Open Theism and the Future

Open Theists all deny that God has exhaustive foreknowledge of the future, but they differ in their accounts as to why this is so. They tend, however, to want to maintain the doctrine of omniscience in spite of the limitation in question. Some say that God is omniscient in spite of the limitation because the claims about the future that he does not know are not true in the present, but will only come to be true later, and omniscience doesn't require knowing anything that isn't true. Others say that all claims about the future are truth, but some of them are unknowable and God is omniscient in virtue of knowing all that can be known. These positions share a common theme, however, and it is this: the future is composed of two parts, one part open to omniscience and the other part not. The part of the future that is not open to omniscience is the undetermined part, with future free actions being the prime and motivating example of such.

Here I will term this division aspect of Open Theism "the Asymmetry Thesis", the thesis that the part of the future that is determined by present and past events is secure in truth value and falls within the scope of omniscience whereas the parts of the future that remain undetermined by the present and past do not fall within the scope of omniscience and perhaps are not secure in truth value. The Asymmetry Thesis faces serious troubles, and here I intend to cast doubt on its plausibility. I will argue that, given Open Theist assumptions, there is no part of the future that can be known to be true, including the determined part of it. I will begin by explaining what one needs to say to defend the Thesis and then say why it fails.

I. Explaining and Defending the Asymmetry Thesis

Worries about the future, both the possibility of knowing it and the possibility that claims about it lack truth value, are rooted in the idea that for something to be true and knowable there must be something accessible to us or God that makes the claims in question true. This claim involves two aspects. The first aspect is that truths require a truthmaker. The second aspect is an accessibility claim, expressible as the idea that whatever the truthmakers are, they have to be knowable. Knowable truthmakers for the future would clearly be enough to open the future to being known, and only knowable truthmakers would be enough in the present context. For God is not only a knower, but an infallible one; he is not only omniscient but essentially so. So if he holds a belief about a certain matter on the basis of something else, then the basis itself better not leave open the possibility of the belief being mistaken. This point dovetails in a fine way with the literature on truthmakers, which are a subclass of entailers: where T is a truthmaker for p, the existence of T entails p.[1]

Whether there are such truthmakers for every truth is a matter of some controversy. For example, it is true that Bush is President, but neither his existence nor the existence of the property of being President entail that he is. Nor does the combination of the two, since Bush could have existed and not been President.

Similar issues arise for general truths, such as the truth that all ravens are black. Even if we could find a truthmaker for the truth that a given raven is black, the collection of such truthmakers for each black raven doesn't entail that all ravens are black. To get that entailment, one has to have the further information that there aren't any other ravens. But this additional

claim is itself a general truth, leaving us in the position of not being able to provide truthmakers for general truths by appeal to particularities.[2]

In response to these difficulties, the truthmaker view has need of an ontology containing states of affairs such as *Bush's being President* and *All raven's being black*, so that truth can be explained in terms of the obtaining of these states of affairs. An alternative view here abandons the notion of truthmaking in favor of a slightly weaker view in terms of which truth is held to supervene on being.[3] On this idea, for any proposition that is true at one world but not at another, there is something that exists at one world but not the other or some fundamental property or relation that is instantiated at one world but not the other. Though there are questions that can be raised about this proposal as well, the idea it contains is at least as intuitive and attractive as the truthmaker idea itself.

For present purposes, however, I will continue to use the language of truthmaking, since it is a congenial terminology in which to discuss the Asymmetry Thesis. In addition, nothing in the discussion to follow triggers any of the issues that separate the truthmaker proposal from the more general idea that truth supervenes on being, so there will be nothing gained in the discussion here by using the more cumbersome notion of the supervenience of truth on being rather than the notion of truthmaking.

To defend the Asymmetry Thesis, the Open Theist needs to defend two claims. The first claim is that there are knowable truthmakers for the part of the future that falls within the scope of God's omniscience, and the second claim is that there are no knowable truthmakers for the part of the future that falls outside the scope of God's omniscience. The difference between the two parts of the future, for Open Theists, concerns the intrusion of freedom into the story of

actuality and the indeterminism that results from this intrusion. The existence of a divide that was orthogonal to the issue of freedom and determinism would provide no comfort to the Open Theist, for it is not the mere fact of unknowable aspects to the future but the existence of such aspects as a result of indeterminism that forms the core claim of Open Theism.

The simplest way to proceed in finding what an Open Theist must say here is to focus on the parts of the future that fall within the scope of omniscience, and then simply argue that the other parts lack the features in question. So what should an Open Theist say here? The first point to note is what an Open Theist cannot appeal to, which is states of affairs and their future obtaining. If the parts of the future that are true and knowable in virtue of the existence of states of affairs that currently exist and have the property of obtaining in the future, the Asymmetry Thesis will be incapable of defense. For, if there are such states of affairs with such properties, there is no reason whatsoever to think that the Asymmetry Thesis is true in virtue of some indeterminism that can be found. If the Asymmetry Thesis were true given this explanation of truthmakers for the future, it would have to be because some states of affairs haven't come into existence yet or can't have the property of obtaining in the future (perhaps because there isn't any such property). There are possible views of this sort. For example, Robert Adams has suggested that states of affairs involving individuals may not come into existence until the individuals in question come into existence.[4] Even if such a view were defensible,[5] it wouldn't help the Open Theist, since this way of dividing the future into parts with truthmakers and parts without is orthogonal to the division in terms of freedom and indeterminism that Open Theism needs (since it provides no basis for thinking that there aren't such states of affairs regarding the future free actions of presently existing individuals).

