹ Of course, knowing is also different from believing something for inadequate or irrelevant reasons. For example, suppose I believe that Mars is the fourth planet from the sun, but I believe this only because the tooth-fairy told me so in a dream. Then my reason for believing is inadequate and I don’t actually *know* that Mars is the fourth planet from the sun.

Christian theologians claim that God is omniscient or all-knowing. As we shall see, there is some disagreement about how best to understand the claim that God is omniscient. On one understanding, “God is omniscient” means “God knows every truth and God believes no falsehoods.” But some define “God is omniscient” as “God knows all the truths that can be known and God believes no falsehoods.” This second definition is apt to be puzzling. How could there be truths that cannot be known? We’ll return to this issue later on. But for now, just keep in mind that there is some disagreement about how best to understand God’s omniscience.

What do we mean when we say that someone has free will or acts freely? This question forces us into one of the greatest philosophical controversies. There are two main views of

human freedom, the compatibilist view and the incompatibilist view. Compatibilists hold that an action can be both free and determined. Determinism is the view that given the past, only one future is possible. When we deliberate, we normally assume that more than one future is open to us. For example, suppose you go to an Italian restaurant, look at the menu, and make a selection. You opt for the spaghetti. Looking back at your decision, you assume that you might have chosen lasagna instead. But if determinism is true, spaghetti was the only possible order you could make. The “lasagna option” was an illusion. What, then, is a free action according to compatibilists? *One performs an act freely if one performs the act because one wants to (all things considered)*. The basic idea here is that one acts freely as long as one is not coerced. The “all things considered” qualifier is needed because we often have multiple “wants” or desires. At the restaurant, you might have wanted both spaghetti and lasagna, but you knew you could not eat (or afford) both. You chose the spaghetti because you wanted it more than you wanted the lasagna; and given that you couldn’t have both, the spaghetti is what you wanted *all things considered*.

If we combine the compatibilist view of free will with determinism, we get what philosophers call *soft determinism*. (It’s called “soft” because it affirms determinism without denying that we have free will.) Now, suppose we ask, “Why did you want spaghetti more than you wanted lasagna?” According to the soft determinist, this feature of your psychology was fully determined. It was fully *necessitated* by the past and whatever causal factors led to your present mental states: biological, environmental, sociological, etc. Nevertheless, when you ordered spaghetti you did so freely because you wanted to order spaghetti.

According to incompatibilists, free will is logically incompatible with determinism. If an act is determined, then it is not free; and if an act is free, then it is not determined. When is an act free, according to incompatibilists? *One performs an act A freely at time T, if one performs A at T but at T one could have refrained from performing A*. A free action is undetermined but it is not a random event, it is “up to” the agent; and refraining from the act was genuinely possible. If we combine the incompatibilist view of free will with the denial of determinism, we have what philosophers call *libertarianism*. (If we combine the incompatibilist view of free will with determinism, we get what philosopher’s call *hard determinism*—“hard” because it denies that we have free will.)

Libertarians deny that we are determined, but they do not deny that many different causal factors influence our choices and actions: biological factors, psychological factors, social factors, environmental factors, and so on. Often our choices may be quite limited, e.g., I may simply choose to satisfy one desire rather than another, e.g., the desire for spaghetti rather than the desire for lasagna, and the two desires themselves may not be chosen at all—I just find that I have them.

Why does it matter if we are free? First, most people assume that a person is morally responsible only if he or she acts freely. And so we cannot hold people accountable for their good or bad actions if they are not free. Second, as noted above, whenever we deliberate, we assume that we can choose between multiple possible futures. And if we make real choices, our lives seem much more significant than if the apparent choices are illusory. If we are not free, then we are like puppets or robots—or at least we are a lot more like them than we want to be, or (normally) take ourselves to be. Finally, from a theological point of view, free will seems important for at least two reasons. (a) If a human being’s response to God’s love is not free, then the response is apparently manipulated by God (either directly or indirectly). But a God of love surely would not wish to manipulate persons in this way. (b) Theologians commonly appeal to

human free will in explaining the presence of evil in the world. And the appeal to free will is arguably an essential element in any plausible explanation of the presence of evil given that God is both wholly loving and almighty.

II. The Foreknowledge Argument

Let's now consider a more formal statement of the problem of divine foreknowledge and human free will. A more formal statement will give us a better understanding of the assumptions that lie behind the problem:

1. God's beliefs are infallible.
2. For any event x, if God believes in advance that x will occur, then no one is in a position to prevent (or avoid) x.
3. For any event x, if no one is in a position to prevent (or avoid) x, then no one is free with respect to x.
4. For every event x that ever occurs, God believes in advance that it will occur.
5. So, no one is free with respect to any event.
6. So, human free will is a complete illusion. ²

For ease of reference, let us call this "the Foreknowledge Argument." Some comments on the argument are in order. Premise (1) expresses the claim that God cannot be mistaken. Christian theologians generally insist on (1), and it follows from the thesis that God is not only omniscient but necessarily so. If God cannot lose his omniscience, then God cannot hold any false beliefs.

Premise (2) is the heart of the problem. As noted in the opening paragraph, this premise seems true because (a) no one is in a position to make any of God's beliefs false and (b) no one is in a position to change the past, and hence no one is in a position to change what God believed in the past. Compare: when I was four years old I believed that Santa exists. Neither I nor anyone else can now change the fact that I had that belief when I was four.

The great Christian theologian Origen denied premise (2) on the grounds that knowing something is true doesn't cause it to be true. For example, if I know that a bank robbery is happening because I'm watching it happen, I am not causing the robbery to happen. Unfortunately, Origen's solution misfires, because the argument does not say that God causes our actions. Rather, it underscores our limitations as humans. We cannot cause God's beliefs to be false, and neither can we change the past. Thus, Origen's solution fails to address the real problem. ³

Premise (3) reflects the incompatibilist view of free will. If you perform an act A at a time T, you must be able to refrain or avoid that action, if you act freely. Clearly, compatibilists and soft determinists will deny premise (3). This is one way to solve the problem of divine foreknowledge and human freedom, but as we shall see, it comes at a cost.

Premise (4) must be true if God has complete and detailed foreknowledge; for as we have just seen, if one knows that X, then one believes that X. So, if God knows you will phone your mother tomorrow, then God believes you will phone her tomorrow. Many have denied premise (4) on the grounds that God is timeless, outside of time. The statement "God believes *in advance*" implies that God is in time; his believing precedes or comes before the event in question. So, premise (4) is false if God is timeless. We'll examine this response to the argument in section IV.

Steps (5) and (6) follow logically from premises (1) through (4). Step (5) tells us that no one ever acts freely. Therefore, as step (6) says, free will is an illusion. We may feel we have it, but we don't. While the argument is focused on human free will, note that the premises would seem to apply to God also. If God has total foreknowledge, that would include knowledge of what God will do in the future. So, if the premises of the argument are all true, they seem to imply that God never acts freely.

III. The Compatibilist Solution

As previously noted, compatibilists deny premise (3) of the above argument: "For any event x, if no one is in a position to prevent (or avoid) x, then no one is free with respect to x." One acts freely as long as one performs the act because one wants to (all things considered). And what one wants may be fully determined. Thus, free will does not require the power to refrain from performing the act, according to compatibilists. Traditional Calvinists take the compatibilist solution.⁴ According to Calvinists, God knows the future because God decrees it. God is sovereign in the very strong sense that God causes every event that ever occurs. "Every event" includes every human action, every human desire, every human intention, and every human thought. God does not necessarily cause every event directly, however; God may cause many or most events indirectly, by way of what theologians call "secondary causes." A secondary cause is a causal factor previously created by God. So, for example, God created you by way of your parents, and God created your parents by way of your grandparents. Given that many events occur via the operation of laws of nature, the laws of nature are especially important secondary causes, frequently employed by God in bringing events about.⁵

The Compatibilist solution is open to at least three theological objections. First, it makes God the cause of every wicked action. God causes people to act as they do. Doesn't this make God the author of evil? And if so, how can God be wholly good?

