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THE FUNDAMENTAL QUESTION

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ABSTRACT: Asking the question "Why is there something instead of nothing?" almost always inspires a reaction of awe or wonder. This emotional response is both appropriate and desirable, whether or not a legitimate answer to the question is obtainable. The question is *deep,* and the fact about which it asks is impossible to explain by citing some other fact or some antecedent condition. In this paper I consider several possible responses, including a rejection of the question as meaningless, positions that posit the existence of a necessary being, and teleological explanations that posit the instantiation of value in the world. It is argued that each of these positions is either an unacceptable response or fails to diminish our sense of awe at the existence of the world.

Many philosophers have expressed a feeling of awe when they come to address what Martin Heidegger has called the fundamental question of metaphysics: "Why is there something instead of nothing?"[1] Some have attempted to answer the question, and in finding an answer, their feeling could be diminished, or otherwise transformed into a kind of religious awe. Others have dismissed the question as meaningless or at least unanswerable,[2] and hence feel nothing special when they address it. Ludwig Wittgenstein's response is a complex one, for he both rejects the verbal expression of awe as a piece of nonsense, but insists that the feeling itself has an absolute significance.[3] He connects it with the nonsense of ethics, which he says "is a document of a tendency in the human mind that I personally cannot help respecting and would not for my life ridicule it."[4]

There are many possible answers to the question, ranging from attempts to dissolve it to rationalist explanations of the world as a whole. Their variety helps to illuminate the conditions under which a feeling of awe is appropriate.

Much depends upon how the problem is interpreted, and what is thought to be at stake. For example, an antimetaphysical positivist response would dissolve the question as meaningless, and hence implicitly suggest that any feeling of awe here is irrational and inappropriate. Heidegger, on the other hand, claims that philosophy itself is at stake:

> To philosophize is to ask "Why are there essents rather than nothing?" Really to ask this question signifies: a daring attempt to fathom this unfathomable question by disclosing what it summons us to ask, to push our questioning to the very end. Where such an attempt occurs there is philosophy.[5]

It is not surprising, given this view, that he regards the question as deeply significant. Nevertheless, Heidegger does not propose an answer himself, and one is left with the impression that his feeling of depth or awe is caused partly by the fact that his own mind is stalemated.

The attitudes of Heidegger and the positivists may be contrasted with the work of those like Nicholas Rescher,[6] Robert Nozick,[7] and John Leslie,[8] who have constructed elaborate theories that actually answer the question straightforwardly. They do not leave the question in the realm of the mysterious and terrible, but make use of traditional explanatory mechanisms such as universal laws (Rescher), probabilities (Nozick), and teleology (Leslie). I will discuss their arguments in what follows, but my main concern is not the question of their success or failure in explaining the existence of the world. My focus is on the question of whether their explanations have succeeded in eliminating the awe that accompanies the fundamental question itself, or have themselves given expression to it in some other form.

In this paper I will argue that a feeling of awe at the existence of something rather than nothing is appropriate and desirable. By this I mean psychologically appropriate and desirable, given our normal understanding of the meaning of the "why" question. I shall not construct an answer to the question, nor even a complete taxonomy of answers, but this does not mean that I regard the question as being something completely beyond our comprehension. Even if it is impossible to supply an answer, the fact that we respond to it means that something, however odd or inexplicable, has been understood. As long as we feel something about this issue, there must be a serious problem of explanation or a profound mystery that exercises the mind. If the question arouses nothing at all, no awe, no anxiety, no bewilderment or surprise, then we must hold a kind of positivist position that claims that the question is a piece of nonsense, and thus denies that any feeling of wonder at the existence of the world is needed. I will argue that this position is inadequate.

The structure of my argument is defensive rather than constructive. It is *prima facie* plausible to hold that the fundamental question ought to inspire awe, given what it means, and given that many philosophers have expressed such a feeling. I believe that there are only two conditions under which the

question might conceivably fail to be awesome to one who considers it seriously. Firstly, if someone were to believe that the question is meaningless, then feelings of wonder or awe would be inappropriate. This is relatively straightforward, but some discussion of Wittgenstein's position is necessary, for he appears to believe that wondering at the existence of the world is some kind of nonsense, even though he gives expression to it.

Secondly, if someone were to believe that no explanation is required for the existence of the world, then they might fail to have any feelings of significance about the "why" question. This position could be adopted if one believed that it was necessarily true that something exists. In response to this, I will argue that there are reasons to be perplexed or awed even if one holds that it is necessarily true that something exists. For example, the position of Baruch Spinoza, which denies that there are contingent truths, and appears to entail that no explanations are needed, nevertheless permits a (reinterpreted) sense of awe at the very fact of absolute determinism. In my final section, I will examine some modern responses to the question, with the aim of showing that any tenable answer to the question, including the necessitarian position, must deepen our sense of mystery and our sense of the significance of existence itself.

I. SENSE AND NONSENSE

It is arguable that if the fundamental question has no meaning, then it can invoke no feelings. Thus one way of denying that a feeling of awe is appropriate is to deny that the question of why the world exists makes sense. Senseless questions should provoke no response, beyond an expression of incomprehension. The intelligibility of the fundamental question has been denied by some philosophers. Paul Edwards, for example, argues that there is a logical grammar to the word "why" that has been violated in this case, rendering the question meaningless.[9] He claims that when we ask of anything x why it happened or why it is what it is, we presuppose that there are antecedent conditions other than x that can explain x. This is partly what is meant by using the word "why," and if there are no such conditions, then it loses its normal meaning. In the case of the question of why there is something rather than nothing, there can be no antecedent conditions of this kind, because they too must be included in the "something" that must be explained.[10] Edwards thus concluded that the question has no cognitive meaning, since it violates the conditions under which a "why" question can make sense.

It can be replied that this conclusion is too strong. Any antecedent conditions that are used to explain why there is something are also brought into question, it is true, but this does not entail that the question itself is without meaning. There are several other possibilities: the question might be answered by an explanation that invokes conditions that are themselves self-explanatory, or conditions that are natural (in Nozick's sense[11]) and hence require no further explanation, or the question might have an abnormal answer, invoking an

explanation that does not use standard antecedent conditions. All that Edwards has shown is that the fundamental question violates the normal conditions under which "why" questions can have answers. But a question that does not have a normal answer is not necessarily meaningless. Extraordinary puzzles and situations transcend the conditions that he cites, and may force us to think about explanation in different terms. So his claim that the fundamental "why" question is unintelligible is not justified by his argument. Furthermore, the claim is unlikely to be defensible without the imposition of implausible restrictions upon what counts as a legitimate explanation.

Edwards makes it clear that his rejection of this question is not based upon "an empiricist meaning criterion or on any question-begging assumptions in favor of naturalism."[12] Nevertheless, his dissolution has one feature in common with a logical positivist approach: he has argued, in effect, that it is irrational or inappropriate to feel any sense of awe or mystery about the existence of something instead of nothing. Since he begins his article by claiming that lack of clarity about the use of the word "why" is responsible for confusion on a number of philosophical fronts, it appears that he regards the expressed feeling of awe in the face of this question, or the fact for which it demands an explanation, as some kind of confusion. It might be thought that anyone who agreed with Edwards that the question is without cognitive significance would also agree that any feelings of wonder that it provokes are misplaced or confused, but this is not the case. Wittgenstein is one apparent counterexample. He expressed wonder at the existence of the universe, but also believed that the verbal expression of this wonder was nonsense:

> If I say "I wonder at the existence of the world" I am misusing language. Let me explain this: It has a perfectly good and clear sense to say that I wonder at something being the case, we all understand what it means to say that I wonder at the size of a dog that is bigger than anyone I have ever seen before or at anything that, in the common sense of the word, is extraordinary. In every such case I wonder at something being the case that I could conceive not to be the case. I wonder at the size of this dog because I could conceive of a dog of another, namely the normal size, at which I would not wonder. To say "I wonder at such and such being the case" has only sense if I can imagine it not to be the case. In this sense one can wonder at the existence of, say, a house when one sees it and has not visited it for a long time and has imagined that it had been pulled down in the meantime. But it is nonsense to say that I wonder at the existence of the world, because I cannot imagine it not existing. I could of course wonder at the world round me being as it is. If for instance I had this experience while looking into the blue sky, I could wonder at the sky being blue as opposed to the case when it's clouded. But that's not what I mean. I am wondering at the sky being whatever it is. One might be tempted to say that what I am wondering at is a tautology, namely at the sky being

> blue or not blue. But then it's just nonsense to say that one is wondering at a tautology.[13]

Although this argument appears to conclude that it is nonsense to wonder at the existence of the world, it must be balanced against the context in which he introduces his experience of wonder. Having distinguished between absolute and relative value, he claimed that a complete list of the facts about the world must fail to include any absolute ethical judgments.[14] Ethics has a sort of supernatural meaning, and if we are tempted to use expressions such as "absolute good," we must be expressing something that lies outside the world. He concludes, then, that we can try to express the meaning of these expressions by locating particular experiences in which we confront something absolute, and one of these experiences is the feeling of wondering at the world.[15] In using this example Wittgenstein preserves a certain kind of sense for the feeling, even though it is not the kind of sense that appears in factual statements. The "absolute" transcends the language of fact. In the manner of a philosophical mystic, he insists that he feels wonder, but argues that saying this in words is a kind of nonsense. This does not mean that the feeling itself is nonsensical, but it is a response to something (the existence of the world) that shows itself, and yet cannot be stated.

His position clearly derives from the Tractarian conception of meaning, according to which language may express only factual propositions that are either true or false, and cannot express the great significance that resides in ethics and religion, nor in the mystical sense of wonder. One potential problem with this is that it apparently denies that there can be any appropriate reason for feeling the way we do. It combines the assertion of wonder with the denial that there is any basis for it, since it is expressible only as a kind of nonsense, that one wonders at the truth of a tautology. On the other hand, for Wittgenstein the sense of wonder is clearly significant; indeed he suggests that it has a much greater significance than factual or scientific information. It lies beyond our expressive capacities, but it remains meaningful in a way that words cannot be.