We can approach the issue of the needed view for Open Theism by noting the following. It is obvious that the only possible features that could function as knowable truthmakers with any hope of carving the future into regions as desired by Open Theists would be something about God or about the world. If it is something about God, we should expect the claim to be something about what God *ordains* to be true about the future. Today, perhaps, God ordains that a certain event in the future will occur, and this ordinance itself is the knowable truthmaker for the future truth. More generally, some truths follow logically from sets of ordinances, so if God ordains all the elements of the set, then these ordinances are knowable truthmakers for anything logically implied by the set in question.

While it is surely unproblematic to posit the kind of self-knowledge that would be needed for God to know what he ordains and what he does not ordain, it is not so easy to defend the idea that such ordinances are truthmakers. To be a truthmaker, the entity in question must entail the truth in question, so if God ordains that it will rain tomorrow, then it must follow logically that it will rain tomorrow, i.e, it must be impossible for the ordinance to presently exist and it not rain tomorrow. Traditional theists have a ready explanation of why such an entailment is present, for traditional theists hold that God is essentially immutable in character, that he cannot will one thing at one time and change his mind to will something else at the next. But Open Theists don't envision God in this way. On the Open Theist position, God's nature changes in response to the indeterministic unfolding of the history of the world he has created. So, whereas the ordinances of God, on traditional theism, have an immutable character to them, they have no such character according to Open Theism. Without such an immutable character, however, ordinances cannot function as truthmakers, since they do not entail the content of the ordinance. If God's will is not

immutable, he could ordain today that it rain tomorrow and yet it not rain tomorrow because he changes his mind in the meantime.

The Open Theist might try to solve this problem by agreeing that some ordinances are not immutable, but claiming that others are immutable. Such a move is a philosophy shrouded in mystery. What makes the difference here? Does God say to himself, "I really mean it this time!" when ordaining an immutable ordinance? Does he have more resolve about some ordinances than others? Maybe the furrow in the brow upon ordaining imparts the necessary permanence here.

Rhetorical questions don't take the place of an argument, however, so we must probe deeper if we are to find this proposal unacceptable. If we think carefully about what such a proposal requires, I believe we can see why this proposal will fail. As noted already, there is no account of ordaining that by itself entails that things ordained about the future will in fact happen. This point is independent of what kind of theist one happens to be, whether a Classical Theist or an Open Theist. What is needed in order to secure the implication is some further property of God. Classical Theists have the resources to secure the implication by noting that God is immutable, so that it is impossible for him to ordain one thing yesterday and something else tomorrow.[6]

If God is mutable, then his ordinances fall into two possible groups: those that will be revoked and those that won't be revoked. But this division among ordinances doesn't provide the resources needed to make some ordinances into truthmakers. If O is an ordinance regarding proposition *p*, then even if O is an ordinance that won't be revoked, O still won't entail *p*. We get the entailment only with the added information that O won't be revoked, so O alone isn't a

truthmaker of *p*. Such an account is buck-passing of a most objectionable sort, since we now explain the truth of some claims about the future by appeal to another truth about the future, a truth about the free choices of the Divine. If the existence of freedom is somehow behind the truth of the Asymmetry Thesis, such an appeal is surely untoward.

Perhaps an Open Theist might claim that there is a special class of potential ordinances that can only be ordained irrevokably. We might try to generate some plausibility to the idea in this way. Suppose that to annihilate an object requires doing something that makes it go out of existence. Suppose further that "gappy" existence isn't possible: it isn't possible, that is, for a thing to exist for a span of time, cease to exist for a time, and then re-appear. Suppose further that one cannot ordain at t that a certain thing happen at t without making that thing happen at t when one has the power to do so. Then God's ordaining the annihilation of a thing can only be ordained irrevokably, and there is a non-empty class of irrevokable ordinances.

But even if there are some irrevokeable ordinances of this sort, they provide no basis for arguing that the ordinances of a mutable being could be irrevokable regarding events in the future, for the example only shows that there are irrevokable ordinances where the event is simultaneous with the event. Moreover, the supposition that the ordainer is mutable provides a *prima facie* reason for thinking that any such ordinances about the future can be revoked. If there are some ordinances that, by there very nature, cannot be revoked, we need an account of the nature of such ordinances that, in the way described in the above paragraph for these very special synchronic annihilation ordinances, generates the conclusion that some diachronic ordinances (ordinances where the time of the ordinance and the time of the event diverge) can't be revoked. Merely claiming that there is no conclusive argument for claiming that they can be revoked has

no probative value to rebut the *prima facie* evidence that such ordinances are revokable on the basis of the fact that it is a mutable being doing the ordaining. Such evidence leaves open the epistemic possibility of a defense of the idea of irrevokable diachronic ordinances, but no theory can be defended solely by appeal to its epistemic possibility.

For those who are willing to take the argumentative task seriously, the only hope I can see for providing a rational account of how some ordinances are irrevokable is by appeal to God's moral character. Even though Open Theists deny that God is immutable, they do not go so far as to deny God's moral perfection. Part of God's moral perfection involves the inability to do wrong, and since ordaining that a certain event will occur falls into the same general moral category as promising that it will occur, an Open Theist might argue that all of God's ordinances have to be irrevokable to avoid the charge that he is behaving wrongly in the same way that occurs when someone breaks a promise. Thus, it might be claimed, even though God is not immutable, he is immutable enough that we can conclude that he won't ordain anything in anything but an irrevokable way.

This line of argument cannot succeed, however, since breaking a promising and revoking an ordinance are not always wrong. They are always wrong for beings who have perfect predictive powers, for nothing unanticipated or unexpected can occur for such beings to explain why the *prima facie* wrongness of breaking a promise or revoking an ordinance is permitted in a given case. But for individuals lacking such perfect predictive powers, things can happen that justify the breaking of a promise and the revoking of an ordinance. It is of the essence of Open Theism that God is just such an individual lacking perfect predictive powers, so even if it is impossible for God's moral character to change or for God to do something wrong, it remains

possible for God as conceived by Open Theists to break a promise and to revoke an ordinance.