It doesn't help to note that human agents are secondary causes. Of course serial killers perform acts of killing, but they are caused to act as they do by God, either directly or indirectly. Consider the following hypothetical. Suppose a mad scientist invents a special kind of computer--call it a psycho-computer--that can control the thoughts and feelings of others by manipulating their neurons. By programming the psycho-computer a certain way, the mad scientist can cause you to have all the mental states of a bank robber, such as, "I desperately need money," "Robbing a bank is a good way to get money," and so on. He programs the computer in this way and you rob a nearby bank. Are you responsible for this act or is the mad scientist? Surely it is the mad scientist who must be held accountable, not you. You were merely a tool in his hands--the means by which he brought about the robbery. Similarly, if God, by means of secondary causes such as laws of nature, causes a human being to act, then it seems that God is accountable for the act.

Second, according to Christian theology, God holds humans accountable for their sins. But given the Compatibilist solution, God causes people to commit whatever sins they commit. And a God who causes humans to sin while holding them accountable for their sins seems clearly unjust.

Third, what is the significance of human responses to God given the Compatibilist solution? Some people worship God and devote themselves to serving God, and some people do not. Some people explicitly rebel against God. But whatever one's response to God, God causes it, directly or indirectly, given the Compatibilist solution. But how can one's response to God be meaningful or significant if God is causing the responses? The responses are puppet-like or robotic, it seems.

Beyond these theological objections to the Compatibilist solution, there are philosophical questions about the compatibilist view of free will. The most important objection to the compatibilist view is the Consequence Argument.⁶ The basic strategy of this argument is to assume—just for the sake of the argument—that determinism is true, and then show that this assumption leads to the denial of human free will. But we need to discuss some key elements of the argument before we can state it clearly and succinctly. First, let us assume that God determines every event that ever occurs by creating a universe that is fully governed by deterministic laws of nature. A law of nature is deterministic if, given the initial conditions, only one result is possible. For example, if water is heated to 212 degrees, it will always boil.⁷ (We are just assuming that the laws of nature are deterministic *for the sake of the argument*, not claiming that this law or any law is deterministic in fact. Keep in mind that the compatibilist insists that we can have free will even if determinism holds true.) Second, the phrase “a conjunction of all the laws of nature” refers to a proposition of the form “A and B and C . . .” (where each of the letters stands for a law of nature, such as the law of gravity). And we are to assume that this conjunction includes *all* of the laws of nature, including any laws of nature that humans have not yet discovered. Third, the phrase “a complete description of the state of the whole universe at some time before humans existed” refers to a proposition that describes the state of the universe long ago *in complete detail*. For example, this proposition would specify the location of every atom, the velocity of every physical object, and the electrical charges of all the physical particles. Of course, no human can state or write down such a proposition; but that doesn’t matter: there is some truth about the *total state of the universe* at any time prior to the existence of human beings. Fourth, let’s assume, just for the sake of the argument, that you will be jogging tomorrow at 9:13 a.m. So, a complete description of the total state of the universe tomorrow must include the fact that you are jogging at 9:13 a.m. With these preliminaries, we can state the Consequence Argument in a relatively informal way as follows:

1. Determinism is true.
2. If determinism is true, then a conjunction of all the laws of nature together with a complete description of the state of the whole universe at some time before humans existed *logically implies* a complete description of the state of the whole universe at any later point in time. (This is one way of spelling out the deterministic thesis that given the past, only one future is possible.)
3. So, a conjunction of all the laws of nature together with a complete description of the state of the whole universe at some time before humans existed *logically implies* a complete description of the state of the whole universe at any later point in time.
4. We (humans) have no choice about the laws of nature and the total state of the universe at times before humans existed.
5. We (humans) have no choice about the logical consequences (implications) of propositions about which we have no choice.
6. So, we (humans) have no choice about a complete description of the state of the whole universe at any future time.
7. So, no human being has any choice about whether you will jog tomorrow at 9:13 a.m.

Of course, (7) implies that you have no choice about whether you will jog tomorrow at 9:13 a.m. And the event of your jogging tomorrow is just a random example. We could say the same thing about any truth regarding the future--none of us has any choice about it, if determinism is true. So, contrary to what compatibilists claim, determinism does rule out free will.

Some comments on the Consequence Argument may be helpful. First, keep in mind that premise (1) is assumed just for the sake of the argument. The argument isn't affirming determinism, it is rather a defense of the if-then statement, "If determinism is true, then we humans do not have free will." Premise (2) simply unpacks the meaning of determinism given that determinism is grounded in the laws of nature. Step (3) follows logically from premises (1) and (2). Premise (4) expresses the very plausible claim that we humans do not have a choice about the laws of nature. For example, we don't get to vote on the law of gravity, or choose the strength of the force that binds protons and neutrons together (the so-called strong nuclear force). Premise (4) also expresses the very plausible claim that we humans do not get to choose what the universe was like in the remote past. Whatever state the universe was in, say, a billion years ago, there is nothing we can do about it now. The past is settled, fixed. In part, premise (5) expresses the conviction that we humans do not control logic. We don't have to think logically, of course, but we don't get to choose the rules of logic. Premise (5) also expresses a further thought which might be put as follows: *If we have no choice about the truth of propositions A and B, then if A and B together logically imply C, then we have no choice about the truth of C.* This principle is certainly very plausible. Steps (6) and (7) seem to follow logically from (3), (4), and (5), together with the assumption that it's true that you will jog tomorrow at 9:13 a.m. No one has any choice about what happens in the future, given the premises of the argument. But this means no one has free will given determinism; and hence, the compatibilist view of free will is false.

Could a compatibilist reply as follows: "The argument does not change the fact that we sometimes do things because we want to do them; and that's what a free action is"? Unfortunately, this response misses the point. Simply put, the argument says that our lack of choice over the laws of nature and the past transfers to the present and future *if determinism is true*. Compatibilists agree that we have no choice about the laws of nature and the past. So, the crucial premise is (5). If I have no choice about the truth of A and B, and A and B together logically imply C, how could I possibly have any choice about the truth of C? ⁸ Thus, the argument is directly challenging the notion that an act is free if the agent does it because he/she wants to. Go back to the example of the mad scientist who uses the psycho-computer to control what you believe and desire, thus bringing it about that you rob a bank. In effect, the argument is saying that given determinism, nature (or God) plays a role like that of the mad scientist, controlling what we believe, desire, intend, etc. From this perspective, doing the act because you want to is simply not enough to make the action free.

Although the Consequence Argument seems compelling to me, it remains true that philosophers are deeply divided over the nature of free will. And many hold the compatibilist view.

IV. The Timelessness Solution

Many great theologians have held that God is not in time, among them Augustine, Boethius, Anselm, and Aquinas. And many theologians have regarded divine timelessness as a solution to the problem of divine foreknowledge and human freedom. This solution has been defended in recent times by C. S. Lewis and Paul Helm.⁹ Many Christians take it for granted that God is "outside of time." But the phrase "outside of time" is a metaphor, and it invites us to form

a spatial image, with perhaps a circle containing things in time and God outside of the circle. Such a picture can be misleading and so we need a literal definition of divine timelessness.

To say that God is timeless is to say that there is no sequence in the divine life, no “before and after.” This is a very far-reaching claim. For example, it means that there is no sequence of divine acts, with one act coming after another. God doesn’t create the universe on one occasion, and then later send Christ into world, and still later conduct the final judgment. God doesn’t call Samuel to be a prophet at one time, and then later call Isaiah to be a prophet. Furthermore, God does not wait for a person to make a prayer request, and *then* answer the prayer. If God is timeless, there is no sequence of divine “willings” or volitions. God doesn’t will different things at different times. This means, in effect, that the divine will is a “package deal,” covering everything in a single volition: all creative acts, all revelations, all answers to prayers, and all redemptive acts are included in a single divine volition. The effects of that timeless, “package deal” volition are played out in time, but the volition itself does not occur in time. From this perspective, we might compare God’s timeless volition to setting a thermostat. Someone sets a thermostat just once in the morning, and then it operates throughout the day, sometimes turning the furnace on, sometimes shutting it off, depending on the temperature.

