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The concept of mystery: A philosophical investigation

Liccione, Michael James, Ph.D.

University of Pennsylvania, 1988

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THE CONCEPT OF MYSTERY: A PHILOSOPHICAL INVESTIGATION


by Michael Liccione

A DISSERTATION
in
PHILOSOPHY

Presented to the Faculties of the University of Pennsylvania
in Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy.

December 1988

 (signature)
Supervisor of Dissertation (James F. Ross)

 (signature)
Graduate Group Chairperson (Paul Guyer)

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ABSTRACT

THE CONCEPT OF MYSTERY: A PHILOSOPHICAL INVESTIGATION

by Michael Liccione

Supervisor: James F. Ross

The philosophical interest of mystery is that something may well fall under a distinctive ontological concept of mystery. Such a thing would be explicable with reference to intention, but not uniquely determined by its *explicans*. This is the "properly mysterious," which is essentially mysterious in virtue of what it is, not just of our epistemic limitations. The richer uses of 'mystery', and defects in recent literature, suggest this line of inquiry.

Part I rebuts the main arguments against the possibility that something is properly mysterious. First, if something's existence is *completely* explicable it need not thus be *exhaustively* explicable (i.e., uniquely determined by that of its *explicans*). Second, event-determinism is not establishable empirically and nothing establishes general determinism *a priori* (e.g., the Principle of Sufficient Reason). So there is no reason to think every existent is uniquely determined to exist. But there is good reason to think everything is completely explicable in principle.

Part II shows there is better reason to think the world's existence properly mysterious than not. The world asked about in the question "Why does the world exist?" should be defined as *the totality comprising all that really changes and what is ontologically parasitic thereon* (The World). The World's existence is both logically contingent and contingent in one or the other of two *de re* senses (*contra* Wittgenstein, Parmenides and Spinoza), and thus is either inexplicable for any knower or explicable as intentionally produced. The producer would be extramundane, *de re* necessary, and could not uniquely determine the existence of The World. Defending classical theism against charges of conceptual incoherence, I conclude that the existence of The World is best thought completely explicable as intentionally created, though not exhaustively explicable by the existence of its creator.

In conclusion, I expound and adopt Aquinas' account of creation, on which God creates for a reason and freely. Thus there is *good* reason for the world's existence, but *no* reason why this world exists *rather than* some other.

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INTRODUCTION: THE PROBLEM OF MYSTERY

The Philosophical Interest of Mystery

Bad fiction aside, mysteries fascinate and beguile; the big ones inspire awe. We say we encounter mystery in the experience of wonder, the face of the unknown, the intimacy of love, and the attitude of worship. Wildly different things are called mysterious in senses drawing power from immemorial sentiments. The origin of language, the dispensations of fate, the genesis of nature's laws--mysteries all--provoke calmly intense interest that transcends self-interest, underlies much professional interest, and elevates mere curiosity. That mystery offers fertile ground for philosophical cultivation seems to want little argument.

Yet whatever their individual commitments, most philosophers shy away from talk of mystery. They will, to be sure, talk freely about matters justly thought mysterious; but about mystery as such, little more than a prophylactic silence is usually heard. There are good explanations for this, but not good reasons, and even this study's modest effort to restore the concept of mystery to its rightful philosophical place will show why. Though strict demonstration is out of place, I find good reasons for believing that mystery is an essential feature of the world--not just a sign of our ignorance.

Mystery has a poor philosophical reputation because it has often been invoked to mask ignorance, exploit fears, or deflect resentment of unjust social conditions. Pagan religious observances, along with the myths that envelop them, are an historical paradigm of mystery; the ancient Mysteries at Eleusis are the earliest standard example.¹ More recently, the Catholic Church has enshrined the concept of mystery in dogma: the mysteries of faith are expressly distinguished from anything humans could discover just by their own powers.² Whether or not there are mysteries only a deity can make known, trafficking in this thick sort of mystery makes philosophers *qua* philosophers uncomfortable. Religion is arguably the most powerful influence in human life, promising access to truth denied, even opposed, to common sense and to that enlightened common sense which constitutes natural science. The well-attested dangers lurking here justify caution, and in some cases contempt. Saddled with a dubious history, religious mystery can seem best left to the spec-

¹Angus 1928, 54ff; Bornkamm 1967.

²Vatican Council I defined: "If anyone says that divine revelation contains nothing truly and properly called mysteries, but that all the dogmas of faith can rightly be understood and demonstrated from natural principles by a well-trained rational faculty, let him be anathema." Dogmatic Constitution *Dei Filius*, Chapter 4, Canon 1 (DS 3041).

ulations of those who traduce reason rather than live by it. This is not to say that non-religious philosophers should or do ignore mysteries altogether, as if many baffling problems weren't called mysteries. But the oft-times tacit suspicion is that to treat mystery as a uniquely important category, somehow encompassing more than such problems, is to betray a basically unphilosophical cast of mind.

In the main, however, the religious associations of 'mystery' should present no obstacle to my undertaking. First, religious belief, like any other common type of belief, raises issues philosophers can, should, and regularly do consider. Second, the question how to clarify and apply the concept of mystery resembles many philosophical questions, and answering such questions would be impossible were we to ignore forms of life from which they arise--in this case, religious forms. Therefore, a free exploration of some of the concept's distinctly religious dimensions, far from hindering a truly philosophical approach, is indispensable to it.

Still, it's worth noting a suspect use of 'mystery' in order to give valid misgivings their due. Tabloids abound with astrological projections, fundamentalist eschatology, and stories of out-of-body experiences, monstrous neonates,

communications with the dead, etc.--a ragged host of "occult" or "supernatural"³ phenomena called mysteries or thought to be evidence thereof. One shouldn't wave all these away as marketing devices; a few merit serious scientific and spiritual attention. But the fact that many are transparent hoaxes, and that most are impossible to confirm, lends an air of tawdriness to the lot. Worse, absence of support by the intelligentsia actually whets the popular appetite for such accounts. After all, if only a few of the more spectacular ones are true, then there are exciting and perhaps very comforting realities requiring no great expertise to appreciate. I can't delve further into motives for treasuring mysteries of the supermarket racks, but the enthusiasm for them is quasi-religious and often irrational. For that reason, the whole business seems suited less to philosophy than to reductive explanation by psychologists and other social scientists, with occasional warnings from religious leaders. Of course, that many are wont to believe strange things for foolish reasons--or from causes other than reasons--doesn't prove all such beliefs false. What is veridical in the occult I can't say; but it will, I trust,

³The term 'supernatural' has a technical sense in Catholic theology; I am using it here in its coarse, popular sense.

be implicitly and abstractly characterized in my attempts to lend a measure of rigor to the concept of mystery.

In more respectable fields of inquiry, the suspicion persists that to relegate a problem to some category of the mysterious is either to give up addressing it or to attach oneself to a relatively fruitless way of addressing it. And if, say, consciousness, freedom, and God are mysteries, it's pretty feeble to classify them so and inquire no further just because they're too hard to explain. Much good philosophy has stemmed from the wish not to throw up one's hands in face of such mysteries but to work unflaggingly toward reasoned conclusions. Though the success of such reasoning is often debatable, the value of continued effort is not.