The value of Wittgenstein's position in the "Lecture on Ethics" is that it helps to illuminate the special status of the fundamental question of metaphysics. Although he does not discuss the why question itself, it is consistent with his view that the act of asking it may draw us into that feeling of wonder in the face of the absolute nature of existence, which he claims is significant in the way that ethical and religious truths are significant. Indeed, he admits to having an inclination to use the phrase "how extraordinary that anything should exist,"[16] which is close to asking the question itself. Just as the propositions of the *Tractatus* are nonsensical in themselves, but may be used as a ladder that brings us to an appreciation of the mystical, so the fundamental question may bring us to wonder at the existence of the world, even while it remains a kind of verbal nonsense.

Nevertheless, as Wittgenstein later acknowledged, the Tractarian theory of meaning is ultimately inadequate as an account of what language can do, and insofar as his position relies upon this theory, it is also inadequate. If the question of why there is something instead of nothing is to inspire wonder, then it must have some kind of meaning, even if its only function is to draw attention to a feeling for something absolute that cannot be expressed as a fact. It is because we can understand the expressions that Wittgenstein uses that we are able to understand the feeling of wonder that he tries to describe. If there were nothing to understand at all, then he would not be able to use the example in the way that he does. We may therefore conclude that, far from proving that the fundamental question lacks meaning, the way that he uses this example illustrates the kind of meaning that it has, which is such as to evoke awe and wonder. Instead of being an argument against awe, Wittgenstein's position demonstrates that the feeling is intrinsically connected to the meaning of the question, or the expression of the extraordinary nature of existence.

One suggestion as to why the fundamental question evokes this feeling is that it indicates that there is a fact-transcendent meaning to the existence of the world. Wittgenstein claims that he cannot imagine the world failing to exist, or that this is somehow beyond the representational powers of language. Yet he feels wonder nonetheless, because he can sense that there is something that lies beyond language. Another possible explanation is that the fundamental question asks about something that we can represent as a matter of fact, although we cannot see how to explain it. We can see the problem, but we cannot find an "explanation space" within which it could be solved. The question appears to cite a contingency, the existence of something, and ask for an explanation for it, but normal explanations are apparently ruled out (this much can be conceded to Edwards). When this is comprehended, we begin to see the contingency of existence as an absolute brute fact, something we must simply accept without a normal explanatory procedure. This realization, this confrontation with an absolute contingency, may provoke a feeling of wonder or awe, for we are confronted with something immense and somehow "beyond" reason. It is appropriate to feel this way if we understand the question in this way. However, some philosophers have tried to explain the existence of the world by invoking a logical or metaphysical necessity. We must therefore ask whether, given this kind of response, a feeling of awe is rendered inappropriate, impossible or irrational.

II. NECESSITARIAN EXPLANATIONS

It is arguable that necessary truths require no explanation. It is also arguable that it is inappropriate to feel awe at that which requires no explanation. Therefore, if it were believed that the existence of something instead of nothing

was a necessary truth, it could be argued that a feeling of awe in response to the fundamental question is misplaced or irrational. Alternatively, even if it were not a necessary truth, but nevertheless something "natural," then awe might be considered inappropriate. I will examine this latter claim, in the form in which Nozick advances it, in the next section. In this section, I shall examine necessitarian solutions to the fundamental question.

We may have an intuition, even before considering the position in detail, that the claim that "something exists" is necessarily true is misguided, if not certainly false. This is especially true if we already feel that the fundamental question is awesome or unfathomable, but even if we are not so impressed, it looks like a mistaken claim. Modern philosophers normally argue that the notion of necessity derives its significance from the notion of analyticity. In other words, a necessary truth is one that is immediately true in virtue of its meaning or can be shown to be so using logic plus the appropriate definitions. But the existence of something instead of nothing is not usually thought to be an analytical or a logical truth. For example, when Susan Haack makes the observation that the standard objectual semantics for classical logic entails that a theorem such as "$(\exists x)(Fx \vee \sim Fx)$" entails that something exists, she sees this as an embarrassment for the objectual interpretation of the quantifiers, rather than something that naturally conforms to intuition.[17] Even when the notion of necessity is seen to derive from metaphysics rather than logic, as in the case of Saul Kripke's theory of essentialism, there is no strong intuition that this can lead us to a better understanding of the fundamental question.

The notion of necessity is not a simple one. Contemporary philosophers tend to analyze logical necessity as truth in "all possible worlds," a phrase that can be understood conceptually or realistically. That is, some think of possible worlds as being conceivable situations that do not exist except in the imaginations of those who think them up, while others treat possible worlds as real things. David Lewis is the most prominent defender of the view that possible worlds are real things, and he even goes as far as characterizing a world as a maximal mereological sum of spatiotemporally related things.[18] In other words, he believes that possible worlds are very large material objects of a certain kind, and the underlying reason for this is that he believes that this is what the actual world is. He argues that, since mereology does not permit 'empty sums', there can be no empty world. Thus with his conception of a world Lewis can claim that "there isn't any world where there's nothing at all. That makes it necessary that there is something."[19] It is worth noting that this conception of a possible world automatically answers the questions of whether God exists, and whether there are abstract objects. Neither can be included in a mereological sum of spatiotemporally related things, so neither is possible. Such a conception, it may be contended, settles far too much about ontology far too quickly. We do sometimes wish to consider possibilities that, on Lewis' theory, we must regard as impossible.

Lewis is not the only philosopher to argue that the empty world is impossible using the premises of a theory of possible worlds. David Armstrong, whose position is very different from that of Lewis, also contends that the situation where nothing exists is impossible, but for a different reason. He adopts a combinatorial theory of possibility that limits possible worlds to those constructed from given elements (actual individuals, properties and relations). Clearly, the empty world is not so constructed, because it has no structure at all.[20] Hence there is no empty world, and the proposition that something exists is a necessary truth. Both of the Davids seem to be committed to the idea that our understanding of the nature of possible worlds derives in some way from our understanding of the actual world. Lewis claims that possible worlds are just "different ways things could have been,"[21] so they must be significantly similar to the actual world, with variations. Armstrong claims that possible worlds are constructs from the elements that make up the actual world, and thus we understand them because we can apply the concepts we already use in comprehending actual-world truth.

Does the Lewis-Armstrong position on the nonexistence of an empty world succeed in diminishing our feelings of awe at the existence of the world? We may allow that the arguments for their views have plausibility if we accept certain conceptions of possibility, but they do not establish the necessity of something instead of nothing. Their shared conclusion explains neither the fact that the world exists nor the wonderment we feel in the face of this fact. Hence they do not entail that awe is inappropriate, nor do they effect any reduction in the strength of this feeling. It should be emphasized that Lewis and Armstrong have not supplied any reasons for thinking that the proposition "Nothing exists" is incoherent or inconsistent per se. If we accept one of their theories, then it is impossible, but in itself it is a consistent proposition. But their theories are just the elucidations of specific conceptions of possible worlds, and these conceptions may be challenged or rejected. Furthermore, it is easy to turn their modus ponens into a modus tollens: given that the theories of Lewis and Armstrong lead to the impossibility of the empty world, we can use this as a reason for believing these theories to be mistaken. All that we need, it seems, is a plausible alternative conception of possible worlds that makes the empty world accessible.

Thomas Baldwin has constructed a detailed formal argument to show that there is a possible world where nothing exists, and thus he makes use of a different conception of worlds.[22] It is based upon the idea that it is always possible to "subtract" a concrete object from a given possible world and thus to find another possible world, accessible to the first, which has exactly one less object in it. He begins with the premises that a world with a finite number of concrete objects is possible, that each of these objects might not exist, and that their nonexistence does not entail the existence of anything else. He then shows that there is an iterative procedure for "subtracting" objects from worlds, and the end result, given a finite number of objects, is that there is a possible

world where all concrete objects have been subtracted. This is the empty world. The subtraction argument, as Baldwin calls it,[23] probably represents the most natural way of thinking about the possibility that nothing exists. It is the limit case of a series of worlds that contain fewer and fewer concrete objects, and it is accessible to us in that we can think of the limit case of such a series. If we must consider abstract objects as well as concrete objects, then the subtraction argument as it stands will not suffice. However, a similar argument may be constructed for this case, and it would work for at least an Aristotelian realist position on universals, since this position states that universals exist only when their concrete instantiations exist.

Clearly Baldwin's conception of possible worlds is different from that of Lewis and Armstrong. While he uses an "abstract conception"[24] of a possibility, they treat possibilities as if they were substantial things. He claims that their theories invoke the existence of something as a background condition of there being a possibility at all, and hence they use a line of thought that relies upon a substantialist analogy. Baldwin compares their conception of possible worlds to a situation in which, although each of us can get away without doing the washing up, someone has to do it. It is written into the rules, or into the background context, that the washing up will be done. In this situation, the last person left in the kitchen cannot leave the kitchen without washing up, and this is similar to the way that Lewis and Armstrong would block the subtraction argument. They would claim that we can get down to a world with exactly one concrete object, but if we remove it, we are no longer talking about a possible situation. Baldwin's response is that the comparison does more harm to their position than his. As he says, although it cannot be that the washing up is done unless someone does it (so there is no empty case), "the abstract conception of a possibility does appear to permit a possibility that is not a possibility of, or for, anything—namely the possibility that there be nothing at all."[25] In this case, since he is arguing that the existence of concrete objects is not analogous to the case of washing up, he must believe that the "abstract conception" of possibility has logical priority over the substantialist conceptions of Lewis and Armstrong.