Many Christians assume that the Bible says or implies that God is timeless, but this is not so. In fact, the Bible, on the most natural interpretation, represents God as doing different things at different times, e.g., creating the world and then later delivering Israel from Egypt, first hearing prayers and *then* responding to them, calling one prophet now and another one later, and so on. And the book of Revelation speaks of “the Lord God, who is and who was, and who is to come, the Almighty” (1:8). Taken literally, this verse says or implies that God exists in the present, existed in the past, and will exist in the future (since God cannot act in the future if he doesn’t exist in the future). True, the Bible also says that “with the Lord one day is as a thousand years, and a thousand years as one day” (2 Peter 3:8). But this verse seems to be saying that God experiences time differently than we do, not that God is timeless. And even we experience time in different ways, depending on the circumstances. As the old saying goes, “Time flies when you’re having fun.” Moreover, it stands to reason that a being who will never die experiences time very differently than we whose days are numbered.

But advocates of timelessness argue that the Bible speaks as if God were in time in order to make it easier for humans to understand what God is trying to reveal. The message of the Bible is accommodated to our limited ability to understand. So, we shouldn’t take the Bible literally when it speaks as if God were in time. We should understand that God, as the greatest possible being, is not bound by time. (Notice that a particular *philosophical* view of what the greatest possible being is like is playing a key role here.)

How is the timelessness solution supposed to work? Lewis puts it like this:

Another difficulty we get if we believe God to be in time is this. Everyone who believes in God at all believes that He knows what you and I are going to do tomorrow. But if He knows I am going to do so-and-so, how can I be free to do otherwise? Well, . . . the difficulty comes from thinking that God is progressing along the Time-line like us: the only difference being that He can see ahead and we cannot. Well, if that were true, if God *foresaw* our acts, it would be very hard to understand how we could be free not to do them. But suppose God is outside and above the Time-line. In that case, what we call “tomorrow” is visible to Him in just the same way as what we call “today.” All the days are “Now” for him. He

does not remember you doing things yesterday; He simply sees you doing them, because, though you have lost yesterday, He has not. He does not “foresee” you doing things tomorrow; He simply sees you doing them: because, though tomorrow is not yet there for you, it is for Him.¹⁰

So, the timelessness solution denies premise (4) of the Foreknowledge Argument: “For every event *x* that ever occurs, God believes *in advance* that it will occur.” God doesn’t literally have *foreknowledge* because God’s knowledge is timeless. God doesn’t believe you will drink a cup of coffee *before* you drink it. Rather, we should say something of this sort: *God timelessly believes that you drink a cup of coffee on June 25, 2031, at 10:01 a.m.* And how does God come by knowledge of the future? According to Lewis, by direct awareness--just as you might know what a friend is presently doing by observing her, God, as a timeless being, is directly aware of what occurs at all times, past, present, and future. God is like a person standing on a tall tower, looking down at the events below. Just as the person on the tower can observe many events at one glance, God can be directly aware of all events in the past, present, and future.¹¹

The timelessness solution is creative and fascinating, but many philosophers find it problematic. First, notice that a timeless belief cannot change. In order for an entity to change, it must have a property at one time and then lack that property at a later time, e.g., think of a leaf changing from green to brown in the fall. If timeless beliefs cannot change, they are fixed, just as past beliefs are fixed. So, if God timelessly believes that you drink a cup of coffee on June 25, 2031 at 10:01 a.m., will you, at that date and time, have the power to refrain from drinking the coffee? It seems not, since timeless beliefs cannot be changed and God’s beliefs cannot be mistaken.¹²

Second, even if God’s beliefs are timeless, they are related to certain facts about the past. To see this point, we need to distinguish between sentences and propositions. For example, the English sentence “It is going to rain” and the German sentence “Es wird regnen” express the same proposition. Propositions are truths (or falsehoods) that can be expressed (put into words) via sentences. Sentences belong to specific languages, such as English or German. Propositions do not belong to languages and they may or may not be expressed in any language. Now, let’s assume, for the sake of the argument, that Katherine Heigl, the film star, will buy a Porsche on May 21, 2029. Then, even if God is not in time, last year the English sentence, “God timelessly believes that Katherine Heigl buys a Porsche on May 21, 2029” expressed a true proposition. (We might even imagine that someone carved this sentence in stone a year ago.) It is a fact about the English language that this sentence expressed a true proposition one year ago. So, on May 21, 2029, will Katherine Heigl have the power to refrain from buying a Porsche? It seems not since in doing so she would have to alter a fact about the history of the English language (or else make one of God’s beliefs false).

Third, divine timelessness would make it possible for God to reveal the future to human prophets. We might call this the “possible prophet” objection.¹³ It runs as follows:

1. If God is timeless, then God can reveal the future to human prophets.
2. Whatever God reveals cannot be false.
3. So, divine timelessness would make *foreknowledge* of human free acts possible.
4. But *foreknowledge* of human free acts is not possible.
5. So, God is not timeless.

Premise (4) is crucial here. Keep in mind that part of the motivation for offering the timelessness solution is precisely that *foreknowledge* of free acts seems impossible; Lewis is very explicit about this (see the above quotation). Of course, the foreknowledge in this case would not be God's, but the prophets'. Since, however, the content of the prophets' beliefs about the future is revealed by God, the content cannot be false.

Fourth, the timelessness solution, as Lewis develops it, involves an implausible assumption about time, for it claims that God is directly aware of the future. But one cannot be directly aware of something unless it exists. (One cannot be directly aware of a unicorn because there are no unicorns; one can see a tree only if it exists; one cannot see or be directly aware of a non-existent tree.) But the future is the part of time that hasn't happened yet, so the future does not exist. Yet, the timelessness solution states or presupposes that the future does exist. Otherwise, God could not be directly aware of it.

Now, just at this point, Lewis says something that bears close scrutiny. He says that God sees you performing future acts "because, though tomorrow is not yet there for you, it is for Him." But if God sees the future it exists. Even God cannot be directly aware of that which does not exist. And the idea that the future exists is both implausible and disturbing. If the future exists, your great-great grandchildren exist (assuming you will have great-great grandchildren). They are not temporally present, but they really exist. This may surprise you, especially if you do not yet even have children! But God, according to the timelessness solution, can be directly aware not only of your future acts, but of the future acts of your descendants (assuming you will have descendants). All of this, I submit, is very hard to believe. From the standpoint of common sense, my future acts don't exist; I know this because I simply have not performed them yet; I'll get around to it—at least, I hope!

And there is another problem in this vicinity. The foreknowledge problem arises in part because the past is fixed or settled; what has happened in the past cannot now be altered. But if we hold that the future exists, how can the future be altered? God sees the future for what it is, so it seems the future is settled too.

Some advocates of the timelessness solution do not affirm that God is directly aware of the future. But then how does the timelessness solution explain God's knowledge of future free acts? Thomas Aquinas says, "Through His essence God knows things other than Himself in so far as His essence is the likeness of the things that proceed from Him."¹⁴ So, apparently, God somehow knows about human acts through His own essence. And this seems to imply that God knows the future as it is represented in the mind of God. But how can that be? Given that humans have free will in the incompatibilist sense, there is more than one possible future. And knowing all the possible futures is not at all the same thing as knowing which one of them is the actual future. So, how could God know the future simply by knowing His own essence? The suggestion seems quite mysterious.

Given the above objections, it is far from clear that the timelessness solution works. In fact, it seems to me quite problematic. Of course, even if timelessness does not provide a solution to the problem of divine foreknowledge and human freedom, God might still be timeless. Nevertheless, let's here note two alternative views of God's relation to time.

Some philosophers and theologians hold that God is in time, the same time we humans inhabit, but God is without beginning and without end. God existed at all past moments, exists now, and will exist at all future moments (without end). On this view, there is sequence in the divine life. God does different things at different times. For example, God's deliverance of Israel from Egypt happened before God raised Jesus from the dead. One problem with this view is that,

according to physicists, to be in time one must have a location in space. But God is not located in space, according to traditional Christian theology.