A more general point can be made as well. The argument above relies on the idea that any promise is capable of defeat by further learning except for infallible promisers. Though relevant, this appeal to fallibility doesn't get to the core of the issue, since for any promise a fallible being might make and yet for whom predicting all possible futures was easy, a complete possible future could itself be the object of the promise. For example, God could promise to do whatever it takes to make the sun rise tomorrow, and then all possible futures will be covered by the quantifier 'whatever', and so if the sun doesn't rise, it would count as a breaking of a promise and no information gleaned between now and then could count as a surprise to such a being that would warrant not keeping the promise.

There could be other defeaters of the prima facie obligatoriness of keeping the promise, however. One kind of defeater for keeping a promise is the "I've changed my mind but will make things up to you so that you won't be wronged and won't feel wronged" defeaters. So God can change his mind, if mutable, and still retain perfect goodness by failing to keep the promise in question in such a way that everyone affected by the change is not wronged because better off (or at least as well off) and suffers no remnant of feeling wronged because satisfied by what God does instead. In the limiting case, no moral patients are affected by such a change of mind, and so the justification is trivially present. But even in the non-trivial cases, such a defeater will be available to a mutable but omnipotent being. In short, the combination of fallibility, mutability, and omnipotent is a lethal combination for the attempt to generate truthmakers from God's moral perfection and the moral nature of promising.

Time for honesty. One can use the above to generate a defense of the Asymmetry Thesis,

since it is possible for there to be a promise not subject to the above sort of defeater. Suppose the promise is that something exists or happens tomorrow. In such a case, no moral patients would exist to make things up to were such a promise violated. So, the advertised claim is false: there is a way for an Open Theist to defend the Asymmetry Thesis.

But: false advertising abounds on both sides, in a way of no comfort at all to Open Theism. The advertised view is that knowledge of the future is compromised by freedom and indeterminacy. What the above shows is that no rescue attempt for this view can be launched from the idea that some of God's promises might be irrevokable. It is true that some of God's promises might be of such a nature, and that because of this, the Asymmetry Thesis might be true. But if the class of knowable truths is so exceedingly small that it involves only claims such as *something will exist or happen* and its ilk, the false advertising by Open Theism vastly outweighs the false advertising of the claim espoused to this point that no defense of the Asymmetry Thesis is forthcoming. An foreknowledge of the sort envisioned to this point is so enfeebled that honest admission of the effect of the view would make it nearly impossible to elicit adherence. "Come with us to follow a god who knows so little of the future that the most we can claim is that he could know that something will exist or happen in the future. Our religion is just the sort you need to embrace to honor your justified perspective that human freedom is really important!" Yes, by the thousands the converts stream to the platform.

Three letters form the appropriate response. The first is 'W'. The second is 'T', and the third is left as an exercise for the reader.

The point is that there is nothing but hollow victory of the most philosophically ignominious sort in this defense of the Asymmetry Thesis. Except for the domains of freedom

and indeterminism, any adequate defense must come close, at the very least, to covering all the remainder. The proposal here covers nothing even remotely close to the total body of such rendered presentable in usual portrayals of the crucifixion by well-placed remnants. Instead, the present proposal tries to cover the entire body of typical human size with a piece of cloth barely larger than a geometric point. So, even if the Asymmetry Thesis can be rescued in this way, it is a rescue effort aimed only at the retrieval of the dead. It provides cold comfort indeed for those hoping for a live option in philosophical theology.

It is important to emphasize here that this counterargument doesn't affect the point that some of God's ordinances are *permanent*, i.e., that they never in fact are revoked. Such permanence of ordinance, however, is not enough for them to count as truthmakers, since a truthmaker has to entail, by itself, the truth of the proposition in question. When we need to add the idea that the ordinance is permanent before the inference to the proposition in question is valid, that guarantees that the entailment isn't present for the ordinance itself and thus that it isn't a truthmaker for the proposition in question.

Perhaps the most bizarre suggestion to try on behalf of Open Theism would be to suggest that God is eternal rather than everlasting, and that it is in virtue of God's being outside of time that some parts of the future are knowable and some are not. No Open Theist has ever suggested such an implausible view, and besides the fact that Open Theists generally reject the doctrine of eternity, it is fairly easy to see why adding the doctrine here and appealing to it to solve the problem under discussion isn't going to work. For if the Asymmetry Thesis about the future is true in virtue of something having to do with the doctrine of eternity, we should expect the same asymmetrical implications for the past and present, since it is at the core of the doctrine of

eternity to deny that somehow there is greater intimacy between God and some parts of time over other parts of time. But Open Theists are averse to limitations on God's knowledge of the past and present, perhaps partly for the quasi-Ockhamist reason that difficulties a theory faces should not be multiplied byond necessity, so any appeal to the doctrine of eternity will overreach wildly.

The proper conclusion to draw here is that, if there is an explanation of how the determined parts of the future are fixed and knowable whereas the undetermined parts are not, it will need to be found in the created order itself rather than in some fact about God's nature, character, or intentions (as conceived by the Open Theist). This result is not terribly surprising, however, since Open Theists typically do not appeal to God or his activity to explain the distinction. It is rather some feature of the world itself that does explanatory work. And the feature is not hard to find; it is contained in the very description of the distinction in question. Some parts of the future are causally determined by events that have already occurred and some parts of the future are not causally determined. The former can be known and may partake of truth value; the latter cannot.

So the second option for defending the Asymmetry Thesis is simply to find an account of the distinction in an appeal to laws, initial conditions, and deterministic relationships between earlier states and later states. Here the Open Theist may try to exploit the usual introductory formulations of determinism. Such formulations go as follows. If you know the complete state of a deterministic universe at any one point in time, and you know all the laws that govern transitions from one state to the next, you can easily infer what will happen at the next instant. And then you'll be able to repeat the process for the following instant, and for every instant in the future. Thus, if the universe is completely deterministic, it is a fairly simple logical matter to use

knowledge of the laws and of any given state of the universe to come to know completely what will happen in the future.