If the question of whether the empty world is possible comes down to the question of whether we are able to think of a possibility that is not a possibility of or for anything, then it seems that the issue is decided. Of course we can think of this, it is extremely easy! As long as we think of existence as a contingent matter, we can subtract as many items as we like from the actual world without violating any conditions on possibility. It therefore seems that the Lewis-Armstrong position is untenable. Furthermore, even if it were tenable, it does not necessarily succeed in reducing or eliminating our sense of awe at something instead of nothing. At most, it shows that we can avoid the problem of thinking about the fundamental question, but only if we are already committed to the exclusion of a large number of entities, such as abstract objects, God, and anything else that fails to conform to physicalist

rules, from our ontology. However, given that the fundamental question is put forward in a context where these rules do not necessarily apply, the answer cannot be based upon this general ontological position without critically prejudicing the issue.

Many traditional philosophers have defended the position that "something exists" is necessarily true without making use of a general theory of modality or possible worlds. Their claims are based upon the belief that at least one thing inhabits all possible worlds, namely the Supreme Being. If the Judeo-Christian God exists, then he could not have failed to exist, and thus there would necessarily be something rather than nothing. The Anselmian argument, according to which all that we need to grant is the mere possibility of a necessary being to conclude that this being is actual, is controversial, and as it involves a series of complex problems, I will not discuss its details here. There are other ways of arguing for the necessary existence of God, and one of them is a straightforward deduction that proceeds directly from a consideration of the fundamental question itself. This is Gottfried Leibniz's argument in part seven of *The Principles of Nature and Grace*,[26] which may be paraphrased as follows:

1. Every fact has an explanation (the Principle of Sufficient Reason).
2. The fact that there is something rather than nothing cannot be explained by the series of contingent things (that is, "bodies and their representations in souls"[27]).
3. Therefore, the explanation for the existence of "something" must lie outside the series of contingent things, in a being that exists necessarily.

To argue in this way effectively explains why there is "something," but the explanation is just that there is no alternative, because of the existence of a necessary being. The argument does not by itself construct an explanation for contingent beings, although it does direct us to the point from which Leibniz thought the explanation must proceed. The existence of God explains why there is something, but the creativity and benevolence of God explain why contingent things exist as well. God has selected the best of all possible worlds as the actual world, and this is due to His power and essential goodness. But this is a separate matter from the fundamental question of metaphysics, which receives a simple answer in the necessary existence of the deity.

In the face of this kind of answer, we must ask whether it is still appropriate to feel awe. If everything has been explained, both the fact of existence itself, and the fact of contingent existence, has it become irrational to gasp and to wonder? Well, in fact it is difficult to see how the invocation of a necessary being *explains* why there is something instead of nothing, except in a trivial fashion. Rather than providing a full-blooded explanation, Leibniz's argument can be seen as a clear statement of the alternatives: either the existence of the world of contingent things is inexplicable, or there is a necessary

being, since trivially, this being explains its own existence. One can therefore deny the existence of God only on the condition that one fails to make sense of the contingent world as a whole. I shall examine both of these alternatives with respect to their capacity to induce attitudes of awe.

Leibniz depends upon the principle of sufficient reason in answering the fundamental question, and he allows a form of teleological explanation to account for contingent truths (although, given his theory of truth, it is arguable that even contingency is eliminable from his system). He introduces the question with an argument that the series of contingent beings will not be able to explain the existence of something rather than nothing, so he clearly presupposes that there is a series of contingent things. Some philosophers have concluded that there must be something wrong with Leibniz's argument, and that the fault lies in his first premise. For example, Noel Fleming has claimed that in this context, the principle of sufficient reason is "both doubtful in itself and opaque in what it requires."[28] We are familiar with explanations for contingent entities, whose existence depends upon other contingent entities, but it is difficult to understand even the possibility of the necessary existence of something. However, if Leibniz's argument is rejected on the grounds that he makes illegitimate use of the principle of sufficient reason, then we are left with the alternative that the existence of something rather than nothing is inexplicable. Fleming admits that this is the case, and concedes that "what the argument shows is that it is inexplicable unless something is necessary."[29] He does not suggest a way out of this situation, but claims only that the principle of sufficient reason is false, at least in this context.

It is arguable that this position is itself inexplicable unless it is combined with some kind of expression of awe. We cannot claim that the world's existence makes no sense at all, that it is an absurdity, and expect to be able to treat this with a casual attitude, as if we were saying something plain and obvious and of no real consequence. Even if it is true, the claim is outrageous and audacious, for it opposes our normal disposition to look for causes and explanations, and puts nothing in its place. On this hypothesis, there can be no hope for a clue as to why the world exists. It is just there, and we must accept that it is there without seeking for its depth, or for a satisfaction of the inevitable human desire to understand more completely. This position involves the acceptance of ultimate mystery, which is not the kind of mystery that might be resolved or rendered less mysterious in the light of some metaphysical postulate. It therefore necessitates a feeling of awe, for we are awed when we confront the absurdity of the world itself. It is a consistent position, but it is not an easy alternative to face, if we are willing to take it seriously. If we adopt this position, we must learn to live with the absurdity of existence, rather than merely take it on board as a theory. William Barrett has made this clear in his discussion of Leibniz's argument:

> But if we choose this alternative, we cannot do so in the style of the cavalier or superficial atheist who does not pause for a moment at the

> enormity he is accepting. For it is an enormity: we do not say elsewhere, of any particular fact, that there is no explanatory cause or reason, the fact just simply happens to be there; but in this case, confronted by the most enormous fact of all, the universe, we would be willing to say it just happens to be there. We need to have the intellectual imagination of Nietzsche to grasp how audacious and staggering is the hypothesis of atheism. For if we say the world is without a reason, then it becomes absurd, and the whole of existence, and we along with it, absurd. We have then to accept the absurdity of life, as some of the existentialists have spoken of it, and learn to live with that absurdity.[30]

If we accept atheism, then we must accept its awesome consequences, and try to live in the shadow of an ultimately inexplicable world. This is appropriate because it is a sincere recognition of what we have accepted, and a feeling of wonder in the face of the fundamental question is appropriate for the same reason. Furthermore, it is desirable to retain this feeling, and let it have its full expression, for if we do not, then we will become dishonest atheists. Nietzsche complained that no one in his time understood the fact that God is dead, for even when they believed it, they acted as if nothing had changed. Their atheism was dishonest. If God does not exist, then we ought to be astonished that there is something rather than nothing, for this is a wondrous absurdity.

Consider now the other alternative, which is that Leibniz's argument works, and we must therefore accept the existence of God. Does this eliminate the possibility of awe, just because we have found a way to give an answer to the question, or does it introduce another reason for feeling that "something instead of nothing" is powerful and significant? I have already indicated that the explanation provided is a trivial one, in that the existence of a necessary being is somehow self-explanatory. It does not proceed by way of an explanatory theory, but by stating what would be required for the question to have an answer. It could therefore be argued that, since trivial explanations are not occasions for wonder, it is not appropriate to feel anything awesome or significant about the necessary existence of God. We might be in awe of the notion of deity itself, but this is a different matter. Leibniz characterizes God as a supremely good, supremely powerful free agent, which can be seen as awesome, but these features are not used in answering the fundamental question, and are irrelevant to the feelings we have about it.

I believe that this argument is fallacious. There are occasions when necessary truths can inspire feelings of great wonder, and we can be amazed by what we know to be in some sense "trivial." For example, students of mathematics have often been astonished by the truth of the formula "$e^{i\pi} = -1$," which relates very "significant" numbers in a single equation, yet it is a necessary truth, and could be seen as trivial. In the case of the existence of God, there are reasons to be amazed if we are sincere about its implications. It is arguable that we do not have an adequate notion of the deity, especially if

the only source for the intelligibility of this notion is the fact that it provides a swift answer to the question of why something exists. Furthermore, if more substantial content is added to our conception of God, such as that which is added by a religious tradition, it becomes even more difficult to see how He can explain the existence of something rather than nothing, because His interest in human affairs makes Him appear more contingent than necessary.

The Judeo-Christian tradition has insisted on making the idea of God sacred and special, by insisting that He cannot be represented in images or idols. As such, it has enforced certain necessary limits on our understanding of divine existence. It is sinful to think that one has a complete understanding of God, because it is a form of pride. Thus even when we turn to religion as a means of grasping an answer to the fundamental question, we are informed that to "grasp" the deity is ultimately to make a mistake. We find ourselves confronting a mystery in any case. It is therefore appropriate and desirable to feel a sense of wonder at the fact that it is impossible for there to be no God—appropriate because God lies beyond our complete comprehension, and desirable because it is a rejection of the sin of pride.

In reply to these points, it might be suggested that Leibniz's argument may succeed in answering the fundamental question, but fail in demonstrating the existence of God. For his conclusion (as I paraphrased it) is just that the explanation for the existence of something must lie outside of the series of contingent things, in a being that exists necessarily. We might claim, and many philosophers have, that numbers and universals exist necessarily, in which case there is no need to rely upon a conception of God in providing an answer to the question. If these items are postulated, then we can answer the fundamental question without any of the fuss that theism and atheism involve, and without provoking any sense of wonder or amazement. For numbers in general are quite ordinary things, and universals are even more commonplace. Anyone who knows arithmetic, and comprehends that it has existential implications, has the capacity to understand why there is something instead of nothing. There must be something existent, if arithmetic is true.

I have two replies to this. First, Leibniz himself would not have found this kind of answer acceptable, for it cannot be used to answer his second question, which is why the world is exactly the way it is.[31] For him, the God hypothesis has explanatory virtues that arithmetic in itself does not, since it can supply a teleological explanation for the contingent world (i.e., it is selected by God). In the context of his argument, an explanation for contingency is an important aspect of the fundamental question. Secondly, even if we ignore this context, an attempt to answer the question by citing numbers and universals as necessarily existent things is philosophically inappropriate. Platonic realism should not be understood as an attempt to explain the existence of the world, and platonic 'reality', the realm that is inhabited by platonic Forms, is not to be seen as a realm of 'necessary beings', but rather as a realm of transcendent beings. The point of postulating this realm is to account for the fact

that Forms are changeless, eternal, and nonphysical, not to account for the fact that something exists. Indeed, in the case of the traditional argument for platonic realism, the One-over-Many argument, it is not difficult to conceive of the nonexistence of all Forms. This would be the case, it seems to me, if there were no 'manys' to explain through the postulation of a 'one', and it is not difficult to conceive of the nonexistence of all particulars.