Another view begins with a thought-experiment. What if God hadn't created the physical universe? Might God nevertheless have created a number of (non-physical) angels, one after the other? First God created the angel Gabriel, then later God created Michael the archangel, and so on. This scenario seems logically or metaphysically possible, but in this scenario God would obviously not be in physical time, the sort of time physicists study and theorize about. And yet, God would not be timeless, because there would be a sequence of actions in the divine life. We might say that in this scenario, God is in *metaphysical time*: there is a sequence in the divine life, a "before and after," but God is not located in physical space and so is not in physical time. In thinking about God's creation of the physical universe, it is natural to suppose that God existed *before or prior* to physical reality. This way of thinking seems to put God in metaphysical time. One question here is, "How exactly does metaphysical time relate to physical time?" Those who hold this view will want to maintain that, for any physical time that exists, God's knowledge and power extend to events occurring at that time.¹⁵ It is worth noting that some Scripture verses seem to fit well with the idea that God is in metaphysical time, e.g., "to the only God . . . be glory, majesty, dominion, and authority, *before* all time and now and for ever" (Jude 25, italics added). The passage may be understood as saying that God existed prior to "physical time," the kind of time physicists can measure.¹⁶

V. The Middle Knowledge Solution

Luis de Molina, a sixteenth century Spanish priest, suggested that God can have complete and detailed knowledge of the future, including knowledge of future free human actions, because God has middle knowledge. What is middle knowledge? It is knowledge of what *every possible free creature would freely do in every possible situation*. Middle knowledge is knowledge of conditionals (if-then propositions) of the following form:

If person P were in circumstance C, P would freely perform act A.

Such conditionals are properly called *subjunctive conditionals of freedom*.¹⁷ The subjunctive mood in English is used to explore hypothetical situations (e.g., "If I were rich, I would give lots of money to the poor") and to express wishes (e.g., "I wish I were rich").¹⁸ The if-clause of a conditional is called its *antecedent*, while the then-clause is called its *consequent*, and the consequent of a subjunctive conditional of freedom concerns an action performed *freely*. Advocates of the middle knowledge solution assume that humans have free will in the incompatibilist sense; they reject the compatibilist view of free will.

Notice that middle knowledge is not the same thing as foreknowledge. Foreknowledge is knowledge of what will actually happen. If God foreknows that you'll drink a cup of coffee on June 25, 2031, at 10:01 a.m., then you definitely *will* drink a cup of coffee at that date and time. But middle knowledge is knowledge of conditionals and many of these conditional statements have false antecedents (if-clauses). For example:

If President John F. Kennedy had not been assassinated in 1963, he would freely have withdrawn American troops from Vietnam.

This conditional might be true, even though its antecedent is false. But notice that this conditional, even if known to be true, does not yield knowledge of the future (i.e., of events subsequent to 1963). In fact, JFK was assassinated on November 22, 1963, and thus he made no subsequent decisions regarding the troops in Vietnam. How, then, does middle knowledge provide God with foreknowledge? Suppose the following subjunctive conditional is true:

If you were placed in a Starbucks coffee shop on June 25, 2031 (at 10:01 a.m.), then you would freely drink a cup of coffee at that time.

And suppose that God has middle knowledge; he knows this conditional is true. Further, suppose God decides to place you in a Starbucks coffee shop on June 25, 2031, at 10:01 a.m. This guarantees the truth of the antecedent (if-clause) of the conditional. And given that God knows both the conditional and its antecedent, God knows you *will* freely drink a cup of coffee on June 25, 2031, at 10:01 a.m. In this way, divine middle knowledge makes divine foreknowledge of future free acts possible.

Middle knowledge is so-called because Molina thought of it as lying between (a) God's knowledge of necessary truths and (b) God's *free knowledge* (i.e., God's knowledge of what depends on his own will). *Necessary truths* are truths that cannot be false under any circumstances, e.g., no circles are squares, no forced action is free, and no person is a number. God's knowledge of necessary truths includes God's knowledge of everything that is logically possible, e.g., God could have created unicorns though he did not do so. By contrast, God's *free knowledge* is God's knowledge of those things he freely causes or brings about. God knows Mars exists because he created it. God knows that humans exist because God created them. God knows the ancient Israelites were delivered from slavery in Egypt because God brought this event about. As noted above, God's middle knowledge is God's knowledge of subjunctive conditionals of freedom having the form, "If person P were in circumstance C, then P would freely do act A." These subjunctive conditionals of freedom are not necessary truths. If they were necessary truths, then the circumstances specified in the antecedent would *necessitate* the action specified in the consequent, in which case the action would not be free. Moreover, God does not cause subjunctive conditionals of freedom to be true; if God caused these conditionals to be true, then the acts specified in their consequents would not be free acts (in the incompatibilist sense); they would be caused by God.

It is very important to see that, according to the middle knowledge solution, God has middle knowledge regarding *merely possible* free creatures that he decides not to create. Let's name one of these non-existent free creatures "Bea Nott." According to the theory of middle knowledge, God would know what Bea Nott would freely do in every possible situation in which she might exist. For example,

If Bea Nott were placed in a Starbucks coffee shop on June 25, 2031 (at 10:01 a.m.), then she would freely order a Caramel Cocoa Cluster Frappuccino.

If Bea Nott were placed in the Garden of Eden and told not to eat of the fruit in the midst of the Garden, then Bea would freely avoid eating that fruit.

For any possible circumstance that Bea Nott might be in, God would know what she would freely do in it. And once God decides which possible free creatures to create and which circumstances they will be placed in, God knows the future.

Of course, a person's total circumstances often depend to some extent on the free choices of others. For example, if someone freely offers me a bribe, then my circumstances include the offering of the bribe. But God's middle knowledge includes the knowledge of what free creatures will freely do in *every* possible circumstance, which includes circumstances that depend on the free choices of others. So, God's middle knowledge is obviously extremely complex, but such complexity is no obstacle for God, who is the greatest possible knower.

Advocates of the middle knowledge solution deny premise (2) of the Foreknowledge Argument: *For any event x, if God believes in advance that x will occur, then no one is in a position to prevent (or avoid) x.* God's foreknowledge is based on God's middle knowledge. And God's middle knowledge is knowledge of what agents would do *freely* (in the incompatibilist sense) in such-and-such circumstances. So, God knows what you will *freely* do. If God knows you will freely drink a cup of coffee at time T, you *will* freely drink a cup of coffee at T, but you have the power to refrain from doing so, since you are free in the incompatibilist sense.

Molina's solution is undoubtedly subtle and ingenious, but it is far from clear that it works. Critics have advanced a series of objections. First, it's not clear that the middle knowledge solution actually addresses the problem. Suppose God believed 1000 years ago that you will drink a cup of coffee on June 25, 2031, at 10:01 a.m. (We can even imagine that 1000 years ago God instructed a prophet to carve this statement in stone, replacing the word "you" with your name.) The fact that God believed this proposition 1000 years ago cannot now be changed. So, how can you possibly have the power to refrain from drinking the coffee at the specified date and time? You cannot change the past and you cannot make God's belief false.¹⁹

Second, how does God know the subjunctive conditionals of freedom? How does God know what merely possible free creatures would do in every possible situation? The middle knowledge solution does not explain how God comes by his middle knowledge; hence it explains one puzzling form of knowledge, namely, foreknowledge, by appealing to another puzzling form of knowledge, namely, middle knowledge. Such an explanation hardly seems illuminating. To underscore this difficulty, let's think about how God might have some other forms of knowledge. (A) Necessary truths can often be known simply by understanding the concepts involved. If one understands what a free action is, then one understands that "No forced action is free" is necessarily true. But one cannot know subjunctive conditionals of freedom in this way. If one could, then the antecedents would necessitate the consequents, in which case the acts specified in the consequents would not be free acts. (B) God's knowledge of present contingent events—at least many of them—seems unproblematic if we allow that God has powers of direct awareness analogous to our human senses, such as vision and audition.²⁰ But how God would know what *merely possible* creatures would freely do in every possible situation is certainly a mystery. We can often make reasonable assumptions about what our friends and loved ones would do in hypothetical situations, but that's because we have knowledge of their character and past actions. For example, you might well know whether a friend or loved one would freely take heroin if it were made available. But merely possible free creatures do not have a "track record"—they've never *done* anything. And one's character is formed as one makes decisions over time, thus developing *tendencies* to act in certain ways. So, merely possible (uncreated) free creatures do not have characters, either. Furthermore, past actions and character do not necessitate future free

actions—there is always the possibility that one will act out of character if one is free (in the incompatibilist sense). Therefore, it is very hard to see how middle knowledge is possible.