But to acknowledge this is not to ignore an obvious fact in face of which it's quite respectable to admit mystery: the failure of human thought to explain virtually any matter of ultimate concern to general satisfaction. It goes without saying that the limitations imposed on us by nature and circumstance contribute mightily to this failure. But it's worth asking whether some things are mysterious *in virtue of what they are--no matter how much any rational agent could in principle know about them.*

I submit that the philosophical interest of mystery lies in what supports an affirmative answer to that question. That such an answer is possible is suggested by the sense of mystery most of us have, but which the practical demands of life encourage us to set aside. Moreover, to content ourselves with viewing the mysterious as merely what one doesn't or can't but may like to know is to ignore the history of the concept, belittle the sentiments many sorts of mysteries still evoke, and reduce the contemporary interest of mystery to the term's role as a literary and journalistic convenience. One can readily encounter intellectually curious people who are engrossed by large mysteries not just as hard problems but for what their mysteriousness may intimate about the nature of things. Most such people either profess adherence to some specific religious tradition or affirm some Supreme Mystery apprehended in the mystical traditions of the major religions. But that's no reason to believe that the possibility of a distinctive ontological concept of mystery is conceivable only from a religious point of view. Even in the most secular-minded, a sense of the mysterious is more than a nose for the problematic, and in some people, it has stimulated religious belief where such belief had been lacking. Though such changes in outlook as

that sense may have helped induce are hardly dictated by a chain of demonstrative reasoning, they needn't be at all irrational.

Still, the suggestion that mystery could be a distinctive ontological category does run counter to a weighty view, widespread among contemporary philosophers in the analytical tradition, that is often encouraged by a pair of innocuously construable claims. The claims are, first, that you can correctly *identify* something in one way or another and for this purpose or that, without having to take any one way as exclusively correct; second, and partly by reason of the first, that you can *explain* humanly identified things in one way or another and for this purpose or that, without excluding other ways or impugning purposes that others (or other sorts of knowers) may have. Construed with due care, these claims are easily defended, indeed almost trite, and my argument will entail that some such construals of them are truths. But it is common today so to construe and defend them as to generate strong forms of epistemological relativism. The general form I have in mind is: anything you're justified in believing is at most what you and other humans, *qua* members of a limited community, are justified in believing (or: warranted in asserting) for the time being,

and isn't knowable in some independent and universally valid way. Relativists of this stripe might object to my thesis as follows.

"If what you've just said about identification and explanation is correct--and something like it certainly is--then we could never have final, definitive word on anything's identity or explicability. For we could never say, independently of an optional and legitimately revisable theory, just what our beliefs are really about, or what might justify those beliefs. So, we could never have sufficient grounds for saying that some things are mysterious in virtue of what they are, no matter how they may be known. To be sure, we might allow for the mysterious in a trivially broad sense. If our identifications and explanations can't be final and definitive, then things are inexhaustibly identifiable and explicable for us; thus there's no end to mystery. But since that's true of everything, we still won't have found anything in particular to be distinctively mysterious in virtue of what it is. We might look to history and linguistic usage for what, if anything, has been *considered* so mysterious; in that case the concept might bear some interest for various empirical inquirers, and derivatively for epistemologists. But it couldn't have such interest as you profess to find in it."

Though it is beyond my scope to refute strong epistemological relativism directly, I aim partly to meet this sort of objection. Roughly speaking, I shall argue that *the properly mysterious is that which is completely explicable with reference to intention but isn't uniquely determined*. What's thus mysterious are beings, occurrences, states of affairs or relations that we can describe in non-vacuous, minimally controversial ways, and that under those descriptions involve or embody intention, but aren't explicable by anyone, even in principle, to the extent some philosophers have believed all *explicanda*⁴ must be in principle. Among the weakest objections to this would be that we don't know all the sorts of explanation that are and aren't possible for us, much less for other sorts of knowers, whoever or whatever they may be. For as I shall show, we can so define '*...is explicable*' as to cover relevant ideals of explanation and contrast it with relevant uses of '*...is myster-*

⁴I shall use the term *explicandum* and its plural *explicanda* for any being, occurrence, or state of affairs that can be asked about in such a way that some true answer to the question constitutes a non-trivial explanation of the existence, occurring, or obtaining of what is asked about. I shall use the term *explicans* and its plural *explicantia* for any being, occurrence, or state of affairs which, if cited in answer to such a question, is such that its existence, occurring, or obtaining suffices to answer the question and thus explain what is asked about. See below, I.2.

ious'; in those senses, there's good reason to affirm that certain mysterious things are of such a nature as not to be *exhaustively* explicable. If successful, this strategy would provide the best support for affirming the ontologically mysterious that one could reasonably demand.

The main objection might still be pressed: "Should your strategy succeed by your lights, it still wouldn't be good enough. That's because there's no theory-independent fact of the matter that would settle the question whether to accommodate mystery in the sense you've adumbrated. You simply haven't appreciated the fact that identification and explanation take place within optional, ever-revisable conceptual and theoretical frameworks. You're nominally free, I suppose, to work within a framework that would include mystery in your sense. But our epistemic limitations make it far wiser to adopt one that would preclude it. For whether or not anyone accepts your framework, we can't assess it on the basis of what certain things intrinsically are rather than just how they seem when some human community identifies and explains them; that notion surely is incoherent. Hence, your argument is at best sleight-of-hand: you want to say that there's an irrefragable fact of the

matter to recommend your framework to us, when such a so-called fact is only a posit of your limited, and limiting, framework."

Behind this objection lies an undoubted insight. We can't identify or explain anything except with signs whose import is determined by their use in a human community, and any such community's ways of signifying change over time. Moreover, the world we inhabit seems indeterminate in at least two ways: not only are the boundaries of the wide world unclear, but different human outlooks and purposes also organize the world into different worlds, not all of which are mutually compatible (cf. Goodman 1978). There's no fixed, neutral vantage point from which to identify and explain either "the" world or any of its constituents. In view of the conceptual and theoretical diversity this involves, I concede that there's no exclusively correct way of identifying and explaining anything.

But to maintain that mystery in an ontological sense characterizes the world--or anything else--is not to assume that things can be identified or explained in only one, exclusively correct way. It entails only that a certain ideal of explanation is unattainable *in principle* with respect to certain entities described truly and significantly. Nor

does it follow from what I've conceded that there's no world, and hence no constituents of it, to which our concepts and theories can and must be adequate, or that some concepts and theories aren't better than others. Of course, what 'adequate' and 'better' might mean is relative partly to the sort of concepts and theories in question, and to the needs and purposes they serve. But this still leaves open the question whether, and in what sense, mystery characterizes something that our concepts and theories *should* be adequate to, and what needs and purposes we should look to satisfy in debating the matter.