Of course, once an indeterministic component is thrown into the mix, things get more complicated. Perhaps, for example, the warming and cooling of the earth would be a completely deterministic process if human beings were removed from creation, but that with human beings thrown in with their freedom to pollute (or not), the future patterns of warming and cooling can no longer be predicted with full confidence. In fact, the degree to which the intrusion of freedom into creation muddies the waters of predictability may be so extensive that there is very little of the future that is predictable, if predictability requires immunity from possible interaction by indeterministic processes. The laws of nature do not cover whether or to what extent the relationships described will be interrupted, and they do not themselves describe when interruption is even possible. The laws contain at least implicitly ceteris paribus clauses about intrusion from outside the physical systems they govern, and one such intrusion is that provided by free human individuals.

In order, then, to find any part of the future to be knowable, the Open Theist will have to have some further information about which subsystems of nature are immune to human intrusion. Perhaps there are some subsystems of nature that human beings cannot affect. For example, if we knew that free individuals are only found in our solar system, then we could point out that interference cannot occur outside the light cone for our solar system (assuming, of course, the truth of the physical theories that limit interaction in this way). Of course, the antecedent here is a whopper for us, but not for God. So even given the messiness that the intrusion of freedom produces, there is no reason to suppose that the messiness extends so far as to undermine the

distinction between the predictable parts of the future and the unpredictable. Perhaps not as much of the future can be known as some have thought, but that is no argument against the Open Theist position that there are two parts of the future, one having truth values and being knowable, and the other lacking truth values and hence being unknowable.

So we have found what the Open Theist must say here. The explanation of the Asymmetry Thesis is found by appeal to the power of determinism to allow predictions of the future. By knowing the laws and what has already occurred, the rest is simple logic. Where it isn't is the land of epistemological dragons: not even God will wander there, for therein lies inescapable risk of error.

II. The Nature of Laws and the Problem of Miracles

There is a problem, however, for this account and defense of the Asymmetry Thesis. The problem is miracles. In the global warming example, we saw how the intrusion of free individuals into the system of nature can rob the laws of their predictive power. Human beings may or may not pollute, and there are no laws that make it perfectly predictable whether they will or won't, and hence none of the laws that would be useful for predicting global warming and cooling can be used for that purpose once the human element is introduced into the system. Instead, the laws must be conceived as having ceteris paribus clauses that are violated by the intrusion of the human element. The laws themselves are not violated, however. It is just that the laws for a physical subsystem must be thought of as laws for the system on condition that no intrusion from outside the system occurs. Since human beings have the power to intrude into this

particular physical subsystem, the laws become impotent for full and accurate prediction so long as such intrusion is possible.

If this is so of the minor power to intrude that human beings possess, it is also true of the immense power an omnipotent being has to intrude into any physical system whatsoever. If we have correctly characterized the situation of global warming in relation to intrusion by free human beings, then we will need to conclude that a similar problem undermines any attempt to predict the future because of the possibility of free intrusion into the universe in the form of miracles.

This result arises immediately on a very intuitive account of the laws of nature. On this account, a law of nature is a true conditional of some sort that contains a *ceteris paribus* clause in its antecedent to cover intrusions from outside the system governed by the law. For example, the laws of psychology involve an assumption that more fundamental biological features remain constant, so that the laws concerning human behavior aren't undermined by the fact that a bullet to the head keeps people from behaving in the way our best psychological theory predicts (assuming we had a good one, that is). The same is true about biology and the underlying chemistry, and it is true about the relationship between chemistry and the underlying physics. Finally, in the same vein, the laws of physics aren't violated when God chooses to intervene miraculously into the physical system of the universe, but the law is rendered explanatorily otiose in virtue of an intrusion from outside the system that is covered by the *ceteris paribus* clause of the relevant law.

The more empiricistically inclined Humeans among us will object, no doubt, to this understanding of laws of nature and the related notion of a miracle. On such a Humean approach

laws of nature are generalizations about the course of nature itself, and even if we can sort some generalizations for less basic sciences in a way that will be more useful to us by including *ceteris paribus* clauses, the basic laws of nature are nothing beyond the best system of of regularities. As David Lewis puts it,

> Take all deductive systems whose theorems are true. Some are simpler, better systematized than others. Some are stronger, more informative, than others. These virtues compete: an uninformative system can be very simple, an unsystematized compendium of miscellaneous information can be very informative. The best system is the one that strikes as good a balance as truth will allow between simplicity and strength.... A regularity is a law iff it is a theorem of the best system.[7]

Nothing is a regularity, of course, if it is not an exceptionless universal generalization, and the metaphysics that underlies this conception of laws is one on which the fundamental entities are particular, local facts and causation is nothing beyond a repeated pattern among types of particular, local facts that holds across all of space-time. Lewis's "best system" account of laws is meant to address the problem that there are more regularities than laws, and so some device is needed to separate mere regularities from laws, and that is what the notion of a best system of regularities is intended to do. Laws are regularities that form the best trade-off between simplicity and strength.

On such a conception of laws, it is logically impossible for a miracle to be a violation of a law, for the laws contain no *ceteris paribus* clauses and it is incoherent to suppose that L is both a regularity across all of space-time and yet has counterexamples to it induced by divine activity. Instead, miracles would need to be defined relative to the concept of a near-law, a regularity that

holds almost always and everywhere, and to which a divine intervention is a counterexample. Of course, this necessary condition is far from a sufficient condition for being a miracle, but it is how the account must start.