Third, there is the so-called “grounding problem” for subjunctive conditionals of freedom. What would make such conditionals true? If I believe that a bank robbery is now taking place, what makes the proposition I believe true? The natural suggestion is that the proposition, “A bank robbery is now taking place,” is made true by its correspondence with a certain event, namely, the occurrent robbing of the bank. And many would allow that predictions about the future are true if they correspond to future events. For example, “It will rain tomorrow” is true if rain occurs tomorrow. But many subjunctive conditionals of freedom are about merely possible creatures that God never creates, so there are no events for these conditionals to correspond to. And many subjunctive conditionals have false antecedents and consequents, e.g., “If President John F. Kennedy had not been assassinated in 1963, he would freely have withdrawn American troops from Vietnam.” Neither the antecedent nor the consequent of such conditionals correspond to any actual event. So, it is hard to see how subjunctive conditionals of freedom can be true.²¹ And, of course, only *truths* can be known. Even God cannot know what isn’t true.²²

Fourth, divine middle knowledge would apparently lead us to deny that we have free will in the incompatibilist sense. Consider the following argument:²³

1. If God knew the truth-values (i.e., truth or falsity) of all subjunctive conditionals of freedom prior to the creation of the world, then those truth-values are beyond our present control.
2. The truth of a subjunctive conditional of freedom, together with the truth of its antecedent—which corresponds to factors that are beyond the control of the agent at the time of the act—necessarily implies the truth of its consequent.
3. The consequent of a subjunctive conditional of freedom specifies a single course of action the agent would take; it does not specify a range of options the agent might take (such as “Either do act A or refrain from act A”).
4. So, if God has middle knowledge, then a human agent does not have more than one course of action open to him (or her) in any given set of circumstances, and hence human agents do not have free will in the incompatibilist sense.

Some comments may help to clarify this argument. In regard to premise (1), recall that God uses middle knowledge to decide which possible creatures to create and which circumstances to place them in. This being so, there is surely no way that we (humans) can now change the truth-value (i.e., truth or falsity) of the subjunctive conditionals of freedom. And advocates of middle knowledge must accept premise (2), for if (2) were not true, then middle knowledge would not enable God to have foreknowledge. Premise (3) simply gives an abstract description of the contents of the consequent of any subjunctive conditional of freedom. The consequent of each true subjunctive conditional of freedom specifies an action that would be performed under the specified circumstances. For example, “If you were placed in a Starbucks coffee shop at time T, then you would freely drink a cup of coffee at time T.” Given that this conditional is true, and that you are placed in a Starbucks coffee shop at time T, you will drink a cup of coffee at time T. If you were to refrain from drinking the coffee at time T, then the conditional would not be true. So, it seems that divine middle knowledge would eliminate alternative courses of action, and hence eliminate free will in the incompatibilist sense.

In fairness it should be noted that a few Bible passages seem to ascribe middle knowledge to God or Christ. Perhaps the clearest example occurs in Jesus' judgment of the cities of Chorazin, Bethsaida, and Capernaum. Regarding Capernaum, Jesus remarks, "If the mighty works done in you had been done in Sodom, it would have remained until this day" (Matthew 11: 23). Taken at face value, Jesus seems to be suggesting that the citizens of Sodom would have repented of their sins if they had witnessed miracles such as those Jesus had wrought in Capernaum. But, of course, Sodom is the Old Testament paradigm of moral depravity so extreme that God destroyed the city with fire and brimstone. Should this passage and others like it, however, be taken at face value? After all, taken at face value, this passage is very problematic. Are we to think that the citizens of Sodom would really have repented had God sent a miracle-working prophet to the city? And God knew this but didn't send such a prophet to Sodom as he did to Capernaum? It is troubling to think that God might have saved the Sodomites by extending a little more grace to them, but God chose not to do so. Indeed, this hardly seems consistent with the Scriptural claim that God "wants everyone to be saved" (1 Timothy 2:4). Thus, all things considered, Jesus's remarks about Capernaum should probably not be taken literally. After all, Jesus often used exaggeration as a rhetorical device to provoke serious reflection. Accordingly, passages such as this are not solid evidence for divine middle knowledge.

Some very resourceful philosophers defend the middle knowledge solution, so it is bound to remain an option for Christian thinkers.²⁴ But I must confess that the objections considered here, taken together, seem formidable to me and keep me looking for an alternative solution to the problem of divine foreknowledge and human free will.

VI. Open Theism

Open Theists hold that God does not have infallible knowledge of the future free acts of created agents.²⁵ Open Theists regard the Foreknowledge Argument as a sound criticism of traditional Christian theology, but their thinking is not motivated simply by the Foreknowledge Argument. They stress the need for a biblical view of God's knowledge, and they think that the Bible indicates that God's knowledge of the future is partial rather than exhaustive. Traditional Christian theology has downplayed biblical texts that support this claim.

Space does not permit a thorough exploration of the relevant biblical texts, but let's consider some of the kinds of passages that Open Theists appeal to:

Isaiah 5:4. What more was there to do for my vineyard that I have not done in it? When I expected it to yield grapes, why did it yield wild grapes?

This passage portrays God as expecting something to happen that did not happen. God expects Israel ("my vineyard") to bear good spiritual "fruit," but Israel does not do that. Assuming God has complete and infallible foreknowledge, why would God ever expect something to happen that does not happen? A being with complete and detailed foreknowledge knows exactly what will happen on every occasion.²⁶

1 Samuel 15:10-11. The word of the LORD came to Samuel: "I regret that I made Saul king, for he has turned back from following me, and has not carried out my commands."

This verse describes God as having regret for making Saul king of Israel. But what sense would it make for God to regret this action if he knew exactly how things would turn out (i.e., that Saul would not follow the way of the Lord)? Of course, we humans sometimes regret outcomes even when they are predictable, but that's because we sometimes have no better option, e.g., a surgeon may regret the pain an operation causes even though not-operating would have had a worse outcome. But did almighty God have no better option than to appoint Saul king? Is God not capable of creating better leaders than Saul? Surely there have been many leaders better than Saul in the history of the world, all of them created by God.

2 Peter 3:9. The Lord is not slow about his promise, as some think of slowness, but is patient with you, not wanting any to perish, but all to come to repentance.

Here the Lord is said to delay his return so that everyone might repent and avoid spiritual death. But why does the Lord need to be patient if he knows exactly who will repent and when they will do so? And doesn't the verse suggest that the Lord delays his return in hopes of saving more people? But there is no need for hope if the Lord has exhaustive foreknowledge; the outcome is known in advance.

Exodus 13:17. When Pharaoh let the people go, God did not lead them by way of the land of the Philistines, although that was nearer; for God thought, "If the people face war, they may change their minds and return to Egypt."

This verse very strongly suggests that God was not sure how the people of Israel would react under the threat of war. Why would a being with infallible foreknowledge ever be unsure of what will happen? The suggestion makes no sense.²⁷

Genesis 22:12. He said, "Do not lay your hand on the boy or do anything to him; for now I know that you fear God, since you have not withheld your son, your only son, from me."

This verse is taken from the famous passage in which God commands Abraham to sacrifice his son, Isaac. And the verse strongly suggests that God was testing Abraham in order to know what was in Abraham's heart. Such a test makes no sense at all if God already knew exactly what Abraham would do.

Deuteronomy 8:2. Remember the long way that the LORD your God has led you these forty years in the wilderness, in order to humble you, testing you to know what was in your heart, whether or not you would keep his commandments.