Indeed, as far as the main relativistic objection is concerned, the question whether to admit the ontologically mysterious turns on that of what needs and purposes a relevantly comprehensive way of looking at the world should satisfy. A relativistic case for precluding the ontologically mysterious would, after all, have to invoke the aims, preferences, and even prejudices that a preclusive framework would be adopted to satisfy, rather than an immutably stocked ontology and an inviolable charter of rationality that would both, *ex hypothesi*, be chimerical. By the same token, the relativist could at most persuade rather than demonstrate that we should share those aims and preferences.

But for the reasons already suggested, there's at least *prima facie* reason to want to admit the ontologically mysterious. To provide further reason to admit it, I offer the case to follow--which is certainly an improvement on other efforts to locate the philosophical interest of mystery.

Recent Approaches

Two contemporary books treat the concept of mystery systematically from a strictly philosophical point of view. Neither is successful. There is also a less recent, more valuable account of mystery that, although offered as philosophical, is confessedly plausible only in light of Christian revelation.

In *The Mystery of Existence* (1965), Milton K. Munitz first defines a 'mystery', for purposes of philosophical discussion, as a *question* that is "meaningful" but "in principle unanswerable" by any "rational method" open to humans (27). He reviews the uses of 'mystery' (Chapter II) and argues, against verificationism, that a question can be both meaningful and yet unanswerable in principle by us (33-44). I have benefited from that review and that argument and recommend them to the reader. But Munitz also argues that

neither theism (Chapters VI and VII) nor natural science (Chapter VIII) nor Spinozism (Chapter IX) offer a rationally justifiable answer to the question "Why does the world exist?" The reasons for this entail that no rational method could answer that question. Thus we have a mystery--the greatest of mysteries, which Munitz calls "the mystery of existence."

Mystery in its philosophical sense is, for Munitz, no more than an epistemological category: a mystery consists in "the [human] mind's inability to find" a rationally justifiable answer to a meaningful question (32). But the worth of such an approach, like that of a chain, is no greater than that of the weakest link. The main links here are: how Munitz limits what counts as "rational" justification; his characterizations of relevant answers to the question why the world exists; and his arguments that no such answer is rationally justifiable. If any of these links break, Munitz's question doesn't meet his own definition of mystery. As we will see much later, all of them break. So, where's the mystery?

The world is itself mysterious in some sense even if we can answer the question why it exists by some rational method. For it precludes all but one sort of answer to that

question, and if a true answer is of that one sort, a mystery of the world remains. As I will show in Part II, the world's existence is, *pace* Munitz, contingent in such a way that it is either *intrinsically inexplicable*--not merely inexplicable *by us*--or, if intrinsically explicable, not necessitated by what might explain it. Thus, *whether or not* we can answer truly, non-trivially, and rationally the question why the world exists, the world is essentially mysterious. I shall also argue that there is good reason to believe that the world is explicable in such a way as to be 'properly mysterious'.

In *Philosophical Mysteries* (1981), Stephen David Ross rejects the conventional idea that a mystery marks a limit to specifically human knowledge. He claims instead that "mystery is inherent both in the nature of things and the nature of rationality" (1). That sounds fresh and intriguing. Yet it is explicated in terms of a programmatically outlined theory of "ordinal pluralism," which Ross offers no good argument for adopting.

The basic ontological "principle" of the theory is that "whatever is in any way is an order of constituents; every order is a constituent of other orders" (67). Call this principle 'OP'. If OP, then there is no "all-encompassing

world-order" (105): being is irreducibly "plural." Moreover, every order--i.e., every being--is "inexhaustible." This means that everything is "indeterminate in many ways, is determinate in many ways, and that no complete, exhaustive determination can express the nature of an order" (98). Inexhaustibility, as Ross explicates it, entails "functionality" and "complementarity." Thus "what an order is is a function of its relations and constituents," which themselves are inexhaustible; and every respect in which an order is determinate is "complemented" by a respect in which it is indeterminate (99-100). It seems we can never say, with Bishop Butler, that a thing is what it is and not another thing: there could be no definitive word on what something is. This sums up what Ross calls the first of the "two dimensions of the origin of mystery: the inexhaustibility of orders..." (132).

The second dimension is the theory's coordinate epistemological principle: the "inexhaustibility of query" (97; 132). This means partly that if each order is inexhaustible, there can be no end to the questions that arise about it. Further, "corresponding to the plurality and inexhaustibility of orders, there is a plurality of modes of judgment...there is no supreme mode of judgment or kind of

knowledge" (105). And "no order is intrinsically or in principle unknowable," only unknowable in relation to "specific circumstances of judgment and experience" (118-19). Therefore, mystery can't consist in anything's being intrinsically unknowable.

Rather, "mystery...is the residue that obtains in the context of successful query--the questions that remain unanswered when successful answers have been forthcoming. It is, then, the indeterminateness inherent in ordinality...brought into and definitive of query" (121-22). If things are inexhaustible in virtue of their indeterminateness, then knowledge entails mystery. Even as questions are answered, more questions arise. Mystery is ubiquitous and permanent, but not intractable: everything is both knowable as inexhaustible and inexhaustibly knowable.

As one of ordinal pluralism's advantages, Ross advertises its place for mystery (2). But if each and every being is mysterious because inexhaustible, then nothing in particular is distinctively mysterious in virtue of what it is--and this sort of result can be got without the metaphysics. As I have shown already, epistemological relativists could say that everything is inexhaustibly identifiable and explicable. One may thus believe that mystery is

ubiquitous and permanent but not intractable--without recourse to a doctrine of ordinal pluralism.

Ross does, to be sure, have a different argument for adopting OP; but the argument is a bad one. Briefly, it is that a consequence of OP is the "ontological parity" of all orders, which makes ordinal pluralism superior to any theory entailing the "ontological priority" of some mode of being (81ff.). Ontological parity consists in there being "no category of the 'more real', the 'fundamental', or the 'ultimate'." According to Ross, the trouble with making any one category more real than any other, or more fundamental than the rest, is that "all forms of alleged primacy can be shown to be arbitrary" in both their "proposed criterion" of primacy and in their "analysis and application." Thus he argues against such notions as that the simple is more real than the complex, the determinate more real than the indeterminate, and the independent more real than the dependent. But he discusses no specific account of ontological primacy, and at least one such account easily survives his feeble critique while accommodating mystery in an ontological sense.

According to classical theism, God is independent of all other beings, which in turn are dependent on God; thus God is ontologically primary. Perhaps Ross thinks he has

disposed of classical theism by saying that "if we are speaking of causal dependency, then causes are more real [than effects] and first causes are made intransigent mysteries" (81); at any rate, I can find no other relevant argument in this context. But this one not only doesn't show that theism's account of God's primacy is arbitrary; it doesn't show that there's anything wrong at all with that account. First, if there is an absolutely independent First Cause, that doesn't entail that causes *in general* are more real than their effects. Most theists will tell you, e.g., that your parents are causes of you but aren't more real than you. Second, calling "first causes" (or: *the* First Cause) an intransigent mystery doesn't necessarily constitute a criticism. There are no "intransigent" mysteries only if ordinal pluralism is true--and what is at issue here is why we should believe its basic ontological principle.