As for the logical necessity of arithmetic, and the supposedly necessary existence of numbers, it is also inappropriate, and highly questionable, in the context of the fundamental question of metaphysics. Gottlob Frege's version of mathematical realism, if it is seen as a response to this question, has the same ridiculous flavor as the claim that the fact that "$(\exists x)(Fx \vee \sim Fx)$" is a theorem of classical predicate logic proves that something exists. In response, we can say that it simply does not prove this. If anything, it proves that something is wrong with the standard objectual interpretation of predicate calculus. Similarly, if the only evidence for the existence of numbers is the truth of arithmetic, then we can reply that this is not adequate evidence. The substitutional interpretation of quantification, or the Meinongian interpretation of both quantification and arithmetic, will suffice to show that we can accept the truth of arithmetic without accepting the existence of numbers.[32] Thus the logical necessity of arithmetic does not demonstrate that numbers necessarily exist.

I have argued that both of the alternatives presented by Leibniz's argument are appropriate occasions for a feeling of awe. But the context of this argument is the explanation of contingent beings, and this yields a dialectical situation of a specific kind. There is a necessitarian response to the fundamental question that involves denying contingency altogether, and reinterpreting the world accordingly. According to Spinoza's conception of the world, there are no contingent beings. The world as a whole is exhausted by one substance, whose existence is necessary and whose cause is itself.[33] Spinoza claims that "Nothing in the universe is contingent,"[34] and it is arguable that his conception of the world allows for no feeling of awe and no sense of oddness at the existence of something rather than nothing, since the latter alternative is automatically (and necessarily) disallowed. He tries to explain the appearance of contingency by allowing that God, the one substance, has modifications that may be identified with ordinary objects in the empirical world, but ultimately these things also derive their being and their nature from God: "Further, God is not only the cause of these modes, insofar as they simply exist (by Prop. XXIV, Coroll), but also insofar as they are considered as conditioned for operating in a particular manner (Prop. XXVI)."[35]

The absolute "necessitarian" determinism of Spinoza's metaphysics may be difficult to grasp, but it shares much with standard versions of causal determinism, and even includes an account of the Newtonian laws of motion,[36] which form the basis for modern mechanistic and deterministic views of nature. His holistic conception of the world makes the necessity of existence a

kind of internal necessity, for it depends upon the truth of a series of nonlogical axioms and definitions. These axioms and definitions can be rejected. Unlike axioms of logic, the propositions that follow from them are not logically true, but may at best be considered necessary relative to the system. Spinoza argues rather like this: given that we speak of "substance" as being "independent" (as is expressed by his definition), there must be only one completely independent substance, and it must therefore include all that we recognize in the world as ingredients in its very essence. Given that we accept this "internal necessity," we might accept that Spinoza's axioms supply a systematic explanation, or an explanatory framework, within which it is possible to give a complete account of why the world exists. Would this make feelings of awe irrational or misguided?

It is worth noting first that Spinoza himself claimed that a correct understanding of God, as conceived by his system, does make a certain kind of feeling appropriate. This feeling is what he called "the intellectual love of God," and it may be interpreted as a kind of awed recognition of absolute determinism. We can become free when we recognize that freedom is impossible, and that all the anxieties occasioned by the notion of moral responsibility are illusory. Some of us might be appalled at this suggestion, while others might claim that it makes no sense. The only thing that I need to claim is that, whatever we think of its truth, it is something appropriate to the context of Spinoza's astonishing and awe-inspiring vision of reality, and the feeling of love occasioned by a recognition of absolute necessity can be adequately described as a kind of awe. Thus the system does not destroy such a feeling, but renders it appropriate and desirable, although it is no longer something occasioned by the inexplicability of existence as such.

Nevertheless, if it is not considered appropriate or intelligible to abandon the notion of moral responsibility, another option is arguably available in the face of Spinoza's explanatory system. This is the claim that we may feel awe at the completeness and scope of what it explains. It is difficult sometimes to understand the system itself, but the kind of absolute rationalist explanation that is invoked is relatively clear, and the fact that it can deal with the existence of the world is an appropriate occasion for wonder. Therefore, whether or not Spinoza has effectively answered the fundamental question of metaphysics, his system does not eliminate feelings of wonder at the fact of existence. At most, it could be claimed that these feelings ought to be reinterpreted for the context of absolute determinism, but they are still appropriate and desirable.

III. MODERN EXPLANATIONS

In recent years, a number of philosophers have revitalized the fundamental question of metaphysics after a long period of neglect, and they have proposed fascinating and illuminating answers. It is likely that the main reason for this renewed interest lies in the death of positivism, and the rebirth of metaphysics itself, but the appearance of certain cosmological ideas, such as

the Big Bang theory and the Anthropic Principle, has also had an effect. One of the first of the new reactions to the question was that of Nozick, and I will discuss some of the possibilities that he introduces with the aim of showing that they either fail to answer the question satisfactorily, or otherwise pose no threat to my central claim. I shall also argue that one of his "solutions" is itself an expression of awe rather than an explanation. Thus his answers, whatever else may be true of them, do not provide counterexamples to my central claim, that a feeling of awe in contemplating the fundamental question is appropriate and desirable.

I will then consider two variants of what might be called the "value thesis," that the world exists because it is valuable. Many of the recent responses to the fundamental question are partial endorsements of this thesis, and it could become one of the most popular metaphysical explanations. For example, the Strong Anthropic Principle—which, as interpreted by Paul Davies, asserts that the laws of physics *must* be such as to give rise to conscious beings (the weak form says that they are contingently such as to give rise to conscious beings, because after all we do exist)[37]—is clearly connected to the value thesis in some way, since conscious beings are in some sense realizations of value. I will examine the thesis as it appears in the work of Leslie and Rescher, each of whom have their own specific problems. The general point that I will make is that inasmuch as we can offer an intelligible explanation of the world in terms of its value, it is appropriate to feel awe at the fact of its existence. This means that contemplating the fundamental question, which presupposes the fact of existence, also leads to appropriate and desirable feelings of awe, wonder and amazement. In a way, contemplating this question is an act that forcefully brings us to acknowledge not only the fact of existence, but the fact that it is astonishing. We can say this even if we are uncertain whether a version of the value thesis will ultimately succeed in explaining why there is something instead of nothing.

Nozick

Nozick offers several possible explanations for the existence of the world, and divides them into separate categories. I will not discuss all of his proposals. In particular, his remarks on mystical experience appear to be irrelevant, and his theory of self-subsuming explanations can be treated, for present purposes, as a version of the necessitarian position, which has already been discussed.[38] Given the concerns of this paper, it is necessary to point out only that mystical experience is almost certainly connected to some kind of awe, and that a self-subsuming explanation of the world, were it ever to be formulated, would have a similar effect to that which is produced by the self-explanatory explanation that there is a necessary being. That is, it would bring us to a feeling of wonder. We would feel this way about an explanation in which the deepest law or principle of the world explains its own truth, because the principle itself would take on the theoretical role of God, which is

that of explaining all that is contingent and also explaining its own existence. As such, Nozick does not contradict my central thesis by supposing that self-subsuming explanations are possible, nor by discussing the possibility of mystical revelation. This leaves us with what he calls the egalitarian and inegalitarian responses to the fundamental question.

An egalitarian theory holds that all states are equal in the sense that they all require explanation, whereas an inegalitarian theory holds that only some states need to be explained, while others are treated as "natural." One of the best examples of an inegalitarian theory is classical mechanics, where rest and uniform rectilinear motion are natural states requiring no explanation, whilst all other kinds of motion, accelerations and nonuniform circular motions, must be explained by citing the action of forces. Thus a question of the form "Why is state X realized, instead of state Y?" may be answered by showing that some deviant forces acted to bring the state away from a natural state. Nozick claimed that the fundamental question, which has this form, presupposes that nothingness is a natural state. This creates an intractable problem, since "any special causal factor that could explain a deviation from nothingness is itself a divergence from nothingness, and so the question seeks its explanation also."[39] He went on to imagine that nothingness is a natural state that contains a "nothingness force" that may produce something. He then claimed that there is something rather than nothing because "the nothingness there once was nothinged itself, thereby producing something."[40]

This is an echo of Heidegger, whose infamous assertion that "the nothing noths" incited the wrath of Carnap and others. It is an absurdity, a kind of philosophical joke, which neatly expresses the absurdity of the situation that we confront when we think about the fundamental question. In a way, it can be understood as a valid description of what must have happened at the origin of the world, assuming that "something exists" is not a necessary truth. There was nothingness, and then suddenly there was a world, which came from nowhere. To say that the original nothingness contained a force that produced something is self-contradictory, because a force is something, and if nothingness contains something, then it must be something, which is impossible. Therefore, as an explanation, it fails.

It might be thought however that there is no other way of expressing what must have happened, given that there is no eternal substance and no God. We are then left with a self-contradictory situation, which cannot explain anything but somehow serves to express something. It expresses our paradoxical situation, as entities whose world is an enigma, and whose origin is an outrage to reason and good sense. We can find joy in this situation, the joy of being released from rational thought so that we might revel in being the outpouring of nothingness, and enjoy our paradoxical existence. This feeling of joy is not separate from a feeling of awe, it is continuous with it. I am nothingness nothinged, you are nothingness nothinged, and yet we are all something! How astonishing! How comical! What an awesome world this is.