Judges 3:1, 3-4. Now these are the nations that the LORD left to test all those in Israel who had no experience of any war in Canaan: the five lords of the Philistines, and all the Canaanites, and the Sidonians, and the Hivites who lived on Mount Lebanon, from Mount Baal-hermon as far as Lebo-hamath. They were for the testing of Israel, to know whether Israel would obey the commandments of the LORD, which he commanded their ancestors by Moses.

Here the Lord is portrayed as testing the Israelites to see if they will remain faithful to him. But a being with infallible and complete foreknowledge obviously has no need of such tests.

Why is God's knowledge of the future partial rather than exhaustive? Open Theists answer this question in two different ways. Some Open Theists, such as Clark Pinnock, think that there is no truth about future free acts because there is nothing to make propositions about future free acts true. Since these thinkers deny that there are any true propositions of the form "Person P *will* freely do act A," I will refer to them as *Truth-Value* Open Theists. Truth-Value Open Theists are apt to accept Peirce's view that propositions about the future are true only if there is some condition or factor in the present that fully guarantees their truth. For example, "The earth will orbit the sun tomorrow" is true if present conditions and the laws of nature guarantee that the earth will orbit the sun tomorrow. But there is never a present condition or factor that fully guarantees what an agent will do *freely* (in the incompatibilist sense) in the future—the agent might refrain from the act in question. Hence, there are no truths regarding what agents will do freely in the future. And since only truths can be known, God does not have knowledge of future free acts.

Other Open Theists, such as Richard Swinburne and William Hasker, allow that propositions of the form, "Person P *will* freely do act A," can be true, and often are. For example, "I will jog tomorrow" is true if sometime tomorrow I go jogging. These Open Theists hold that God's lack of knowledge regarding future free acts is a self-limitation brought about by God's decision to create agents that are free in the incompatibilist sense. If creatures are endowed with free will (in the incompatibilist sense), there is no way for anyone, including God, to have infallible knowledge of their future free acts. Just consider: when we predict how someone will act, what is the prediction based on? Answer: their past acts (their "track record"), their character, and what we know of their inner states (thoughts, desires, intentions, etc.). Predictions based on this type of information may very likely be true, but they cannot be infallible, because free agents sometimes act "out of character." They always retain the power to refrain from the act we predict they will perform. And while God's predictions would surely be far more accurate than human predictions, even God's predictions could not be infallible, if persons are truly free in the incompatibilist sense. I will refer to Open Theists who think there are truths corresponding to future free acts as *Epistemic* Open Theists, since the truths in question are not *known* by God, on this view.

Both versions of Open Theism imply that God takes risks in creating free agents. Prior to creation, people have no "track record," no character, and no mental states for God to base predictions on. And newborn babies also have no track record and no moral character (since character is formed by a pattern of actions over time). So, God works with free creatures under conditions of uncertainty in regard to what they will do. But according to Open Theists, God is like a master chess player who can bring the game to the outcome he desires, regardless of the moves the other player makes.

Open Theism certainly raises many questions. First, some wonder how God can be in control of the world if God doesn't know the future in complete detail. For example, suppose that, next week, a tyrant will fire off a hundred nuclear missiles, thus starting a global nuclear war that results in the death of all human beings. Assuming the death of all humans (in the next week or so) is not part of the divine plan, then doesn't this sort of example show that the God of Open Theism is not in control of the world? No, it does not. Open Theists affirm that God is almighty and an almighty being can intervene in the course of events whenever it wants to. The tyrant who wants to press a button to launch one hundred nuclear missiles might suddenly find

that he is completely paralyzed. Or he might launch the missiles only to find that they have been transported to a galaxy far, far away, where they explode harmlessly. Or the wiring in the launch mechanism might suddenly be disconnected. Or the missiles might all be turned instantly into “duds.” And so on. Thus, God can be in control of the world even if he does not have exhaustive foreknowledge.

Second, aren't Open Theists denying that God is omniscient? The answer here depends in part on the definition of omniscience. On the traditional understanding, “God is omniscient” means “God knows every truth and God believes no falsehoods.” Notice that by this definition, *Truth-Value* Open Theists affirm that God is omniscient, for God does know all *truths*, from this perspective, but there simply are no truths corresponding to future free acts. *Epistemic* Open Theists, on the other hand, claim that there are truths about future free acts, but God does not know these truths. Thus, they deny that God is omniscient in the traditional sense, but they offer a different definition of omniscience. They claim that God is omniscient in the sense that God knows all the truths *that can be known* (and God believes no falsehoods). Given the Foreknowledge Argument, truths of the form “Person P *will* freely do act A” simply cannot be known infallibly; for if God knows in advance (and infallibly) that someone will perform an act, then the act is not free. Notice that this limitation on God's knowledge is self-imposed, because it is entirely up to God whether any creatures have free will in the incompatibilist sense. In deciding to create free agents, God imposed a limit on his own knowledge. And we have already seen why there is no way for even God to know infallibly what creatures *will* freely do, for the information available at any given time (the individual's track record, character, present thought, etc.) does not ground infallibly correct predictions regarding free acts.

In evaluating the Epistemic Open Theist's definition of omniscience, it may be helpful to compare it with the typical definition of omnipotence used by philosophers and theologians, which is along these lines: God can do whatever is logically possible. Given this customary definition, there are some things God cannot do, such as, create a colorless green frog or a person who is identical with the number 13. And most Christians, on reflection, agree that there are some things God cannot do. For example, in discussions of the problem of evil, most Christians will say that much of the evil in the world consists in (or stems from) wrong acts freely performed by humans. Why doesn't God cause people to always freely do right actions? Because if God causes people to do what they do, then their actions aren't free. Even God cannot *force* you to do some act that is *freely* performed by you. The Epistemic Open Theist's definition of omniscience (God knows all the truths that can be known and God believes no falsehoods) places a similar logical limit on God, but in respect of his knowledge rather than his power. It simply isn't logically possible for *free* actions to be infallibly foreknown, given the Foreknowledge Argument.

Third, aren't Open Theists denying that God is the greatest possible being? Isn't the God of Open Theism “too small”? Actually, Open Theists agree that God is the greatest possible being. But they think that infallible knowledge of future free acts is simply not possible; the Foreknowledge Argument shows why.

Fourth, since Truth-Value Open Theists deny that there are any truths of the form “Person P will freely do act A,” aren't they denying that biblical prophecies are true? First of all, the prophetic literature in the Bible does not consist primarily of predictions. It consists primarily of moral discernment and moral judgment. And when predictions are made, they often concern what God has already decided to do, not what free creatures will do. For example, God can predict the coming of Christ because this is an event God has decided to bring about “in the

fullness of time.” Nevertheless, some prophecies do concern the acts of free agents. For example, Jesus predicted that Judas would betray him (John 13:21-30). Truth-Value Open Theists deny that “Judas will freely betray Jesus” was true prior to Judas’ act of betrayal. But this doesn’t mean they claim that the statement was false; they might claim that it was neither true nor false. Also, Truth-Value Open Theists are not claiming that Jesus’ prophecy was unfulfilled. Jesus’ prophecy was fulfilled when Judas betrayed him. A prophecy can be fulfilled in the sense that, at some future time, a present tense version of its contents (in this case, “Judas betrays Jesus”) is true. This way of understanding predictive prophecy, however, brings out two additional problems for Truth-Value Open Theism:

1. We commonly regard a prediction as true if the predicted event occurs at the time specified. For example, if a newscaster says, “The President will veto the bill tomorrow,” we ordinarily regard the statement as true if the President does indeed veto the bill the next day. So, Truth-Value Open Theism conflicts with our ordinary ways of thinking about statements concerning future acts.

Here Truth-Value Open Theists might reply that our ordinary ways of thinking about predictions are not sacrosanct. Perhaps we are speaking loosely when we speak of true statements regarding future free acts. Perhaps it would be more accurate to say that a prediction of the form “Person P will freely perform act A” is fulfilled when a present-tense version of its contents is true.

2. In claiming that propositions of the form, “Person P will freely do act A,” are neither true nor false, Truth-Value Open Theists are committed to a departure from standard systems of logic. In standard systems, every proposition is either true or it is false. Truth-Value Open Theists typically opt for a three-valued logic: a given proposition p is either true, false, or neither.²⁸ In departing from standard, two-value systems of logic Truth-Value Open Theists take on a complication that Epistemic Open Theists avoid.