Fortunately, we needn't look to ordinal pluralism for a philosophical concept of the ontologically mysterious. Though Ross never refers to him, the existentialist Gabriel Marcel, who converted to Catholicism relatively late in life, propounded just such a concept a few generations ago.⁵

⁵ I shall discuss that concept mainly as it is developed in "On the Ontological Mystery," 1956, 9-47. For a wider-ranging criticism, see Munitz 1965, 27ff; for a reliable overview of Marcel's thought and works, see Miceli 1965.

Marcel developed his ideas as much through drama as through explicitly philosophical treatises, and his very concrete approach doesn't readily lend itself to summary exposition. I shall therefore exhibit only enough of it to suggest both its interest and why, despite that interest, I shall not follow it.

Consider his well-known distinction between "mystery" and "problem."

A problem is something which I meet, which I find complete before me, but which I can therefore lay siege to and reduce. But a mystery is something in which I myself am involved, and it can therefore only be thought of as a sphere where the distinction between what is before me and what is in me loses its meaning and initial validity. A genuine problem is subject to an appropriate technique by the exercise of which it is defined; whereas a mystery, by definition, transcends every conceivable technique (1950, 260).

In clarifying this vague if suggestive description, we do best to use Marcel's own favorite method, which is to offer an example; but first it is necessary to set the example's context.

A central theme in Marcel is that to deny the existence and importance of mystery in his sense is to make *despair* all but inevitable. Thus:

The world of the problematical...is the kingdom of technics of whatever sort....despair consists in the recognition of the ultimate inefficacy of all technics, joined to a refusal to change over to a

new ground...It is for this reason that we seem nowadays to have entered upon the very era of despair. We have not ceased to believe in technics, that is to envisage reality as a complex of problems; yet at the same time the failure of technics as a whole is as discernible to us as its *partial* triumphs. To the question: what can man achieve? we continue to reply: he can achieve as much as his technics; yet we are obliged to admit that these are unable to *save man himself*...(1956, 29-30).

By technics' inability "to save man himself," Marcel seems to mean two things. First, to the extent that we restrict our world to that of the problematical, we reduce ourselves to our "functions," i.e., to our roles as achievers of particular, limited ends (10). Life in such a world "is liable to despair because in reality this world is *empty*, it rings hollow..." (12). Second, our technics can't mitigate the chanciness and ephemerality of our existence. We depend on cosmic conditions over which we have no control and which are liable to change; above all, death is inescapable. And "the more the disproportion grows between the claims of the technical intelligence on the one hand, and the persisting fragility and precariousness of its material substratum on the other, the more acute becomes the constant danger of despair..." (31).

By contrast--and this is our example--hope is "at the center of...the ontological mystery" (28). This hope "consists in asserting that there is at the heart of being,

beyond all data, inventories, and calculations, a mysterious principle [that] cannot but will that which I will, if what I will deserves to be willed and is...willed by the whole of my being." E.g., "to hope against all hope that a person whom I love will recover from a disease which is said to be incurable is to say: It is impossible that I should be alone in willing this cure; it is impossible that reality in its inward depth should be hostile or...indifferent to what I assert is in itself a good." Marcel is well aware of the obvious reply that "in the immense majority of cases" such hope is "an illusion." But, he says, "it is of the essence of hope to exclude the consideration of cases...hope rises to a plane which transcends...all possible empirical disproof--the plane of salvation as opposed to that of success in whatever form" (32). Therefore, "the only genuine hope is hope in what does not depend on ourselves."

Hope thus orients one to mystery. One hopes in something "at the heart of being" that is "in connivance" (28) with one's innermost will; and this mysterious principle can neither be discovered nor exploited by technics. It can't be known like an objective datum, which one can know irrespective of what one values, and one can't use it to serve any humanly attainable end. Here, the distinction between

what is in me and what is before me "loses its meaning and initial validity." My whole being is "involved" in my hoping; I know I can't achieve what I hope for; and yet I am certain what I hope for is also willed by something at the heart of being--including the heart of my own being--which will bring about what I hope for.

Genuine hope, however, is no

listless waiting....Hope seems to me...the prolongation into the unknown of an activity which is central--that is to say, rooted in being. Hence it has affinities not with desire but with the will. The will implies the same refusal to calculate possibilities...Could not hope therefore be defined as the will when it is made to bear on what does not depend on itself? (33)

Where is such active hope most clearly instanced? In the saints! "The experimental proof of this connection"--i.e., between hope and active willing--"is that it is the most active saints who carry hope to its highest degree..." (33). And in general, "the study of sanctity with all its concrete attributes seems to me to offer immense speculative value ...I am not far from saying that it is the true introduction to ontology" (42).

That hagiology is, for Marcel, an introduction to ontology tends to confirm an impression the reader may have developed already: that it is Christianity, especially Catholicism, which gives whatever clear sense there may be to

Marcel's efforts to describe the realm of mystery. Thus, what genuine hope is hope in seems to be nothing other than a God who saves us. The same impression can arise in face of other key notions that Marcel associates with mystery: presence, creative fidelity, and "total availability to others" (*disponabilité*).⁶ Acknowledging as much, Marcel insists that "these notions cannot be said to depend on the data of Christianity, and they do not presuppose it" (44). Yet he also admits that

the recognition of the ontological mystery, in which I perceive as it were the central redoubt of metaphysics, is no doubt only possible through a sort of radiation which proceeds from revelation itself and which is perfectly well able to affect souls who are strangers to all positive religion of whatever kind...Thus a philosophy of this sort is carried by an irresistible movement towards the light it perceives from afar and of which it suffers the secret attraction. (46).

Only revelation makes it possible to recognize ontological mystery. Therefore, one can't recognize as sound any argument for such mystery unless Christianity is true, even if the argument is both sound and doesn't employ revealed premises. Moreover, even if the notions associated with such mystery can somehow be grasped without explicit knowl-

⁶Miceli 1965, 106ff; cf. Munitz 1965, 32-33.

edge of revealed data, their full significance can't be grasped unless Christianity is both true and believed to be true.

Marcel's account of ontological mystery no doubt calls for such a confession.⁷ And though that fact doesn't by itself discredit Marcel's account, the necessity of the confession strikes me as a philosophical disadvantage. It would be far better to develop an ontological concept of mystery, and argue that something falls under it, without having to admit that only the fact of revelation could make the concept clear and the argument persuasive. That is what I propose to do.

The Mystery of God and the Mystery in Question

My argument shall not, for example, require for its clarity and plausibility that there is a personal God whose revelation to us validates hope for salvation. Nevertheless, my argument will entail that there is better reason to believe that there is a personal God than that there is not. And if God exists, he is essentially mysterious--indeed the Supreme Mystery.

⁷Those who have found Marcel's account of mystery illuminating tend to agree. Cf. Foster 1957, 18ff.; Maritain 1962, 4; Mascall 1957, 76-87.

Much has been said in this vein: some of it reflects bad thinking, some of it is deliberate nonsense. But to deny that God is essentially mysterious would be almost as laughable as the nonsense. Even though he confessed that the blessed in heaven shall see God as God is, Aquinas thought that God is *incomprehensibilis* in a carefully defined sense of that word (see *ST Ia Q3 A1 ad1*). I see no reason to disagree. Strange as it may seem, however, neither God's existence nor his essence is mysterious in the sense I want to exhibit.