Nozick may insist that this delightful absurdity is a legitimate explanation, but it cannot be taken seriously as such. It leaves us with more questions than it answers, and it is a paradox. We can understand it only if we find it amusing and expressive, and if it is philosophically revealing at all, it reveals that we are unable to find a consistent sense to the existence of the world, but that we can find this situation an occasion for wonder and joy. Therefore, if we take nothing as a natural state in the way Nozick posits it, the feeling of awe that emerges in expressing such a situation is both appropriate, since it is something expressed in the claim that the nothingness "nothinged itself," and desirable, since it may bring us to feel the joy of paradox.

The idea that nothingness is a natural state, which must have paradoxically produced something, is one of the possibilities for an inegalitarian theory. The other possibility is that "something" is a natural state. Nozick offers the following argument for this possibility: something cannot come from nothing, so if nothing was a natural state, then something would not have arisen. But something exists, so nothing is not the natural state. Therefore, if there is a natural state, it must be the state of "something."[41] This is a curious argument, but it does not succeed in demonstrating that the existence of something rather than nothing is a natural state that requires no further explanation. All that it demonstrates, if it works, is a conditional claim. It does not show that the state of "something" is indeed a natural state, for there is no argument for the antecedent of the conditional. In fact, it is difficult to think of what such an argument would be like, and it seems that in this context, we cannot coherently postulate that there are natural states of any kind.

The main problem with both of these inegalitarian approaches to the fundamental question is that they use an inappropriate methodology, which succeeds in physics but does not apply to metaphysics. We cannot make sense of the idea of a natural state in this context unless we can make sense of the deviating forces that are supposed to bring the universe out of its natural state. But we have no coherent idea of what such a force might be. The notion of a force has its home in physical theory, but in the context of an explanation of why anything exists, it has no coherent application. Therefore, we cannot make the assumption that there must be natural states in this context, for we cannot say what it would mean to deviate from them, or what could cause such a deviation. While an expression like "the nothingness nothinged" may be used as a sort of playful paradox, it does not function as an explanation. Recall that Wittgenstein's contribution to the fundamental question, as I argued earlier, was to insist (perhaps more strongly than was necessary) that it is has a special status, and is in some way separate from the realm of factual discourse. If we take this position seriously, then it is clear that Nozick's inegalitarian solutions rest upon a mistake. We should not treat the problem of why anything exists as if it were a physics problem, or as a problem about the evolution of physical (or metaphysical) states.

Nozick also proposed an egalitarian solution to the problem, which does not employ the notion of a natural state, but appears to make the same mistake of using a concept from empirical science to deal with a metaphysical question. In this case, the egalitarian assumption is that all states are equal in their need for an explanation, and it therefore seems that we can employ the principle of indifference from probability theory. That is, all states or events are regarded as being equally probable as long as we can see no reason why one should occur rather than another. Nozick claimed that there are an infinite number of ways for there to be something, corresponding to the infinite number of possible worlds that might be actual, but there is only one way for there to be nothing.[42] It follows that the probability of the empty world, wherein nothing exists, is vanishingly small. The existence of something rather than nothing is thus explained in terms of its greater probability. As Nozick says, it is what one would expect from a random mechanism.

If this explanation were successful, then there would be a good reason for claiming that feelings of amazement at the existence of the world are ill-founded and anomalous. It is inappropriate to feel astonished or amazed at something one believes to be the most probable state of affairs. Of course, it is not impossible to feel this way, but it is not what *should* happen. Therefore, if someone were to have such a feeling after having accepted the explanation that Nozick cites, she would be behaving irrationally (in some sense), or at least inappropriately. In order to defend my central thesis, I must show that this egalitarian explanation fails to provide a credible answer to the fundamental question. In fact, I must argue that it is not merely implausible, but methodologically incorrect. If it remains a possible solution in any sense at all, then my claim is defeated, for the issue that I am addressing is the manner in which we approach the existence of the world, and this can be affected by the ways in which we conceive of possible answers to the question, as much as by what we think is the correct answer.

It is interesting to note how malleable our intuitions can become when constructing answers to this problem. For example, instead of following Nozick's line of reasoning, we might have agreed with Leibniz that the existence of nothing is far more probable than the existence of something because it is "simpler and easier."[43] If we are going to use the idea of a "mechanism" that produces either something or nothing, then we might conclude that what is simplest to produce will be the most probable product, for it will take the least effort—and this must be nothing at all, which takes no effort at all. Perhaps in arguing this way, we are assuming that some principle of efficiency lies behind the mechanism, so that it will most probably do what is easiest to accomplish. On the other hand, using Nozick's reasoning, we would assign a probability based upon his a priori calculations, and given that we understand "something" as denoting an infinite number of possibilities, instead of just one, we would conclude that it would have a far greater probability.

In this case, we assume that the mechanism has no built-in principle of efficiency, and that it just spits out possibilities at random.

The whole notion of a mechanism as it is employed here should not be understood literally, for it really makes no sense, given that the mechanism would itself be something, and yet its function is to decide between something and nothing. If we understand it metaphorically or expressively, as meaning only that the choice between something and nothing is random, then we might ask why it should be considered random in the first place. On Leibniz's view, the choice is not random because there is an automatic bias in favor of nothing, which is simpler and easier. Of course, this view also has problems, for it is just as difficult to say why we should assume that the easier option is more probable. It seems that the only way to decide the issue is to decide upon the nature of some kind of mechanism that produces something or nothing, but this is nonsensical. Even if we disregard the ontological status of the mechanism itself, we have no information whatever about its operation, because it is impossible to say what kind of thing could decide between being and nonbeing. We must therefore conclude that the assignment of any probabilities in this case is impossible. The egalitarian solution necessarily fails, as it relies upon assumptions about the operations of something that is unintelligible. The most extreme version of egalitarianism, which Nozick calls the "principle of fecundity," states that "all possibilities are realized,"[44] and it may also be dismissed as impossible. In the context of the fundamental question, it would imply that both something and nothing are realized, which is an explicit contradiction.

The way that Nozick deals with the problem of why anything exists at all is admirable, for he has proposed bold, imaginative and potentially revealing explanations. Nevertheless, none of them are ultimately successful, and more importantly, none of them dispel the feeling that we confront an ultimate mystery in asking this question. It might be held that a satisfactory answer, if it is possible at all, must actually take this feeling of mystery and awe seriously, and account for it in some way. To a certain extent, the theory that the world exists because it is valuable may be capable of doing this. But, as I shall argue, this does not constitute an objection to the appropriateness of the feeling, and in fact helps to explain why it appears when people reflect on the fundamental question.

Naturalistic Theories

Some philosophers have defended the view that there may be an adequate naturalistic explanation for the existence of our universe. As physical cosmology moves closer and closer to a scientific explanation for the origin and structure of our universe, more and more of our "why" questions look answerable. It now seems that we are in a position to account for the existence of at least those physical objects that inhabit our universe by using the laws of

physics, although the resulting explanation may not deal with the totality of all existent objects. As such, it will not succeed in answering the fundamental question of metaphysics. The starting point for many of the recent attempts to explain the existence of our natural world is the theory advanced by Edward Tryon[45] that our universe began as a quantum fluctuation of the vacuum. This theory appears to presuppose that there was already a preexistent vacuum, or an empty space-time, before the emergence of a quantum fluctuation. Because this vacuum has physical properties that allow such fluctuations to occur, it cannot be counted as literally "nothing"—a state of true nothingness would not submit to the laws of quantum mechanics. Therefore, it is not literally a theory of creation ex nihilo.

In an attempt to rectify this problem with Tryon's theory, Chris Mortensen has suggested that the laws of physics may be formulated so as to remove the assumption of a preexistent space if they have the consequence that in the absence of space (or when the metrical structure of space is undefined), certain events have certain probabilities.[46] He also argues that the assumption of a preexistent time can be removed by strengthening the condition on this consequence so that in the absence of matter, neither space nor time exist, yet the probabilities of certain events occurring remain as they were. This would mean that a quantum fluctuation event may occur simultaneously with the emergence of space and time, and its occurrence would be explained by the fact that the laws of physics give this event a certain probability. Thus the universe exists because it is probable for it to exist, according to the laws of physics.

Mortensen admits that this explanation does not account for the truth of the laws of physics, and given that this is an important part of the story, it may be claimed that the explanation is incomplete. What could possibly explain the truth of the laws of physics? If anything could explain them, would it be another naturalistic explanation? Some have speculated that the laws of our universe may be explained by postulating the existence of a preceding universe in which there are black hole singularities that are themselves the origin points for other universes. This is possible given a big bang cosmology because a black hole singularity has the same physical features as the big bang singularity. Thus every black hole in our universe is potentially a singularity that gives rise to another universe. Using these facts, Tryon's theory of the quantum fluctuation, and data on the values of the fundamental constants of physics, Quentin Smith has argued that we can explain the existence and the laws of our universe using a naturalistic method.[47] He claims that the existence of our universe may be given a probabilistic explanation that has a similar form to the inductive-statistical model used by Carl Hempel.[48] For example, if there were 10 billion black hole singularities in a specific universe, but only one billion are the big bang singularities of the past boundaries of other universes, then we may explain the existence of a universe with the following reasoning (where "U" is the property of being a black hole singularity that

is the past boundary of a universe and "B" is the property of being a black hole singularity that is the future boundary of a region of a universe):

1. P(U/B) = 0.1
2. Bx

   ———

   ——— [0.1]
3. Ux

This says that if there is a 0.1 probability of B given U, and x has B, then x has U with a 0.1 probability.[49] It is a naturalistic explanation, not only because it uses a scientific model of explanation, but because it supposes that our universe ("x" in the above argument) has a naturalistic origin: it came from another universe of a similar kind. Smith uses the same model to explain why our universe has the basic laws that it does, for they are also determined probabilistically by the laws of the universe whose black hole singularity is identical with our big bang singularity (assuming that there is one). He notes that the laws governing symmetry breaking, those that statistically explain why our universe has the basic laws that it has, are metalaws that hold in all universes.[50] Thus the mechanism by which universes are produced may be explained with the assumption that all universes behave in certain ways, and the existence and laws of our universe may be explained statistically on the basis of the nature of our parent universe. The metalaws that govern the transition from a black hole singularity to a big bang singularity are needed to ensure that one universe can give birth to another, but in a sense they are purely speculative. We have no way of empirically confirming the existence or any of the properties of anything outside of our universe. Nevertheless, Smith may be correct in thinking that we can explain important features of our universe by assuming that there are other universes of a similar kind.