But Truth-Value Open Theists may reply that three-valued logics seem justified independently of the foreknowledge and free will issue. Such logics provide promising ways of handling at least two important metaphysical problems. (A) Consider the metaphysical problem of vagueness. For example, think of a case in which it seems impossible to say whether a person is bald or thin. The problem doesn’t seem to be a lack of information, e.g., knowing the precise number of hairs on the person’s head or his or her precise weight and height. Sometimes there just doesn’t seem to be a truth of the matter. (B) Three-valued logics may provide the best solution to the problem of logical fatalism: Suppose it is true today that either you will tell a lie at noon tomorrow or you won’t. In a standard, two-valued logic, this disjunction (either-or proposition) is true because one of its disjuncts (i.e., one of the statements comprising it) is true. Suppose “You will tell a lie at noon tomorrow” is the true disjunct. At noon tomorrow, will you have the power to refrain from lying? It seems not, since in order to have that power you would have to have the power to change the past by changing the truth-value of the proposition from true to false. Armed with a three-valued logic, we can say that the disjunction, “Either you will lie at noon tomorrow or you won’t” is true, even though its disjuncts are neither true nor false.

To sum up, Truth-Value Open Theism raises some special questions, but Truth-Value Open Theists are able to give plausible answers. Furthermore, Truth-Value Open Theism has one very important merit, for on this view God is omniscient in the traditional, strong sense of knowing every truth and believing no falsehoods.

Fifth, doesn't the Bible clearly state that God has *exhaustive* (complete) knowledge of the future, including *exhaustive* knowledge of future free acts? Open Theists deny that the Bible clearly states this. Of course, they agree that the Bible contains predictive prophecy and that the Bible indicates that God has quite significant knowledge of the future. But as we have already seen, Open Theists can point to many passages in the Bible that strongly suggest that God's knowledge of the future is partial rather than exhaustive. Let us now consider some biblical texts which affirm that God has knowledge of the future:

Isaiah 46:9-11. Remember the former things of old; for I am God, and there is no other; I am God, and there is no one like me, declaring the end from the beginning and from ancient times things not yet done, saying, "My purpose shall stand, and I will fulfill my intention," calling a bird of prey from the east, the man for my purpose from a far country. I have spoken, and I will bring it to pass; I have planned, and I will do it.

Clearly this passage indicates that God has very significant knowledge of the future. But notice also the words, "I have spoken, and I will bring it to pass." Here, then, God knows something about the future because God has decreed it, i.e., God has decided to bring it about. So, it may be that much of God's knowledge of the future is simply his knowledge of decisions he has already made. This type of foreknowledge is fully consistent with Open Theism and indeed, Open Theists insist that God has foreknowledge of this type. For example, God knows when the Day of Judgment will be because God has already decided when it will be. And the incarnation of the second person of the Trinity, the eternal Son, was foreknown by God, because God decided when and where it would occur, as part of God's plan to redeem humankind.

Do these words, reportedly spoken by God to Jeremiah, indicate that God has infallible foreknowledge of human free acts? "Before I formed you in the womb I knew you, and before you were born I consecrated you; I appointed you a prophet to the nations" (Jeremiah 1:5). There are at least two barriers to using this passage as a proof text for divine foreknowledge of human free acts. First, the passage concerns one individual, Jeremiah, who is called to a very specialized role as a prophet. It is simply not legitimate to generalize the passage to all human beings. Second, the passage emphasizes *God's acts* of consecrating Jeremiah and appointing him to the role of prophet; nothing is clearly stated about God's knowledge of Jeremiah's future *free* acts.

The following passage is often thought to support divine foreknowledge of human free acts: "Even before a word is on my tongue, O LORD, you know it completely" (Psalm 139:4). But God's knowledge of what one is about to say may be grounded in God's knowledge of what one is thinking the moment before one speaks. So, this passage can hardly be taken as a proof that God has exhaustive and infallible foreknowledge of future free acts.

The prophet Daniel reportedly says, "There is a God in heaven who reveals mysteries, and he has disclosed to King Nebuchadnezzar what will happen at the end of days. Your dream and the visions of your head as you lay in bed were these" (Daniel 2:28). Daniel proceeds to interpret Nebuchadnezzar's dream which concerns which nations will dominate world events for many years to come. Does this passage support infallible divine knowledge of future free acts?

First of all, the predictions in this case concern nations, not individuals. And sociologists can often predict what a group of people will do without being able to predict what specific individuals in the group will do. For example, as a group, young people who “age out” of foster homes at eighteen may be likely to be unemployed and homeless, but not all of them will suffer these fates and we may be unable to predict which of them will. Second, the extent to which the future events predicted in Daniel are future *free* acts is unclear. The predictions may concern events that are largely due to factors other than human free will, such as environmental factors, psychological factors, sociological factors, and divine influences in human history.

The apostle Paul speaks of divine foreknowledge in the book of Romans: “For those whom he foreknew he also predestined to be conformed to the image of his Son, in order that he might be the firstborn within a large family” (Romans 8:29). Does this passage support divine infallible, exhaustive foreknowledge of human free acts? Well, not clearly. The passage simply isn’t specific about what God foreknows (or how much God foreknows). God foreknows certain persons, apparently, and predestines them to be like Christ. Of course, the passage has a Calvinistic ring to it and Calvinists have always used it to support their theology. Certainly, one cannot use this passage as support for divine foreknowledge without using it as support for predestination. So, those theists who think humans have free will in the incompatibilist sense are apt to urge caution in interpreting this passage. And most of the Bible seems to presuppose that humans are free in the incompatibilist sense, because it assumes that there is an alternative to giving in to temptation. “No testing has overtaken you that is not common to everyone. God is faithful, and he will not let you be tested beyond your strength, but with the testing he will also provide *the way out* so that you may be able to endure it” (1 Corinthians 10:13, italics added). In short, keeping the context of the whole Bible in mind, it is hard to know what to make of the Romans passage. Accordingly, it is at best dubious support for the thesis of infallible, exhaustive divine foreknowledge of human free acts.

Sixth, many biblical prophecies seem to depend on the actions of human beings--they are not simply a matter of divine decree. How can Open Theists account for such prophecies? Here Open Theists have three further moves to make.

1. Some prophecies are warnings. For example, the prophet Jonah goes to Nineveh and apparently makes a prediction, “Forty days more, and Nineveh shall be overthrown!” (Jonah 3:4). But Nineveh was not overthrown because the Ninevites repented. The prophecy was a warning or a prediction with an unstated condition: “Ninevah will be overthrown *if the Ninevites do not repent.*” This type of prophecy obviously does not depend on infallible divine foreknowledge.
2. Consider this: a well-grounded prediction of what your best friend will do in a certain situation does not interfere with his or her free will, because your prediction, even if correct, is not infallible. Similarly, some prophecies may be regarded as correct but fallible predictions. Jesus’ prediction that Judas would betray him might be of this type. Jesus knew Judas so well, and understood the circumstances so well, that he could predict what Judas was about to do. Open Theists might add that Jesus’ understanding of people and of their circumstances was extraordinary, far beyond that of ordinary humans.

3. More elaborately, Open Theists might suggest that some prophecies are fallible predictions, but with the proviso that God will override the agent's free will if he or she does not act in accord with the prediction. For example, think of Jesus' prediction that Peter and John will, upon entering Jerusalem, meet a man carrying a jar of water who will, when asked, provide a room for the Passover meal (Luke 22: 7-13). If the agent (in this case, the man carrying the jar of water) decides to refrain from performing the predicted act, then God will intervene and cause the agent to perform the predicted act. Given that God has a very deep understanding of people and of their circumstances, God would seldom (if ever) need to intervene in this way, but if he did, the human agent would not then be morally responsible for the action. Notice, however, that this third possibility won't work when the predicted act is wrong or sinful (e.g., Judas' betrayal of Jesus and Peter's denial of Jesus), for then God would be the author of evil.