With classical theists, I believe that God exists necessarily, i.e., always, unproducibly, and unpreventably.⁸

A fortiori, God's existence can't be explained as the product of intention. But there being a deity is self-explanatory. It is intelligible in light of what God is--i.e., his essence or nature; for God's nature is only conceptually distinct from God's being actual;⁹ therefore, God exists necessarily. The sphere of mystery I shall consider is rather that of the *actual but contingent*, which does want expla-

⁸For this notion of the divine necessity, I am indebted to J.F. Ross 1980a, Chapter 4.

⁹This is a thesis entailed by Aquinas' doctrine of divine simplicity; see *ST Ia Q3 A3-7*.

nation. As we shall see, such explanation involves reference to God's creative action. But I take that action itself to be contingent, unlike God's existence and nature. There are deep difficulties in distinguishing between what God necessarily is and what God contingently does; but tackling those difficulties is another project.

In Part I, I shall formulate the key senses of 'mysterious' and 'explicable' and show that there isn't a general principle of explanation that precludes any explicable thing's being properly mysterious. Only then will we be able to deploy a rich concept of mystery that is neither factitious nor just a grab-bag for difficult philosophical issues. In Part II, I shall apply the concept in arguing that the world falls under it. In conclusion, I shall do the same for God's creating the world.

Classical theism is plainly the background for mystery as I plan to focus on it. That might be thought a needless limitation, for such theism is clearly not the only system of belief useful for exhibiting the philosophical interest of mystery. But it is the one with which I am most comfortable. If other systems of belief also recommend themselves, the topic's interest can only be enhanced.

PART I: MYSTERY AND EXPLANATION

"Philosophy begins in wonder."
--Aristotle, *Metaphysics*

I.1 The Uses of 'Mystery'

The etymology, uses, and affinities of 'mystery' afford ample basis for how I plan to use the term. Once I have exhibited that basis, I shall formulate stipulative definitions of the sorts of mystery we are after.

The linguistic root of 'mystery' is the classical Greek verb *múein*, 'to close the lips (or eyes)'. From that verb comes *muein*, 'to initiate'; from the latter comes the noun *mustés*, '[one who is] initiate'.¹ The Mysteries of Eleusis were religious rites into which the participants were ceremonially *initiated*; the initiates were thereby sworn not to divulge what they saw in the course of the ceremonies.² So the term *mustérion*, 'mystery', was not at first used as a singular abstract noun, but in the plural within descriptions functioning as complex names of practices.

Were we seeking an etymological key to a focal meaning of 'mystery', something like 'a secret observance' would suggest itself. There is some warrant for this in uses later than the polytheistic Greek one, e.g.:

¹OED, entry on 'mystery'; cf. Angus 1928, 76ff.

²Though the holding of the Mysteries was the occasion of festive, public holidays, the code of silence seems to have been observed with remarkable scrupulosity. Also, Plato metaphorically described coming to know the Forms as being initiated into a mystery (*Phaedrus* 248-50). Cf. *Theaetetus* 156a; *Symposium* 210-12; *Phaedo* 67c. See Munitz 1965, 19-20.

(1) He spent a long time learning the mysteries of the guild.

(2) The formula for Coca-Cola Classic is a trade mystery. As a common noun, 'mystery' is classically used for standardized practices whose custodians want their exact nature kept from outsiders. This sense may well have been religious originally, but there are many non-religious analogies.

Nevertheless, at a time when the Mysteries were being regularly held at Eleusis, St. Paul assured the Church of Ephesus that

When you read what I have said, you will realize that I know what I am talking about in speaking of the *mystery of Christ*, unknown to men in former ages, but now revealed by the Spirit to the holy apostles and prophets.³

This use contrasts in at least three ways with the ones cited so far. First, the very existence of the mystery is unknown short of being specially revealed; second, the mystery is not, in the first instance, a human practice but a divine action; third, as far as possible its nature is to

³*Ephesians* 3:4-5, NAB; emphasis added.

be made public.⁴ But two ideas are common: the mystery is hidden from anyone not introduced to it by an authoritative custodian, and is either an intentional action or entails such action.

Needless to say, many later uses neither refer to nor entail nor even connote intentional action. For example, in (3) The Amazon jungle still exerts the pull of mystery we have a seemingly thick concept of mystery--redolent of magical fecundity, diabolical malevolence, and so forth--but reference to intention is unnecessary. In

(4) It's a mystery why a given quark moves one way rather than another

it seems odd to raise the question of intention, even if the laws of nature that cover quarks are willed by a personal Creator. What persists in modern use is of course the aspect of hiddenness.

So prominent is this deracinated family of uses today that we find it all too easy to reduce mystery to mere hiddenness, and thus to lose sight of the older, more interest-

⁴With the consensus, Bornkamm (1967) claims that New Testament and early patristic use of *mysterion* is chiefly eschatological: the mystery most often spoken of as such is God's universal salvific activity, manifested in the glory of the risen Christ whom the saved will resemble at the resurrection of the dead on the last day. In other early Christian contexts, however, practice is partly modeled on the pagan.

ing uses I want to emphasize. That happens especially when, like Munitz, we use 'mystery' for a question, as distinct from what the question is about. When we call a question a mystery, we typically mean that it is the *subject* of the question that is mysterious; but that can be forgotten. For to speak of a question as a mystery suggests what may be false and is often a distraction if true, namely, that the question is mysterious for reasons distinct from those for which its subject is. Even when a question's mysteriousness is derived just from its subject's, the mystery can appear as nothing but our difficulty in answering the question. That encourages one to overlook the possibility that something about the subject itself, apart from our ignorance, makes the question difficult or unanswerable in the sort of way it is. It also de-emphasizes the fact that something manifest about the subject motivates inquiry in the first place.

I shall return to the relation between mystery and manifestation in a moment. For now, note that one can easily forget its significance when *statements* are called mysteries. Even in cases where a statement is believed to express faithfully the deepest of mysteries, it's too often the statement itself that is made to carry the weight of mystery. Consider

(5) The Son of God became a man.

Christians believe (5) to be an essentially mysterious truth. Theologically, such so-called dogmas are called 'mysteries of faith', the immediate objects of the intellectual assent that is of the essence of faith.⁵ If Christianity is true, however, it is what the dogmas supposedly express that are mysteries in the primary sense; those mysteries are in turn publicly apprehended by the propounding and accepting of statements to be believed--i.e., dogmas--that only allow us to apprehend the mysteries "as in a mirror, darkly." But many believers often mistakenly explain the mysteriousness of a dogma first by their accidental inability to elucidate it, and then by our essential incapacity to comprehend fully what it is about, rather than first by any intrinsic, essential feature of a being to which reference is made in the dogma.

Certainly, both (5) and other forms of words are mysterious in their own right. Consider this translation of Heidegger's famous dictum:

(6) Nothingness nothings.

⁵Pope Pius X, *Litt. motu proprio "Sacrorum antistitum," DS* 3542.