Though nothing in what follows depends on the difficulties of turning this necessary condition for something's being a miracle into a sufficient condition, it is worth noting here that the problems for such a project are well nigh insurmountable. As noted already, being the violation of a near law is not sufficient for being a miracle, even if on the approach in question it is necessary. There are way too many near laws, leading to an easy reductio by pointing out that nearly every event in nature is a violation of some near law. In order to avoid a reductio from this point, a first step that some will want to take is to require that the near laws in relation to which the concept of a miracle is defined have to be near laws that are highly confirmed to be true. In this way, a miracle will need to be a very surprising event, whereas many violations of near laws are not surprising at all (think of highly correlated types of events such as being human and not having blue eyes, and the fact that some people count as violations of the related near law, the near law that no humans have blue eyes; or better yet, the near law that no humans are named J.L. Kvanvig, as close to a real Humean law as anything I know, even though I'm not at all surprised by my own name).

The kind of confirmation in question needs to be all-things-considered confirmation and not simply an overwhelming quantity of incremental confirmation. If we have an opaque and unopenable urn with one million marbles in it from which we've been sampling every second, with replacement, for the last ten thousand years, getting only white marbles except in one rare instance where we got a black marble, we don't want the selection of a black marble on the next

draw to count as a miracle even though it is a violation of a generalization for which we have a great degree of incremental confirmation. We can avoid this result by noting that we have no all-things-considered confirmation for the generalization that there are only white marbles in the urn, since our background information entails that this claim is false.

This fact creates a difficulty for the near law conception of miracles, however. Suppose we start with confirmation at a time *t* for the claim that death is permanent. Suppose also that this isn't a law of nature, but only a near law. Suppose, then, that a miracle occurs at *t** (later than *t*) so that someone who was dead comes back to life. There is no longer any all-things-considered confirmation for the claim that death is permanent, so if there is another instance of someone who was dead coming back to life at *t*** (later than *t**), this event cannot be a miracle in virtue of being a violation of the same near law. The only way for the same kinds of events to count as miracles is for later events to violate different near laws than earlier events. I believe there are ways to show that such generalizations can always be constructed by technical devices, but these devices provide no guarantee that the generalizations in question have ever entered into the minds of any person witnessing the events in question. Instead, the generalizations that will have entered our minds will be the original generalization that death is permanent and our immense surprise needs to be explained relative to that generalization and not some other one regarding which no exceptions have yet occurred. But if our surprise at a miracle is explained in terms of one generalization and the miraculousness of the event in terms of a different generalization, then once again we'll find ourselves admitting too many miracles into the natural world. If we are allowed technical devices to construct near laws for events, then nearly every event is a violation of some highly confirmed generalization. I'll give no argument for this

claim, but just an illustration: the sun will rise tomorrow and won't do so miraculously even though it is highly confirmed for us that the sun has only risen on days prior to tomorrow. Now if we get to turn this event into a miracle by finding some other generalization relative to which the event in question is surprising, only a little philosophical ingenuity is needed to cause problems for the near law view of miracles. The weather prediction is that the sun will rise at 5:44 a.m. tomorrow. Such a prediction gives great fodder for surprise. If I've been unconscious since January and just awoke thinking that I've only been asleep overnight, I'll be immensely surprised by the time of the sunrise, since it is an inordinately early sunrise. But it is no miracle even though it is surprising (relative to one generalization) and a violation of a near law (relative to another generalization).

Moreover, even though the high confirmation requirement seems necessary in some cases, it seems unnecessary in other cases. A normal sequence of events would appear to be capable of being miraculous even though it doesn't surprise us and doesn't violate any regularities we are familiar with. Our knowledge of genetics is relatively recent in human history, but the regrettable effects of various genetic conditions are not recent. From all appearances, the longevity of a given person with a genetic condition that normally leads to early death may be unsurprising but undetectably miraculous. If we insist that it be a violation of a near law, there is no near law that we know of regarding which it is a violation. But it could be miraculous nonetheless.

Perhaps, though, we should think of the confirmation requirement in a slightly different way. We should think objectively in terms of the existence of evidence in the world, and note that this evidence confirms near laws as well as real laws. As cognizers, we fail to map

these confirmation relationships in a number of ways. Sometimes we are unaware of the evidence in question, and other times we don't appreciate the force of the evidence. So when we say that something might be a miracle, that doesn't refute the confirmation requirement since the evidence might exist unawares and its force unappreciated. In both cases, however, the high degree of confirmation still exists for the near law.

Moreover, the reasons for wanting a high degree of confirmation to exist remain. Consider the following dilemma. Either it is possible for there to be a near law that is not highly confirmed, or it isn't possible. If it isn't possible, then the high confirmation requirement is automatically satisfied. So suppose it is possible and call one such near law "NL". We suppose that NL is false (since all near laws are), but that it has the power to imply counterfactuals, generate predictions, and undergird explanations in the way real laws do. We also have to suppose, however, that there are no patterns of events in nature that would make reasonable believing NL if they were discovered, since we are understanding confirmation here in the very objective way described in the last paragraph. Let M be an event that contradicts NL. Then M is a miracle, but would never be recognized as such if the only evidence considered is the basic evidence that noticed patterns in nature provide. But the status a regularity has of being a law or a near law must supervene on patterns of events in nature, since without such a supervenience claim, a regularity could be a near law even if hopelessly incompatible with the patterns in nature. For example, we don't want an account of near laws that lets it be a near law that everyone from North Dakota is over ten feet tall. But if we deny the confirmation requirement, interpreted objectively, we are stuck with such a possibility. So it appears that rightly interpreted, the high confirmation requirement can still be defended as essential to the near law

account of miracles.

Specifying the confirmation requirement will take careful work, however. For the objective patterns in nature, considered as a whole, disconfirm every near law. So what must be said that is some proper subpattern exists which has confirming power with respect to a near law. Such a subpattern will need to be extensive enough that it generates a high degree of confirmation for the near law, so merely have a few instances of a false regularity won't be enough to show that a false regularity is a near law. The subpattern will have to be broad and extensive to have generate the required confirmation.