Given the above possibilities, it seems that Open Theists can account for many of the predictive prophecies in the Bible, and perhaps for all of them, though it is clear that Open Theists must deny that God's knowledge of future free acts is *infallible*. But three points need to be kept in mind here. (1) God's knowledge of the future is infallible whenever it is grounded in divine decrees. (2) To say that God's knowledge of future free acts is fallible is not to say that God ever has false beliefs. If God is fallible with respect to future free acts, then God could make a mistake in this area, but it does not follow that God has ever made (or will ever make) a mistake. (3) While many theologians balk at the suggestion that any of God's knowledge is fallible, Open Theists will emphasize, once again, that infallible knowledge of future free acts simply isn't logically possible, so a being whose knowledge is fallible *in this respect* can nevertheless be the greatest possible knower.

To sum up, Open Theism certainly raises its share of philosophical and theological questions. But Open Theists are able to respond to most, if not all, of those questions with plausible answers. Moreover, Open Theism seems to face fewer (or less severe) problems than the Compatibilist, Timelessness, and Middle Knowledge solutions. Open Theism seems to me the best response currently available to the problem of divine foreknowledge and human free will. And perhaps Truth-Value Open Theism is the best version of Open Theism, because it affirms that God is omniscient in the strongest sense.²⁹

Endnotes

¹ Since one's thinking must apparently start somewhere, one's knowledge of the "starting points" in one's system of beliefs--what philosophers call one's "basic beliefs," is an important topic in philosophy. For example, suppose "Trees exist" is a basic belief for you—you have no argument for it. Still, the belief is surely an item of knowledge, presumably grounded in your sense experience.

² This statement of the problem is borrowed from Thomas V. Morris, *Our Idea of God: An Introduction to Philosophical Theology* (Downers Grove, Ill: IVP, 1991), 91. I have added a parenthesis to premises (2) and (3) and modified step (5) slightly.

³ Furthermore, Origen did not explain *how* God knows the future. For this reason, his "solution" is arguably incomplete. After all, many theologians have held that God can know the future only if it is determined. And if our actions are determined (necessitated), then they are ultimately determined by God, if God exists; for all the causal factors in the world, such as the laws of nature and the physical constants, are created by God.

⁴ For a contemporary defense of the compatibilist or Calvinist solution, see Paul Helm, "The Augustinian-Calvinist View" in James K. Beilby and Paul R. Eddy, eds., *Divine Foreknowledge: Four Views* (Downers Grove, Ill: IVP, 2001), 161-189.

⁵ Admittedly, my wording is a bit loose here. The causes in question are presumably the propensities of physical entities which account for the regularities in the way the physical world behaves.

⁶ The argument has been stated rigorously by Peter van Inwagen, *A Essay on Free Will* (Oxford: OUP, 1983).

⁷ Contemporary physics tells us that some laws of nature are not deterministic but statistical or probabilistic. Probabilistic laws do not always yield the same result even when the initial conditions are the same. For example, suppose the initial conditions are A, B, and C. Probabilistic laws can be thought of as having a form along these lines: If A, B, and C occur, then D will probably occur but E might occur instead.

⁸ Principles similar to premise (5) have been discussed extensively by philosophers and some have been shown to be flawed. The version employed here is borrowed from Alicia Finch and Ted A. Warfield, "The *Mind* Argument and Libertarianism" *Mind*, v. 107, n. 427 (July, 1998), 515-528. As far as I know, no one has refuted this principle.

⁹ C.S. Lewis, *Mere Christianity* (NY: Macmillan, 1943), book IV, part 3. Paul Helm, "Divine Timeless Eternity" in Gregory E. Ganssle, ed., *God and Time* (Downers Grove, Ill: IVP, 2001), 28-60.

¹⁰ Lewis, *op. cit.*, 148-49.

¹¹ Paul Helm also seems to regard God's knowledge of future free acts as a kind of direct awareness. The temporal ("before and after") order is one in which "every moment is also eternally present to God." See Paul Helm, "Divine Timeless Eternity," in Gregory E. Ganssle, ed., *God and Time: Four Views* (Downers Grove, Ill: IVP, 2001), 58.

¹² This objection and the next are borrowed from Alvin Plantinga, "On Ockham's Way Out," *Faith and Philosophy*, v.3, n. 3 (July, 1986), 239.

¹³ This objection is borrowed from Thomas V. Morris, *Our Idea of God* (Downers Grove, Ill: IVP, 1991), 98-99.

¹⁴ Thomas Aquinas, *Summa Contra Gentiles*, Book One, chapter 66, trans. Anton C. Pegis, F.R.S.C. (University of Notre Dame Press, 1975), 217.

¹⁵ Philosophers and theologians disagree about which times exist. According to the block universe view, all times exist—past, present, and future. (As we have just seen, C. S. Lewis' version of the timelessness solution apparently assumes this view.) According to the growing universe view, the past and present exist. Finally, presentists hold that only the present exists.

¹⁶ The same can be said of verses such as John 17: 24, which speaks of the love between the Father and the Son "*before the foundations of the world*" (italics added).

¹⁷ These conditionals are also referred to as *counterfactuals* of freedom, but this is a misnomer, since a counterfactual conditional has an antecedent (if-clause) that is contrary to fact, and many subjunctive conditionals of freedom do not have this feature.

¹⁸ The subjunctive mood contrasts with the indicative mood, e.g., “I am rich.” The indicative mood is used to state a fact, express an opinion, or ask a question.

¹⁹ This point is borrowed from Richard Swinburne, *Providence and the Problem of Evil* (Oxford: Clarendon Press, 1998), 133.

²⁰ Christian theology insists that God is directly aware of our inner states--thoughts, desires, intentions, and so on. It is admittedly not obvious how God comes by this sort of knowledge. But if we allow that mental telepathy is at least logically possible, then we can allow that the greatest possible being might have such a capacity.

²¹ The argument summarized in this paragraph is borrowed from Robert Merrihew Adams, “Middle Knowledge and the Problem of Evil,” *American Philosophical Quarterly*, 14 (April, 1977), 109-117.

²² Material conditionals, which are the focus of beginning courses in symbolic logic, are truth-functional. And a material conditional is true if its antecedent is false. But subjunctive conditionals are not truth-functional. If they were, both of the following conditionals would be true:

- a. If President John F. Kennedy had not been assassinated in 1963, then he would have freely withdrawn American troops from Vietnam.
- b. If President John F. Kennedy had not been assassinated in 1963, then he would *not* have freely withdrawn American troops from Vietnam.

It's hard to see how both of these conditionals could be true.

²³ The argument is borrowed in its essentials from Robert Merrihew Adams, “An anti-Molinist Argument” *Philosophical Perspectives*, 5, Philosophy of Religion, 1991, 343-353; however, I am putting the argument in my own words and so I must take responsibility for any errors in the presentation.

²⁴ For example, Thomas P. Flint, *Divine Providence: the Molinist Account*, Cornell Studies in the Philosophy of Religion (Ithaca, NY: Cornell University Press, 1998) and William Lane Craig, “The Middle Knowledge View,” in James K. Beilby and Paul R. Eddy, eds., *Divine Foreknowledge: Four Views* (Downers Grove, Ill: IVP, 2001), 119-143.

²⁵ Gregory Boyd, “The Open-Theism View,” Beilby and Eddy, eds., *op. cit.*, 13-47; William Hasker, *God, Time, and Knowledge* (Ithaca, NY: Cornell University Press, 1989); Clark Pinnock, *Most Moved Mover: A Theology of God's Openness* (Grand Rapids, MI: Baker2001); and Richard Swinburne, *The Coherence of Theism* (Oxford: Clarendon Press, 1977), 162-78.

²⁶ See also Jeremiah 3:6-7.

²⁷ Exodus 4:6-8 also suggests uncertainty on the part of God.

²⁸ Truth-Value Open Theists need not deny the law of the excluded middle, namely, that for every proposition P, either P or not-P. The disjunction (either-or proposition) is true, but neither P nor not-P is true in some cases.

²⁹ I wish to thank by colleagues Rebekah Rice, Patrick McDonald, and Leland Saunders for their helpful comments on an earlier draft of this paper.