In one way, (6)--an example of what logical positivists once dismissed as a "metaphysical" and thus "meaningless" statement--is even more obscure than (5). One wants to center talk of (6) as a mystery on the question whether it signifies *qua* assertion at all. And many forms of words fraught with meaning, such as certain riddles and paradoxes, are also mysterious. That's because they mystify, often by design, quite apart from whatever humans can or can't learn about the facts, if any, that the words may point to. But even though they present mysteries aplenty, mysterious forms of words don't form a specially important *sort* of mystery.

What is mysterious about forms of words is, typically, either *in what way(s)* they signify or *what* they signify.⁶ When these questions are answered, the mystery dissipates. When they aren't answered but can be, the mystery is simply that of an as-yet unanswered question, just like countless others surrounding non-linguistic entities. And if the questions can't in principle be answered, then we are faced with ill-formed or otherwise misleading strings; the mystery here, if any, would usually lie in why someone has produced the strings.

⁶Physical malformation or corruption of linguistic tokens can make it impossible to discern what they are; but this isn't unique to linguistic tokens.

*Mystery in general involves manifestation as much as hiddenness: the manifestation in some respects of something that is hidden in other respects. Nothing can appear as a mystery unless it appears as something else. More important, what makes a mystery interesting is usually the partial disclosure of what is hidden prima facie. Thus the examples I have cited, except for (3) and (4), refer or are meant to refer to things that someone intends to be known, or known about, by some or by all. Moreover, the richer uses of 'mystery' tend to involve intention--personal activity is both partially disclosed in what is hidden and partially discloses what is hidden. And in (3) and (4), what is hidden are aspects of known entities that invite further inquiry by persons, who could then disclose something more about the entities. Furthermore, what sustains interest in a partially disclosed *x*, qua mysterious, is often the real or imagined possibility of *x*'s further disclosure. Even mystery stories wouldn't be so popular if there were no finding out "who done it." The presentation and disclosure of *x*, by hinting at further disclosure, pose either an invitation to receive, or a challenge to elicit, further disclosure.*

Our response when real mysteries, as opposed to fictional ones, pose such an invitation or challenge is that of *wonder*. This is where the interest of the mysterious makes itself fully felt, and this is why Marcel is certainly right when he associates the denial of ontological mystery with "the atrophy of the faculty of *wonder*" (PE 13). Now wonder usually begins as passive. A powerful example of this is what Otto (1917; 1957) called *mysterium tremendum et fascinans*: that object of primal religious awe which is experienced as the "wholly other" and is the paradigm of *das Heilige*, the sacred or the holy (cf. Eliade 1957). Such awe mixes fear and reverence of something naturally conceived as personal and self-disclosing, and thus motivates worship and ritual. But as the higher religions attest, wonder can even here issue in intellectual curiosity, which motivates a search for such *explanation* as might be had. Such active wonder--when not reduced to mere problem-solving--is an apposite response to mysteries of all sorts, not just a possible response to the *mysterium tremendum*.

Now when a mystery dissipates, or would dissipate, upon explanation, we have an instance of a sort of mystery that is of no special philosophical interest. Even when considering the early, richer senses of mystery, we should there-

fore exclude things that are intentionally made mysterious but would, upon further inquiry, cease to be mysterious. Nor should we focus the interest of mystery on things that manifest themselves to us but whose explanation humans can never discover. For one thing, it isn't at all clear what those things might be; for another, we wonder at all sorts of things we could explain as intentional, but which seem to resist reduction to some more putatively rigorous sort of explanation--e.g., one person's love for another.

To get at the full and interesting sense of 'mystery', we must focus on that which manifests itself clearly and yet poses a definite limit to any inquiry, not just human inquiry. Such things would be mysterious in an ontological sense, not just an epistemological one. Of course, if something that manifests itself to us is both inexplicable and knowable as such, that would in a sense be ontologically mysterious. But as we have seen, the richest sense of 'mystery' would also involve a disclosure of and by someone whose intention explains and is manifested by some *explicandum*.

Something mysterious in this way would occasion permanent wonder in that, given its *explicans*, it might nevertheless not have been at all. Such a mystery would preserve a limit to any possible inquiry, and yet be compatible with the fullest possible explanation that the ex-

plicandum could in principle admit. Thus, the *explicandum* would be mysterious to us less as hidden than as an object of permanent wonder. It would be *marvelous*, in the sense that knowing it as it is, and knowing what explains it, should cause one to marvel at its existence. The world is just such an entity.

I.2 Explanation and the Properly Mysterious

Even so, one may well ask first whether we could ever be warranted in asserting, of any manifest yet manifestly mysterious entity, that it is such a mystery as I have just said the world is. Before considering the world, then, we must define the criteria something must satisfy to warrant our answering that question affirmatively; such will be the task of this section. We must also show that the question can't be answered negatively on a *priori* grounds; such will be the task of the subsequent sections of this Part.

As I have already suggested informally, nothing mysterious in the pertinent sense could be merely either

(AM) *accidentally mysterious*, inasmuch as not all limited rational knowers (LRKs) who can explain it completely in some way or other have done so;

or

(ERM) *essentially but relatively mysterious*, inasmuch as
(a) no LRK of a certain sort can either explain it non-trivially in any way or know whether or not it can be so explained by some other sort of rational knower; or
(b) no LRK of a certain sort can explain it completely in any way, though an LRK of some other sort, if any, can explain it completely in some way or other; or
(c) no LRK of a certain sort can explain it non-trivially in any way, though an LRK of some other sort can explain it non-trivially in some way or other; or
(d) no LRK of any sort can explain it completely in any way, though some or all LRKs can explain it non-trivially in some way or other, and an essentially omniscient rational knower (EOK), if any, would know an *explicans* of it that would suffice to explain it completely in some way or other; or

(e) no LRK of any sort can explain it non-trivially in any way, though an EOK would know an *explicans* of it that would suffice to explain it completely in some way or other.

The terms 'completely' and 'non-trivially' distinguish different levels of explanation. But precisely what those levels may amount to in particular cases is secondary at the moment. We must leave aside the AM and the ERM so as to focus on things whose mysteriousness is irreducible either to contingent circumstance or to limitations peculiar to some or all LRKs.

A being, occurrence, or state of affairs could thus be *absolutely* mysterious in one of two ways. It might be either

(ENM) *essentially and negatively mysterious*, inasmuch as nothing would suffice to explain it non-trivially in any way,

or

(EPM) *essentially and positively mysterious*, inasmuch as some LRK can explain it non-trivially in some way or other, and at least an EOK would know an *explicans* of it that would suffice to explain it completely in some way or other, but nothing would suffice to explain it *exhaustively*.

Only if we are warranted in regarding something as either ENM or EPM are we warranted in regarding it as mysterious no matter what anyone's epistemic capacities may be.

The significance of the ENM, in my view, is mainly heuristic: to contrast one broad way in which something might be absolutely mysterious with the other way that will

concern us more. I do not believe that anything is ENM, partly because it is exceedingly difficult to argue plausibly that anything is ENM. That this difficulty obtains will later turn out to be very important; but in order to show why it obtains, as well as for overall clarity's sake, I must first describe more precisely what I mean by 'explain' and 'explanation', as well as by some of the other locutions I have just introduced: 'explicable', 'would suffice to explain', 'could explain', and 'non-trivial' explanation.