Consider in this context one actual miracle and one possible one. The actual miracle is creation itself; the possible one is the annihilation of the cosmos. For such events to be miracles, we would need to identify near laws that are highly confirmed and which are violated by these events. Moreover, the confirmation must arise objectively from subpatterns in nature, and this fact raises difficulties. First, if the laws supervene on the mosaic of local facts, it is hard to see how annihilation of the cosmos would differ from the non-miraculous cessation of the cosmos, so it is hard to see how such annihilations could be miraculous. Moreover, creation itself would require appeal to future regularities in order to be miraculous, and once again, it is hard to see how creation itself would be a miracle whereas the unexplained origin of the total mosaic itself would not be.

The fundamental problems for such an account of laws and miracles, however, are not on the side of miracles but on the reductive relationship posited between the mosaic of local particular fact and the laws in question. We can begin to note where the problems will lie by noting that such a metaphysic makes it impossible to retain the truthmaker account being

employed here since the basic facts in question do not constitute truthmakers for the regularities in question, since the particular, local facts do not entail the generalizations (one must also have the information that there are no further facts that satisfy the antecedent in question before the generalization follows). It still may be true, however, that truth supervenes on being, in the sense that any difference at the level of truth between two worlds requires a difference at the level of local particular fact (i.e., a difference in basic objects or in the fundamental properties or relations that they display).

As noted earlier, the differences between the truthmaker account and the account on which truth supervenes on being have been ignored to this point since the language of the truthmaker account is quite intuitive and the differences have made no difference to the course of our discussion to this point. But here they do. On a non-Humean account with a traditional understanding of God as being immutable in his decisions, we can talk in terms of truthmakers present at the original creation for everything that happens throughout the entire history of a deterministic cosmos. The laws are themselves fundamental facts about the cosmos rather than a kind of generalization having only derivative status from the more basic particular facts, and thus can be appealed to in an unproblematic way as truthmakers for everything subsequent (so long as we also know the immutable intentions of God concerning when to intervene into the created order and when not to). But if the laws are derivative entities that depend on God's creative choices regarding local facts, nothing of the sort can be said. There is only the actualization of "one damn fact after another," and the best system of regularities is elicited from these more fundamental creative acts rather than the local facts being generated by fundamental laws and initial conditions. In choosing to create, given this Humean metaphysic of the created order, God

would have no choice except to select particular facts to actualize, and then calculate the nature of the laws from whatever sequence of particular facts is selected.

Once we adopt such an understanding of creation with respect to worlds assumed to be deterministic (so that God only needs to metaphysically determine the entire constellation of particular facts to create the cosmos), the next question that must be answer is how to conceive of creation under indeterminism. To retain the Humean flavor, the introduction of chance into the picture must still honor the idea that everything is fixed by the arrangement of local qualities and objects in spacetime, where this local requirement forbids appeal to such items as global features of the world, modal properties, and irreducible probabilistic properties as well. The attempt to retain such a Humean flavor, however, wreaks havoc with the Open Theist's attempt to divide the future into knowable and unknowable regions, where the latter is the domain in which chance plays a role. For on the Humean picture, what the chances are is a function of the totality of spacetime, and on any account of creation, God creates by actualizing whatever is metaphysically basic. Once the metaphysically basic is actualized, however, the laws and chances are fixed on the Humean picture, but in a way that is irrelevant to God's ability or need to predict the future in order to know what will happen. For he has already, on this picture, fixed the entire mosaic of local qualities in spacetime, a mosaic that fixes both laws and chances. By knowing what he creates, however, he bypasses the need for any appeal to laws and chances to calculate what will happen in the future.

Nor is there any refuge in the idea of God's creative activity spanning all of the time involved in the spacetime of the cosmos, so that he too must predict what will happen next on the basis of what has happened to this point. A picture of diachronic creation in which God needs

recourse to the created past and present to predict what he will do next is an unbecoming subjection of the Creator to the created order, positing some inability in the Divine Mind to know itself except through knowledge of past behavior. Moreover, if there is such a problem of prediction, the problem infects absolutely every nook and cranny regarding the future, and not just the undetermined parts of it, thereby undermining the Asymmetry Thesis.

The problem here is relatively simple to appreciate once we realize the implications of any reductive account of chance, according to which chance can be reduced to local particular facts. Our ordinary notion of chance allows that precisely the same total world history can result from different total chance patterns. The precise, total history is, after all, a matter of chance, and different values for chance still leave some chance of same total outcome. It is this idea that lies at the core of the problem of undermining futures for David Lewis's attempt to describe the notion of chance in a way that is compatible with his Humean supervenience claim, for given a history of the world up until a certain time, where the laws both chancy and otherwise are L for that world, there is a chance of a future for that world that entails that the laws are not L.[8] Thus, on a reductive account of chance and laws, information about the future renders all predictability fallible, even when the basis of the prediction includes the laws themselves. To the extent that God's knowledge is incapable of error, reductive accounts of laws and chance are incompatible with any divine foreknowledge whatsoever, and hence cannot be used in defense of the asymmetry thesis. Avoiding such skeptical conclusions about the possibility of divine foreknowledge requires focusing on the supervenience base itself as the direct object of the divine creative activity, but then if God's knowing his own creative intentions allows divine knowledge of some of the future it also allows knowledge of all of the future, since all of it is the

direct object of his divine creative activity.