Another possible explanation for the existence and laws of our universe has been suggested by John Gribbin in his book *In the Beginning: The Birth of the Living Universe*,[51] which is perhaps even more speculative. His theory also makes use of the connection between black hole singularities and big bang singularities, but adopts the model of natural selection to explain how one universe emerges from another. The idea is that some universes "fizzle out" because of their lack of reproductive success. That is, they do not produce enough black holes that spawn more universes that have a good chance of producing more black holes.[52] Other universes have better reproductive success because their basic laws have the right features, in particular the right fundamental constants, that ensure that more black hole singularities become big bang singularities. Thus a universe like ours, in which there are lots of black holes, is to be expected given the laws of natural selection. This is clearly a naturalistic explanation, albeit an odd one, and it has the added virtue of giving sense to the idea that the universe is alive—thus the title of

Gribbin's book. Furthermore, this vision of a vast array of living and reproducing universes is truly awesome. If it is appropriate to feel awed by the immensity of our own universe, then it must be appropriate to feel similarly about the immensity of a whole species of universes. Nevertheless, the theories of both Smith and Gribbin share certain problems, and fail to really address either the fundamental question of metaphysics or the sense of awe that it occasions.

For one thing, we know very little about the behavior of singularities, and it is difficult to say how one can specify any correspondences at all between the universes that, as it were, lay on either side of them. Smith makes use of a conjecture that there are metalaws that govern all universes, which is little more than a conjecture, and Gribbin has no mechanism at all to explain how the basic laws of a parent universe are passed on to any of its offspring universes. They have both taken the path that begins with explaining the existence of the universe by using the laws of physics, and moved one step further to explaining the laws of physics as well, but there are still a couple of "brute facts" left. In particular, the fact that anything exists at all has not been given an account. Smith makes this point explicitly:

> Our ultimate 'brute facts' are not the existence of a universe or the obtaining of a set of basic laws of a universe but the existence of an infinite series of universes and the obtaining of the metalaws common to every universe in the series. There is a reason (explanation) why each universe in the series exists but no reason why this infinite series of universes exists rather than some other series or no series at all.[53]

Thus as he says, naturalistic explanation has a stopping point, but this point may be pushed back farther than hitherto thought possible. His explanation therefore does not resolve the fundamental question, although it goes as far as one can go (apparently) with naturalistic reasoning. We may therefore provisionally conclude that the fundamental question cannot be answered by a naturalistic explanation.[54]

Most importantly, the truth of any of these naturalistic explanations does not entail a reduction in our feelings of awe at the natural universe or at the existence of something instead of nothing (which are different feelings with distinct objects). It may, however, drive us towards a different way of expressing this awe, and it may lead us to distinguish different feelings as appropriate responses to specific objects or facts. When dealing with the immensity of the physical universe and its cousins, we may exclaim: "How wonderful that the laws of nature should be exactly as they are! How wonderful is the immense extension and complexity of the universe, and how astonishing to think that there may be an infinite number of similar universes!" When we are dealing with the fundamental question of metaphysics, on the other hand, we become aware of the immensity of the fact of existence itself. This inspires a different feeling of awe, whose object is a fact rather than a thing. Rather than

being awestruck by the immensity of the universe, we are awestruck by the immensity of the divide between something and nothing, and the realization that there is something in reality and not just nothing. I will pursue this theme in my conclusion.

Teleological Theories: Rescher and Leslie

The idea that it is good to exist, or that being is better than nonbeing, is common enough outside of philosophy. If most people did not hold on to some version of this thesis, suicide would be far more common than it is. However, while it seems plausible as a conclusion about life, it seems less tenable when applied to the existence of nonliving things, or to the universe as a whole. One of the problems with adopting this as a fundamental metaphysical principle is that it is difficult to interpret goodness or value as causally productive. We know from bitter experience that just because something ought to happen does not always mean that it will happen. Normally, other conditions must obtain before a desirable outcome is realized: someone must have the will to bring it about, and the power to implement the right procedures.

In any case, the question of why anything exists at all cannot be answered by using a causal explanation, since the cause of the world (whether it be God or not) must itself be something, and is therefore part of what must be explained. So it seems that we can invoke an evaluative principle to explain the existence of something rather than nothing, as long as we do not interpret this as being a causal explanation in itself. We could say then that the reason that there is a world is that it is ethically (or otherwise) desirable, but that this is not the cause for the world's existence. Since the question is why rather than how the world came to be, it seems appropriate to say that it came to be in order to realize goodness. This would mean that existence has a purpose, which is the realization of value. Leslie's theory follows this kind of course, or at least purports to do so. Alternatively it could be argued that even though value is not in general a causally productive factor, it can be seen as such for the unique case of the existence of the world itself, another tactic adopted by Leslie. If this kind of claim is made, we must be careful not to confuse matters by claiming that value is itself something that requires a cause for its existence. For then the question arises as to why it should be. We ought to hold, then, that value is in some sense "beyond being," as Plato said, even though it can somehow produce something that has real being. We must also hold, as Rescher does, that value is in some sense self-explanatory or self-validating.

Rescher's teleological explanation for the existence of the world does not make use of ethical values such as goodness, but it does make use of the idea of "cosmic values." His theory is not strictly a naturalistic one, since it does not postulate a (strictly) causal explanation for the universe, although it does make use of natural laws. It is really a programmatic solution that demonstrates how the world might have come to be rather than how it must have come to be. He

claims that there could be a set of laws that does not simply describe the way that nature works, but represents the conditions *for* existence itself, rather than conditions *of* existents. These are what he calls "protolaws," and their realization would require the existence of things.[55] It would then be a matter of natural necessity, rather than chance, that there is something instead of nothing. When it comes to specifying what these protolaws are, and how to recognize them, his suggestion is that the fundamental equations that govern the physical world may have viable solutions only when they entail that things exist.

On such an approach, we would accordingly begin by looking to the fundamental field equations that delineate the operation of forces in nature: those that define the structures of the space-time continuum, say the basic laws of quantum mechanics and general relativity, and some fundamental structural principles of physical interaction. Principles of this sort characterizing the electromagnetic, gravitational, and metric fields provide the basic protolaws under whose aegis the drama of natural events will have to play itself out. And the existence of things would then be explained by noting that the fundamental equations themselves admit of no empty solutions—that any solution that satisfies them must incorporate the sorts of singularities we call "things." For such an approach to work, it would have to transpire that the only ultimately viable solutions to those cosmic equations are existential solutions.[56]

This is clearly no more than a suggestion as to what protolaws might be. Rescher does not state unequivocally that protolaws will take the form of physical laws. A more significant question, with respect to the details of his explanation, is that of the grounds for thinking that there are any laws, of any kind, which entail that things exist. In response to this, Rescher claims that the protolaws that actually obtain are those that maximize certain "cosmic" values, such as simplicity, harmony, systemic elegance, uniformity[57] and economy.[58] Finally, if it is asked why protolaws should maximize values, he claims that this is self-explanatory, and that in citing an axiological principle, we have reached the end of our understanding of why the world exists.

> It is the great advantage of a principle of axiology to be in the position to provide materials of its own explanation. Principles of economy, simplicity, etc., are literally self-explanatory by virtue of being optimal on their own footing. . . . A value principle . . . must validate itself.[59]

Thus there need be no infinite regress of laws and necessities, for the ultimate explanation is axiological, and this validates itself. Existence is explained by protonomicity, which is explained by protolaws being value-maximizing, and value-maximization requires no further explanation. It may be simplistic to say that there is a world because the condition of there being a world is maximally valuable, but this is precisely what Rescher's theory says.

There are several possible objections to this theory. For example, Norman Swartz has suggested that the notion of a protolaw is unintelligible because it reverses the normal semantic relation of truth-making, and also that cosmic self-validating principles would be so general that they could not account for the laws of general relativity, quantum mechanics, and so on.[60] It must be conceded at least that Rescher has described only the general form of an explanation for the world, and has not supplied most of the necessary details. But I shall not pursue the case against Rescher. The question that I must examine is whether, given that these details could be supplied, the resulting explanation would eliminate our ability to see existence as wondrous. This is related to the nature of the "cosmic" values that are supposed to be instantiated.

The evaluative view of the world that sees it as an exemplification of such properties as harmony, unity, and simplicity, is an ancient one, and has appeared in several guises throughout the history of philosophy. Parmenides and Plato are the great classical examples, and the nontheistic part of Leibniz's monadology is a good modern example. In the latter case, the real world is selected from the class of possible worlds because of its combination of maximal diversity in phenomena with maximal simplicity in underlying laws. In other words, it maximizes properties that are best seen as intellectual rather than ethical values, and thereby realizes a particular kind of "perfection," that of rational completeness. Rescher's answer to the fundamental question is clearly part of this tradition, for the cosmic values that he postulates as self-validating are not moral values like justice and benevolence, but cold, austere, impersonal properties such as those we seek in our theories. This may or may not give his theory additional plausibility, but clearly it does not eliminate the sense of awe that may be occasioned by reflecting upon existence. If anything, it helps to encourage this feeling, for by seeing the world as a reflection of or a derivation from harmony, simplicity and unity, we may be struck by its magnificence, and wonder at its almost unfathomable capacity to give rise to a vast profusion of what otherwise appears to be arbitrary "stuff." Rescher's answer, then, is not the kind of explanation that "explains away" the riddle of existence. In a sense, the riddle remains within the realm of the extraordinary, even while we can give an answer to it.