To explain is an illocutionary act⁷ that consists of (a) asserting some p saying that the existence (etc.) of some being (etc.) x or sort of being (etc.) \hat{U} stands in some relation to that of some being (etc.) y or sort of being (etc.) \hat{O} ; and (b) indicating that what p says accounts or helps account for the existence (etc.) of x or y or \hat{U} 's or \hat{O} 's (whichever of these is the *explicandum*).⁸ Usually, the indication is implicit, as when one asserts p in answer to a question such as "Why [how] [under what conditions] does

⁷For the notion of explanation as an illocutionary act, I am indebted to Achinstein 1982, Ch. 1. The rest of my account is, of course, entirely my own.

⁸By using the variable-letters ' x ', ' y ', ' \hat{U} ', and ' \hat{O} ', I aim only at expository convenience and do not intend to restrict *explicantia* and *explicanda* to logical individuals and classes of such individuals.

such-and-such exist?" or to the indirect version of such a question; quite generally, an explanation should be treated as an answer to a question, whether or not somebody has explicitly raised that question. Sometimes, however, if *p* and if what *p* says does account for the existence (etc.) of the *explicandum*, simply asserting *p* does not suffice to indicate that what *p* says accounts for the existence (etc.) of the *explicandum*: one might have to clarify *p* or make clear how asserting *p* answers a question (perhaps by reformulating the question). So the indication will have to be explicit in some such way.

An explanation is the product of such an illocutionary act. Of course, *p* can be false, which is sometimes why an explanation is said to be false; so an explanation is true only if *p* is true. By the same token, the indication that what *p* says accounts for the *explicandum's* existence (etc.) can be mistaken even if *p* is true; so we must also stipulate that an explanation is true only if that indication is correct. By what criteria may we judge such an indication to be correct?

The most important criterion is the dual-sided one of *appropriateness*. A true explanation must be appropriate as an answer to some question reflecting a mode of inquiry that

limits what sort of relations one may relevantly indicate as accounting for the *explicandum's* existence (etc.). An indication that doesn't serve to answer such a question, in just the way the question calls for, isn't correct. On the other side of the coin, even if the sort of explanation sought by the question has been supplied, that explanation must be appropriate to what the *explicandum* is. An indication that purports to account for the existence (etc.) of the *explicandum*, but which satisfies the aims of a particular mode of inquiry that is ill-suited to discovering what relation or sort of relation serves to account for just this or just this sort of *explicandum*, isn't correct either. In short, the answer must be fitted to the question, and the question must be fitted to the subject matter: an irrelevant answer to a good question, or a true answer to a bad question, doesn't count as a true explanation.

In due course I will say more about what this means--especially by way of examples--and how it applies to the mystery of the world. But at no point can I pretend to develop and justify a comprehensive theory of explanation by which one could say just what it would be, for any *explicandum*, for something to account or help account for it in virtue of standing in some relation to it. Such a theory

would be adequate only if it covered every sort of *explicandum*, *explicans*, and explanation, and no human I know of may be confident of producing a theory that would accomplish that. Admittedly, if one restricts one's ambition to regimenting the criteria for explanation of this or that sort--as, e.g., in Hempel's (1965) theories of deductive-nomological and inductive-statistical explanation in science--some progress can be made.⁹ But that is a far cry from a comprehensive theory of explanation. And paradoxically, the very unavailability of such a theory helps explain why we should be very reluctant to say, of any being (etc.), that it is inexplicable. If we can't specify *a priori* all the ways in which things might be explained, it seems rash to say, of certain things, that they are inexplicable.

Of course, when we say that a being (etc.) *x* is explicable, we mean not that it can be falsely explained, but that it can be truly explained, even if we lack an explanation. Accordingly, by saying of *x* that it is explicable I mean that some illocutionary act, if performed, would yield

⁹Although even here the progress has been fitful at best. For a critique of the Hempelian program, see Achinstein 1982 and Schlesinger 1983, 125ff.

a true explanation of x , even if no one performs that act. Similarly, to say that some being (etc.) x "would suffice to explain" some y means that x 's standing in a certain relation to y accounts for the latter's existence (etc.), and that there could be a true explanation indicating that x does so. And when we say that someone "could explain" the existence (etc.) of x , we don't mean that they could produce a false explanation of x , but rather that they could produce a true one.

Now it is a conjunctive truth that whatever exists (etc.) is possible and nothing prevents it from existing (etc.). This can always be asserted in answer to a question why something exists (etc.); but partly for that reason, it is also a relatively trivial truth. Thus, every being (etc.) is trivially explicable. But since the sort of inquiry to which trivial explanations would be appropriate is rarely if ever worth pursuing, trivial explanation is rarely if ever appropriate--though the form of words one might use in a trivial explanation can be appropriate in some other illocutionary act, such as rejecting an inquiry.

Non-trivial truths can also be adduced as trivial explanations. Suppose your spouse asks why there's a radio in the refrigerator, and you reply "Because there are two

radios in the refrigerator." Though your reply is true, and what your spouse's question assumes follows from it, it doesn't answer that question. When one asks what accounts for the-state-of affairs-that- p , one usually isn't interested just in hearing some truth q of which p is a consequence, even if the-state-of-affairs-that- q would figure in the sort of explanation one is seeking. What's relevant as an answer to the question at hand is that you put two radios in the refrigerator yesterday, that nothing has since removed them, and that there are now two radios in the refrigerator. Your spouse, after all, wants to learn what actually brought it about that there's a radio in the refrigerator, never mind what else might be there; when s/he learns that, s/he has gotten a genuine answer, i.e., a non-trivial explanation. Another example is the stock one about sleeping pills. If someone wants to know how a particular sleeping pill has worked, it's true to say that it works in virtue of its dormitive power. But the questioner probably knows, and knows why it's relevant, that the pill has that power: one way of putting his question is "What does the pill's dormitive power consist in?". The reply he's gotten hasn't answered that question, and is thus a trivial explanation. Or consider a wispy girl who, when asked why she

wants to play football with the boys, replies "Because!". She is being truthful in a way (the naïve might say "uninformatively" truthful), but is supplying what we should regard more as an *explicandum* than an *explicans*.

True non-trivial explanations indicate that the *explicandum* is accounted for in a stronger way than one might indicate just by pointing out that it is possible and nothing prevents it, or that a statement saying it exists (etc.) follows from a certain truth, or that it belongs to a complex *explicandum*--although any of these points might be useful, even necessary, as part of some true non-trivial explanation. Most, perhaps all, actual *explicanda* we can identify are non-trivially explicable. Non-trivial explanations needn't be complete: many *explicanda* have been non-trivially but incompletely explained, in that we can cite a relevantly explanatory factor without having the whole explanation we seek and could eventually attain. And there might be things that, given our natural limitations, we can explain non-trivially but never completely.