In sum, a reductive Humean account of laws and chances yields nothing of probative value for the Open Theist attempting to defend the Asymmetry Thesis. To find such implications, the Open Theist needs to embrace an indeterminism based on powers and potentialities in things themselves. In such a case, precisely the same total history can result from different types and arrangements of powers and potentialities, and this fact alone undermines any Humean supervenience claim about such powers and potentialities. Moreover, by appeal to such powers and potentialities in things themselves, we can define the collection of laws and chances for a world that similarly resists reduction to the mosaic of local facts. By generating the total mosaic through the direct dispersement of such powers and potentialities to things themselves, some hope arises for the Open Theist that a defense of the Asymmetry Thesis can be found, for such an account puts God in the position of needing to predict, from the character of such potentialities and powers, what the future will be like. Should these potentialities and powers be chancy through and through, then it appears that there will be no infallible guide to the way in which the total mosaic of local fact will turn out. Thus, on this conception, it appears that there will be parts of the future that are not knowable to a being who can only by knowing infallibly.

Once the Open Theist goes this far from the Humean supervenience claim regarding laws and chances, however, the notion of miracle that fits best with this anti-Humean view is the one described earlier in which the laws contain *ceteris paribus* clauses. If God creates things with potentialities and powers, he has the power to override the display of these powers to his own ends, and when he does so, the result is a miracle. To claim that miracles of this sort cannot

occur would require an argument that the only way a potentiality or power could be instantiated in an individual would be in a way which could not be overridden, and it would be truly amazing to find such an argument since we are all familiar with powers and potentialities that are overridden: think of, for example, arm-wrestling competitions, and what one must say about the one whose power to move things was defeated on that occasion.

There is a way to misunderstand this point that bears avoiding. The claim here is not intended to be an example of ordinary language philosophy in which I am clarifying the meanings of terms in ordinary language. I do not believe that what I'm saying about laws and miracles diverges to any great extent from how these terms are used in ordinary language, but the points I am making here do not depend on appeals to ordinary language and the meanings encoded in it. What is crucial to my case is that there is a kind of action that an omnipotent being could perform that involves overriding the powers and potentialities of the things he has created so as to secure a given intended result that was not guaranteed by the operation of the powers and potentialities themselves. I will here term such a divine intervention a "miracle," but in so doing, I am not claiming and do not need to claim to be honoring standard usage for the term.

I will also refer to such miraculous interventions in terms of *ceteris paribus* clause of what I will term "laws", though again I make no claim to be using the term in a way that is not partially stipulative. What I am claiming is that powers and potentialities involve normal operations that can be described in terms of generalizations, and it is these generalizations (or a subclass of them) that I will term "laws." These generalizations, subject as they are to divine intervention if not intervention by more basic features of the created order, must contain *ceteris paribus* clauses in order to be true, and given my perhaps slightly stipulative use of the term

"law", it follows that we can describe miracles in terms of an overriding of the *ceteris paribus* clause of laws of nature. I repeat, however, that I make no pretense to claiming that the terms in question in ordinary language are properly clarified in such terms.

So, the miracles I'm interested in here are overridings of *ceteris paribus* clauses of laws of nature. Such an overriding renders the law impotent for predictive and explanatory purposes without additional information about what overridings will in fact occur. The law is still a law. When its antecedent is true, including the ceteris paribus requirement that no intrusion from outside the system will occur, then the law is perfectly useful for prediction and explanation. But when God performs a miracle, the law sits idly by, useless for any such purpose.

The possibility of such miracles, however, has important implications for the attempt by the Open Theist to defend the Asymmetry Thesis on the basis of an appeal to powers and potentialities and the correlative notion of laws containing such *ceteris paribus* clauses. Above we noted how the appeal to such a conception of creation raises problems for infallible knowledge of the undetermined parts of the future, but the Asymmetry Thesis is not the general skeptical thesis that infallible knowledge of the future is not possible. In addition to arguing that the undetermined parts of the future cannot be known infallibly, a defense of the Asymmetry Thesis must also contain an argument that the determined parts of the future can be known infallibly. In order to find a knowable part of the future, God would have to be able to know the laws and what has already happened, but he'd also have to be able to know when the *ceteris paribus* clauses will be overridden and when they will not. The Classical Theist can explain such knowledge, because if we assume that such miracles are performable only by God, then God can know when ceteris paribus clauses will be violated simply by knowing his own intentions. But

Classical Theists get to carry forward in time any information about God's present intentions through the doctrine of immutability. Open Theists reject this doctrine, and hence have no vehicle with which to ensure that God's intentions tomorrow will be the same as they are today. So, given Open Theism, it is not predictable even for God when ceteris paribus clauses will be violated, and hence there is no part of the future that is predictable, even when the part of the future in question is causally determined by the things that have already occurred.

Let us apply this worry to a particular kind of argument that might be given for how God can know the determined part of the future. One might argue as follows. Certain aspects of the future are now causally inevitable. But if they are causally inevitable, then God can know that these aspects will obtain by knowing the conditions that make these aspects causally inevitable.

This argument fails because the operator "it is causally inevitable that" offers no metaphysical guarantee of a future when the notion of causal inevitability is understood to supervene on the powers and potentialities under discussion here. It doesn't follow from the fact that *p* is causally inevitable in this sense that *p* is, or will be, true. What may follow is that there is nothing that you or I or anyone or anything else in the created order can do to prevent *p*'s being true. Only with the additional information that the *ceteris paribus* clauses involved in the generalizations about the causal powers and potentialities will not be overridden does the conclusion follow.

Some may worry about these claims, thinking they conflict with the primary argument for the libertarian conception of freedom, Peter van Inwagen's Consequence Argument.[9] If such conflict exists, that's not a reason to reject the argument, but in fact, no such conflict is implied. The argument for libertarianism employs the idea that given that certain features of the world are

unavoidable for me resulting in a future that is unavoidable for me as well. The mere fact that the future is not logically implied by the laws plus the initial conditions doesn't by itself undermine this claim, and it is not hard to see that the failure of implication doesn't affect this part of the Consequence Argument. The future might be inevitable for me even if not knowable infallibly even to God, since the sorts of things one has to have control over in order to block the force of the causal factors already in place might be (and certainly are) things that I have no control over at all. All that is blocked here is arguing for the inevitability of the future on the basis of an argument that the laws plus the initial conditions logically imply the future.