It is less clear that Leslie's answer to the fundamental question can work in the same way, for he does make use of ethical values in explaining why things exist. He also tends to use expressions, such as "productively effective ethical requirement," that are difficult to understand except as confusions of some sort, or as puns (something he denies is intended[61]). The answer he proposes is that ethical needs or requirements may be creatively responsible for the existence of things, by which he means that the ethical value of the world is a sufficient condition for its existence. As he puts it: "A thing's value is a matter of there being a reason for that thing to exist. Now the universe may have value. Its ethically desirable character then supplies a reason of some sort for its being there."[62] This explanation would make sense if we

could make sense of the sort of reason that is being appealed to, but this is difficult to do without invoking the causal notions like "produce" or "create." However, Leslie is adamant that ethical requirements as such do not create anything, and even includes a proof that this is the case,[63] so he cannot appeal to causality in explaining what sort of reason can be used. On the other hand, he explicitly compares ethical requirements to causal requirements in that "they are a call for the actual presence of something," and that they set authoritative limits to the actions open to us.[64] His argument therefore has the appearance of both asserting and denying that ethical requirements have a causal-explanatory import.

This criticism is only tentative however, since Leslie's official position is that even though ethical desirability is not in itself a causal factor, it could become one in the case of the existence of the world. This is not a conflation of the two notions, but a claim that it is possible to predicate causal efficacy to ethical goodness, in at least one case—that of the whole world. Given that we can interpret this position consistently, it does seem to be an extraordinary claim. In most cases, perhaps in all cases other than the universe itself, ethical goodness does not have any existential consequences. The goodness of world peace does not have the causal power to bring world peace into being. If it did have this power, then we would be justified in mostly refraining from the pursuit of world peace, on the grounds that it will happen of itself, due to its own goodness. This would be a wonderful situation, and certainly an appropriate occasion for feelings of astonishment, wonder, and gratitude. In fact, it is arguable that Leslie's answer to the fundamental question should provoke the same kinds of feeling for the same reason: to think that the world exists because of its goodness is to think that it is a remarkable exception to an otherwise onerous rule of morality, that we must work for good results. According to Leslie's theory, the universe is a sort of "free lunch," and we may marvel not only at its being exceptional in its causality, but at its stark contrast with the rule of ordinary life, in which we rarely obtain something good unless we work for it.

If this kind of thesis is a possible explanation for why there is something instead of nothing, it is not the kind of explanation that explains away, or obliterates, the feeling of awe. In this case, we feel awe at the fact of existence because of its exceptional status. The feeling may also be appropriately combined with a feeling of gratitude for the goodness of reality, and this is a desirable consequence if it is true that we ought to be grateful. It is not surprising to find that for Leslie, "God" means one of two things. God "may be identified as the world's creative ethical requiredness. . . . Alternatively [God may be identified] as an existing person, a person creatively responsible for every other existence, who owed his existence to his ethical requiredness."[65] Leslie is therefore a kind of theist, and would regard feelings of gratitude and awe at the fact of existence as both appropriate and desirable. At the same time, his position is distinguishable from the strict necessitarian solution to the fundamental question.

IV. CONCLUSION

I have examined a number of possible answers to the question of why there is something instead of nothing, in order to determine whether they might reduce or eliminate our feelings of awe in the face of this question, or otherwise show them to be inappropriate. Some explanations are capable of doing this with respect to ordinary scientific questions. For example, it is arguably inappropriate to feel awed by the effects of electricity and magnetism once their respective mechanisms have been explained. In the past, these were regarded as mysterious and possibly magical phenomena, whereas today they have been incorporated into commonsense everyday knowledge. Photography is another example: once the process of its production is understood, we think it inappropriate to regard a photograph of a person as the capture of their soul, or as an entity with secret magical powers. The general trend of reductive science is to eliminate feelings of magic and mystery with respect to phenomena such as moving bodies, organic life, cognition, and so on. Of course, it does not always succeed. Someone who comprehends everything there is to know about the chemistry of combustion may still feel the ancient wonder of fire, and remain staring into the flames of his fireplace with a sense of awe. To take a more significant case, although there are sophisticated biological explanations for the origin of an individual human being, it is arguably appropriate and desirable to speak of "the miracle of birth," and to feel awed by it.

There are also cases where the emergence of a new scientific theory, rather than reducing or eliminating our feelings of wonder, actually brings them out. It was rarely considered appropriate to see weather patterns as having great significance or beauty (except when they had dramatic results) before the invention of chaos theory. Indeed, people who can easily comprehend the mathematical rules for generating the Mandelbrot set are regularly awestruck by its magnificent unfolding, especially when it is vividly colored. It is therefore possible not only for the correct explanation of a phenomenon to fail to reduce our feelings of awe, but for it to actually excite them. It is arguable that philosophical explanations may provoke the same kind of feeling, even when they proceed by deductive reasoning and invoke a priori notions. In the case of the fundamental question of metaphysics, such feelings may be appropriate even when one believes that there is no answer available.

The recent debate between William Lane Craig and Quentin Smith[66] over the implications of Big Bang cosmology provides a revealing example of how both the refusal to accept an explanation for the universe, and the adoption of a theistic explanation, may appropriately occasion feelings of wonder and awe. Smith offered an argument for the proposition that theism is incompatible with Big Bang cosmology, on the grounds that the unpredictability of the original singularity shows that a rational deity could not exist. In his conclusion, however, he claimed that the absence of a reason for the existence

of the world need not be considered an occasion for despair, and that in fact it can be the source of profound astonishment, which releases a sense of depth and wonder. He expressed this as follows:

> [This world] exists nonnecessarily, improbably, and causelessly. It exists *for absolutely no reason at all.* It is *inexplicable* and *stunningly actual.* . . . The impact of this captivated realization upon me is overwhelming. I am completely stunned. I take a few dazed steps in the dark meadow, and fall among the flowers. I lie stupefied, whirling without comprehension in this world through numberless worlds other than this one.[67]

Craig, on the other hand, entirely disagrees with the position of Smith. He considers each weak point in Smith's argument for the nonexistence of God, and carefully argues that the theist has nothing to fear from it. Nevertheless, at the end of this discussion, he makes the following remark:

> I want to underline the fact that I in no wise denigrate Smith's profound astonishment, which he poetically expresses, that the universe exists at all—on the contrary, I feel it, too. But that astonishment should not end in a mute stupefaction, but lead us, as Leibniz saw, to the intelligible explanation of the universe, the God of classical theism.[68]

He does not argue that the intelligible explanation of classical theism reduces our astonishment at the fact of existence. Instead, he claims that he continues to feel it, even while believing that the fact has been explained.

What this debate illustrates is that our answers to the fundamental question, whether they be positive explanations or rejections of all explanations, do not necessarily affect the appropriateness of our feelings of profound astonishment, awe, and wonder. The issue that divides Smith and Craig is the question of the correct object of awe, not whether the feeling itself is appropriate. For the latter, our astonishment at the existence of the universe should be transformed into a religious feeling, for as we approach the "intelligible explanation" of the universe, we approach something all-powerful, all-knowing, and if we are to follow classical theism in each detail, supremely benevolent. Religious awe is thus appropriate, and God becomes the object of our feelings, the being about or because of which we feel inspired, and the being before which we stand as relatively "insignificant." For the former, our astonishment is properly directed at the world itself, the whole of the world rather than that part of it that is divine.

In this paper I have assumed that awe, wonder, astonishment, and various other attitudes form a family of affective states, each of which is appropriate in the context of the fundamental question. However, it is possible to distinguish them more precisely and argue that some are not merely more appropriate than others but in some sense more fundamental, such that other feelings are actually based upon the most basic affective state. In his book *The Felt Meanings of the World*, Quentin Smith argues that awe is a derivative or

"impure" appreciation of the fullness-of-happening that is the existence of the world.[69] He describes what he means by global awe, which is similar to the kind of feeling with which I am concerned, in the following terms:

> The feeling-sensation of awe is an *awestruck shuddering back from and below*. This flow of the feeling-sensation correlates to the tonal-flow, which is an *awesome towering above and swelling over me*. In global awe, the absolutely immense world-whole that surrounds and encompasses me is felt to tower over me awesomely from all directions.[70]

Smith goes on to argue that global awe in this sense is impure or derivative because, in brief, it is a composite feeling, and is thus not a simple or pure appreciation of the existence (happening) of the world. He claims that global awe is a response to the absolute immensity of the world-whole, as it is a "shuddering back" from an immense whole that towers above. Absolute immensity is a feature of the world that is said to be comprised of two other features: the world's *all-inclusive greatness* and its *happening*.[71] That is, we must appreciate both the fact that the world-whole is the greatest and most inclusive whole that exists, and the fact that it does indeed exist, that it is happening all around us. These two appreciations, when they are captivatingly presented, constitute global awe. But the most basic feeling we can have concerning the meaning of the world, according to Smith, is the appreciation that he calls "joy." This is the most basic because it is a pure response to the existence of the world, rather than a compound feeling.

These claims concerning the status of awe in relation to joy do not actually contradict the thesis that I have been defending. I have claimed, for example, that in the case of one of Nozick's responses it is plausible to say that a feeling of joy can be continuous with a feeling of awe, and it may be that what I have referred to as awe is similar to and continuous with what Smith means by joy. Smith refers to global rejoicing as the extramundane joy in the world's fulfillment, and its fulfillment is its fullness, which is the happening of the world, its very existence. The existence of the world is its immediate presence, felt as a way of living in the present.[72] He states explicitly that "Global rejoicing, then, can be described as an intuitive feeling of the world-whole *completely and all at once possessing the fulfillment of being present*."[73] There is no reason to suspect that Smith has not described a real intuitive feeling, and I have no objections to his arguments to show that one can have intuitive feelings of the world-whole. Furthermore, it does not matter very much to my argument if awe is a derivative of joy, or if it is only an impure appreciation of the world. A number of feelings are appropriate as we confront the question of existence, and I have made no comment about the philosophical priority of one over the others. So it seems that any apparent difference between my position and Smith's could be construed as a trivial matter of definitions, or otherwise a matter of theoretical distinctions that are irrelevant to the question of the appropriateness of feelings of awe.

However, matters are not that simple. If the feeling that Smith describes as global rejoicing is an attitude that is explicitly directed at the world-whole, then it is arguably not the same attitude that I have been referring to as "awe," although it might be connected with it. For one thing, I am talking about feelings of awe at the *fact* that something exists, rather than the fulfillment of the world-whole, which according to Smith is a feature of the world-whole and therefore not a fact. It could be replied that perhaps "the world-whole is fulfilled" is analytically equivalent to "something exists." That is, perhaps I can marvel and become awestruck by the world's feature of existence (its happening) that is identical in some sense with the fact that something exists. If this is so, then it seems that my position is closer to that of Smith's, but I have spoken of awe where he speaks of joy. For another thing, an implicit aspect of the awe that is occasioned by the fundamental question is that it is a response to the fact of existence *given the contrasting alternative of nothingness*. We are not rejoicing at existence per se, we are in awe at the fact that there is a world when there might not have been. If awe is appropriate only in cases where we confront something immense and all-encompassing, then the awe induced by asking "Why is there something *instead of nothing*?" is partly a response to the immense gulf between something and nothing. It is a response to the fact that this immense gulf has somehow been overcome, which is astonishing and perplexing as well as awesome.

The relationship between Smith's views and the point that I have been defending is therefore complex. He is clearly talking about a group of phenomena that are similar to the feelings to which I am referring, but it is unclear whether the kind of feeling that he claims to be a pure appreciation of existence is also an appreciation of the unrealized possibility of nonexistence. If it is so, then I am speaking of the same thing. If it is not so, then we differ, but we need not differ on the basic point that I have been defending. Smith argues in great detail that feelings such as awe, reverence, and even boredom are appropriate responses to specific features of the world-whole. The only problem that I have with his analyses is that he has not explicitly made a place for a feeling that is occasioned by a realization that something exists *instead of nothing*. That is the kind of awe with which I have been concerned. I have not made any claims about the priority that one is to give a particular feeling in relation to its ontological significance.

The fact that the world exists is astonishing, and the fundamental question points us to this fact in a way that clarifies its profound status. If a solution to a problem is something that removes puzzlement (awe, amazement, etc.), then this question is not a solvable problem, for all of the viable solutions are incapable of completely dissolving the puzzlement that it provokes. The only solutions that appear to remove the sense of awe are those that, like Edwards' claim, remove the sense of the question altogether, or those that, like Nozick's egalitarian theory, make existence highly probable. I have argued that neither of these solutions is viable: there is no good reason

to claim that the question is nonsensical, and we cannot assume an egalitarian assignment of probabilities without assuming something unintelligible or self-contradictory.

I have not claimed that the fundamental question is beyond explanation, only that the legitimate explanations that supply an answer are of a specific kind. They do not "explain away." Our understanding of the existence of the world, however we formulate it, is similar to our understanding of the Mandelbrot set, and different from our understanding of electricity and photography, in that it fails to eliminate the wonder we feel at contemplating the "phenomenon." Perhaps this is because, unlike electricity and photography, we are never quite at home with existence. It has not become a part of our ordinary lives, and it is not immediately explicable. Existence is mysterious, and the philosophically tantalizing aspect of the awestruck response to something instead of nothing is the idea that we can come so close to the mystery as to feel it in our bones, even while we believe it to be irresolvable.

ENDNOTES

[1]M. Heidegger, *An Introduction to Metaphysics* (New Haven and London: Yale University Press, 1959), 7–8.

[2]P. Edwards has claimed that the "why" question is without cognitive significance, while others, for example T. Penelhum, have claimed that the question is unanswerable, since the universe exists for no reason (see his paper "Divine Necessity," in *The Philosophy of Religion*, ed. B. Mitchell (Oxford: Oxford University Press, 1971).

[3]L. Wittgenstein, "A Lecture on Ethics," ed. Rush Rhees, in *Philosophical Review* 74 (1965).

[4]Ibid., 12.

[5]M. Heidegger, 7–8.

[6]N. Rescher, *The Riddle of Existence: An Essay in Idealistic Metaphysics* (Lanham, Md.: University Press of America, 1984).

[7]R. Nozick, *Philosophical Explanations* (Oxford: Clarendon Press, 1981), 115–37.

[8]J. Leslie, *Value and Existence*, American Philosophical Quarterly Monographs (Oxford: Basil Blackwell, 1979). See also "The Theory that the World Exists Because It Should," *American Philosophical Quarterly* 7 (1970): 286–98.

[9]P. Edwards, "Why," in *The Encyclopedia of Philosophy,* vol. 8, ed. P. Edwards (New York: Macmillan, 1967), 300–1.

[10]Ibid., 301.

[11]R. Nozick, 121.

[12]P. Edwards, 302.

[13]L. Wittgenstein, 8–9.

[14]Ibid., 6.

[15]Ibid., 8.

[16] Ibid.

[17]S. Haack, *Philosophy of Logics* (Cambridge, London: Cambridge University Press, 1978), 50.

[18]D. Lewis, *On the Plurality of Worlds* (Oxford: Blackwell, 1986).

[19]Ibid., 73.

[20]D. Armstrong, *A Combinatorial Theory of Possibility* (Cambridge: Cambridge University Press, 1989), 23.

[21]D. Lewis, *Counterfactuals* (Oxford: Basil Blackwell, 1973), 84.

[22]T. Baldwin, "There Might Be Nothing," *Analysis* 56, no. 4 (1996): 232.

[23]Ibid.

[24]Ibid., 236.

[25]Ibid.

[26]G. Leibniz, "The Principles of Nature and Grace," in *Philosophical Writings*, ed. G. H. R. Parkinson (London: J. M. Dent & Sons, 1973), 195–204.

[27]Ibid., 199.

[28]N. Fleming, "Why is There Something Rather than Nothing?" *Analysis* 48, no. 1 (1988): 35.

[29]Ibid.

[30]W. Barrett, *Death of the Soul* (Anchor Books, 1986), 30–1.

[31]G. Leibniz, 199.

[32]For details of the Meinongian interpretation of quantification and mathematics, see R. Routley, *Exploring Meinong's Jungle and Beyond: An Investigation of Noneism and the Theory of Items*, interim edition, Departmental Monograph #3, Philosophy Department, RSSS, Australian National University, Canberra (1980), chapters 1 and 10, respectively.

[33]B. Spinoza, "Ethics," in *The Chief Works of Benedict de Spinoza*, vol. 3, trans. R. H. M. Elwes (London: George Bell & Sons, 1891).

[34]Ibid., 68.

[35]Ibid.

[36]Ibid., 93–7.

[37]See P. Davies, *The Accidental Universe* (Cambridge: Cambridge University Press, 1982), 118–22 for an exposition of both principles.

[38]R. Nozick, 119.

[39]Ibid., 122.

[40]Ibid., 123.

[41]Ibid., 125.

[42]Ibid., 127.

[43]G. Leibniz, 199.

[44]R. Nozick, 128.

[45]E. Tryon, "Is the Universe a Vacuum Fluctuation?" *Nature* 246 (1973): 396–7.

[46]C. Mortensen, "Explaining Existence," *The Canadian Journal of Philosophy* 16, no. 4 (1986): 716.

[47]Q. Smith, "A Natural Explanation of the Existence and Laws of Our Universe," *Australasian Journal of Philosophy* 68, no. 1 (1990).

[48]Ibid., 23.

[49]Ibid., 33.

[50]Ibid., 34.

[51]J. Gribbin, *In the Beginning: The Birth of the Living Universe* (London: Penguin Books, 1993).

[52]Ibid., 217–55.

[53]Q. Smith, 35.

[54]A more cavalier naturalist may claim that space-time singularities are physical manifestations of the very idea of "nothingness." He might answer the fundamental question by saying that *both* something and nothing are realized, but at different times (thus avoiding contradiction). He might then exclaim: "The totality of the world is not a something to be contrasted with nothingness, but rather a complex mixture of something and nothing in different measures." I do not know what exactly to say about this proposition, but there is no reason to think that its truth would prevent us from feeling decidedly odd about the situation.

[55]N. Rescher, 33.

[56]Ibid., 34.

[57]Ibid., 49.

[58]Ibid., 53.

[59]Ibid.

[60]N. Swartz, "Can Existence and Nomicity Devolve from Axiological Principles?" *Electronic Journal of Analytical Philosophy* 1:1 (1993), par. 37.

[61]J. Leslie, 3.

[62]Ibid., 2.

[63]Ibid., 19.

[64]Ibid., 7.

[65]J. Leslie, "Efforts to Explain All Existence," *Mind* 87 (1978): 93.

[66]W. L. Craig and Q. Smith, *Theism, Atheism, and Big Bang Cosmology* (Oxford: Clarendon Press, 1993).

[67]Q. Smith, "Atheism, Theism, and Big Bang Cosmology," ibid., 217.

[68]W. L. Craig, "Theism and Big Bang Cosmology," ibid., 231.

[69]Q. Smith, *The Felt Meanings of the World* (W. Lafayette, Ind.: Purdue University Press, 1986), 188.

[70]Ibid., 189.

[71]Ibid., 190.

[72]Ibid., 152.

[73]Ibid.