We can summarize the above argument in the following way. The problem of miracles makes it impossible for the Open Theist to find any pat of the future which is knowable if there is any part of the future that is unknowable. The apparent refuge found in the distinction between the determined parts of the future and the undetermined parts is no refuge at all, given the possibility of miracles. The only hope for the Open Theist on this point is to claim that God has the power to decide something freely that then metaphysically binds him forever. The question for the Open Theist, however, is how this could be so. For the Open Theist conceives of God to be mutable, and thus cannot find a truthmaker for any claim about the God will do in the future anymore than God can locate a truthmaker for what I will do in the future (given the account of truthmakers and the Open Theist restrictions on information available to God to use in trying to predict what I will do).

So the result is that the Open Theist should abandon the Asymmetry Thesis. Doing so results, however, in unbelievably severe restrictions on the doctrine of Providence and the scope of prophecy. Not even if God decides that Peter must deny Christ is that an adequate basis for a

prophetic utterance that Peter will do so, since Peter's future actions, even if causally determined or ordained by God with the greatest divine resolve possible, aren't knowable at the time of the prophecy.

Open Theism could be revised further to avoid denying the Asymmetry Thesis, for it is central to the above argument that God only knows what he knows infallibly. If we loosen the requirements on divine foreknowledge so that being capable of being mistaken is compatible with divine foreknowledge in the same way that it is compatible with ordinary human knowledge, then the argument against the Asymmetry Thesis is no longer compelling. At the same time, however, there is little basis for the idea that we can't know what free individuals will do in the future, and so little basis left for the skepticism about the undetermined parts of the future that are central to the Asymmetry Thesis. Though these issues take us well beyond the purpose of this essay, it is implausible to suppose that I can't know that my daughter will be happy when I give her a new car tomorrow, and it would be an embarrassment of the deepest sort to claim that God is maximally excellent in cognition and yet fails to know some things about the future that I know.

My intention, however, is not to explore the details of revising Open Theism in light of the problem raised here. Instead, my goal has been to show that the changes wrought in a coherent conception of the divine by Open Theist assumptions are much more dramatic and deep than Open Theists have appreciated to this point. In particular, without altering the traditional understanding of divine cognitive perfection, which requires that God knows infallibly everything that he knows, there is no defense available of the view that there are some parts of the future that are knowable to God even if some other parts are not.

Endnotes

1. "By the truthmaker axiom I mean the axiom that for every truth there is a truthmaker; by a truthmaker for A, I mean something whose very existence entails A." John F. Fox, "Truthmaker," *Australasian Journal of Philosophy* 65 (1987), p. 186.

2. For discussion of these issues, see Simon Keller, "Presentism and Truthmaking," in Dean Zimmerman, ed., *Oxford Studies in Metaphysics*, I, (Oxford: Oxford University Press, 2004); and David Lewis, "Truthmaking and Different-Making," *Nous*, 35: 602–615.

3. See, for example, John Bigelow *The Reality of Numbers: A Physicalist's Philosophy of Mathematics*, (Oxford: Oxford University Press, 1988); David Lewis, "NewWork for a Theory of Universals," *Australasian Journal of Philosophy* 61 (1983), pp. 343–377; and Thomas M. Crisp, "Presentism and the Grounding Objection," *Nous* 41 (2007), pp. 90-109.

4. Robert Adams, "Time and Thisness," *Midwest Studies in Philosophy* 11 (1986), pp. 315-329.

5. I argue that it is not defensible in "Adams on Actualism and Presentism," *Philosophy and Phenomenological Research* 50.2 (December 1989), pp. 289-298. Adams's discusses these criticisms in "Reply to Kvanvig," *Philosophy and Phenomenological Research* 50.2 (December 1989), pp. 299-301.

6. We could, of course, define 'ordinance' in such a way that only an unalterable entity could count as an ordinance. Then the question would be whether a mutable being could have the ability to ordain. But the issues would be the same, with no advantage to either side from the understanding of ordinances used in the text.

7.David Lewis, "Humean Supervenience Debugged," *Mind* 103: 473-490, p. 478.

8. The literature on the problem of undermining futures has grown quite large. Here is a representative sample: Frank Arntzenius and Ned Hall (2003), "On What We Know about Chance", *The British Journal for the Philosophy of Science* 54: 171–179. John Bigelow, John Collins, and Robert Pargetter (1993), "The Big Bad Bug: What Are the Humean Chances?", *The British Journal for the Philosophy of Science* 44: 443–462.Ned Hall, (1994), "Correcting the Guide to Objective Chance", *Mind* 103: 504–517. David Lewis, (1980), "A Subjectivist's Guide to Objective Chance", in R. C. Jeffrey (ed), *Studies in Inductive Logic and Probability*. Berkeley: University of California Press, 263–293. Jonathan Schaffer (2003), "Principled Chances", *The British Journal for the Philosophy of Science* 54: 27–41. Barry Ward (2002), "Humeanism without Humean Supervenience: A Projectivist Account of Laws and Possibilities", *Philosophical Studies* 107: 191–208.

9. Van Inwagen holds that the argument for free will and the argument against classical omniscience are analogous. He says, “The . . . argument for the incompatibility of divine omniscience and creaturely free will (it is modeled on certain well-known arguments for the incompatibility of determinism and free will) seems to me to be irrefutable.” “What Does an Omniscient Being Know about the Future?”, *Oxford Studies in Philosophy of Religion*, volume 1, edited by J. L. Kvanvig, p. 2 ms. The free will argument employs the idea that given that certain features of the world are unavoidable for me, and they make the future inevitable for me, the future is unavoidable for me as well.