I will expatiate on the notion of complete explanation in the next section. For now, let us lay bare the difficulty of arguing that anything is ENM; for it is that difficulty--along with the uses of 'mystery' and the sense

of wonder discussed above--which suggests that the philosophical interest of mystery should be directed toward the EPM.

Showing successfully that something is ENM would entail that something's existence (etc.) is only trivially explicable. This would be equivalent to showing that some x is such that no rational agent could identify anything they could properly cite as an *explicans* in a true, non-trivial explanation of x . So, one way to show that something is ENM would be to show that the limits of explanation as such--no matter what sort of rational knower is seeking or offering an explanation, and no matter what sort of explanation is sought or offered--preclude true, non-trivial explanation of some-or-other existent (etc.) x . But as I've already hinted, this epistemological approach is at best unpromising. Since we don't know what other sorts of LRKs there may be, or all that an EOK would know, we can't say what the extent of their explanatory resources may be; for that matter, it is by no means clear even what the extent of our own explanatory resources may be. As far as I can see, the only way one might plausibly argue that something is ENM would be to take the ontological route and try to show some

being, occurrence, or state of affairs to be of such a nature as neither to require a non-trivial explanation nor to admit a true non-trivial explanation.

Along these lines, some have in effect argued that there are explanatorily ultimate truths: what is expressed by such a truth accounts or helps account for certain things, but neither requires nor admits explanation itself.¹⁰ Toulmin (1961), for example, claims that some-or-other "ideal of natural order" is postulated by any science or theory; in Newtonian physics, one such ideal would be the principle of inertia. As such that principle is, in my terms, explanatorily ultimate: it helps account for the behavior of bodies but cannot itself be accounted for by any state of affairs expressible as a more general law or some other truth postulated by the theory. Toulmin aside, some have regarded physical identities as explanatorily ultimate: that water is H₂O, or that the temperature of a gas is its mean molecular kinetic energy, helps account for some physical occurrences but are not subject to explanation them-

¹⁰I am deeply indebted to Achinstein's (1982, Ch. 9) discussion of explanatory ultimacy, which goes much deeper than mine, though with a similar result. Cf. Nozick 1981, 137-140, who tries to develop an "self-subsuming" version of the Principle of Sufficient Reason that would perforce be explanatorily ultimate.

selves (Glymour 1980, 34). Indeed, the candidates for explanatory ultimacy most commonly put forward today are expressed by propositions drawn from scientific theories.

But the explanatory ultimacy of such truths, if it obtains, does so only *relative to certain theories that postulate them*. Such theory-relative ultimacy doesn't suffice to establish the candidates as ENM. Even if certain states of affairs can't be explained in terms of a particular theory that postulates them, it doesn't follow that those states of affairs don't require or admit non-trivial explanation at all. All that follows is that some theory postulating them can't be invoked to explain them non-trivially. If that theory is correct to postulate them, they might nevertheless be explicable from another point of view, such as from within some richer theory--or some theory of an altogether different kind--that also postulates them. An argument that what they express is ENM would have to exclude this possibility. I know of no such argument.

The same goes for occurrences that are inexplicable by means of a given sort of scientific explanation. Hempel (1965), for instance, seems committed to claiming that low-probability random events are inexplicable. Why, e.g., a particular diffracted electron hits a particular point on a

screen is not subject even to inductive-statistical explanation, for "there are no laws that determine the electron's final position with high probability" (Achinstein 1982, 302-3). But inductive-statistical explanation is only one species of that genus of explanation involving appeal to covering laws, and that genus is only one genus of explanation. In the absence of a knock-down argument that such a low-probability occurrence could not be explained differently by any rational knower, we aren't justified in concluding that that instance is ENM. The most we could be justified in concluding is that we now lack such an explanation.

Not all putative candidates for the ENM need be drawn from natural science. Somebody might argue, for example, that it is inexplicable (non-trivially) that numbers are colorless. Thus if one tried to answer the question why numbers are colorless by saying something like "numbers couldn't be colored; they just aren't that sort of thing," one might be met with the response: "I already knew that; what I want to know is why they aren't that sort of thing!" Here, it seems, one could only tell the questioner that she has not appreciated what sort of truth it is that numbers are colorless, namely, a conceptual truth; she has therefore

not understood that no further explanation is required or admissible. The same seemingly goes for logical truths as well.

But this by no means establishes that the states of affairs expressed by conceptual or logical truths are ENM. For one thing, there is no agreement on what conceptual and logical truth consists in; so *a fortiori*, it is unclear either whether such truths, if there are any, are explanatorily ultimate or what might be cited to explain one non-trivially. Moreover, on certain accounts of conceptual and logical truth, one may indeed say what non-trivially explains such truths. If, for example, any conceptual or logical truth p is as such necessary, then no such p could be false--which is by no means trivial as an explanation of why a conceptual or logical truth holds. Of course, some people maintain that conceptual truths are simply affirmations to which we are committed by virtue of adopting an optional "conceptual framework;" some would also say that that logical truths--if they can be clearly identified--are axioms or inferences to which one is committed by adopting an optional system of logic. Indeed, theological voluntarists such as Descartes have believed that the truth value of any proposition is decreed by God, who could have decreed

otherwise. In all these cases, the "necessity" of conceptual and logical truths is conditional if it can be said to obtain at all; hence one cannot explain them by indicating that they "couldn't have been" false. But I shall not dilate on these views; any, if right, would readily afford ways to explain conceptual and logical truths non-trivially.

There is, however, at least one candidate for being ENM whose credentials are worth examining at length. A fair number of philosophers have thought that the existence of the world is of such a nature as to be (non-trivially) inexplicable; and for reasons that will emerge in Part II, thus believing that the world is ENM seems no less plausible than believing anything else to be. So if, as I will show in II.V, there is good reason to doubt that the world is ENM, there is good reason to doubt that anything is.

Those grounds for doubt are one reason why I think the interest of the concept of mystery lies closer to the EPM. To be sure, that the world or anything else is explicable in such a way as to be EPM doesn't imply that it is best explained with reference to intention. But only if something is *both* EPM *and* best explained with reference to intention is there good reason to think mystery a specially interesting category. For only things explicable with reference to

intention answer to the richest uses of 'mystery', and the EPM is the only category of the absolutely mysterious that is congruent with those uses. In face of this, I reserve the term *properly mysterious* for what is both EPM and best explained with reference to intention. If there's reason to think they exist (etc.), it's best to center the interest of mystery on such things.

The purpose of the rest of this Part, however, is to show why there's no *a priori* reason to think that nothing is EPM. I have introduced the tri-fold distinction between "non-trivial," "complete," and "exhaustive" explanation chiefly with that in mind. And without reviewing all major sorts of explanation, or developing pointlessly formal criteria for the three degrees of explanation, the substance and importance of the distinction can be clarified for the present purpose.

I.3 The Two Levels of Non-Trivial Explanation

On some large matters, what might make the difference between trivial and non-trivial explanation is quite controversial. For example, is there a true, non-trivial explanation of the world, and if so how could we grasp it? If, as Wittgenstein asserted, "the world is everything that is the case,"¹¹ one couldn't meaningfully ask for a non-trivial explanation of the world, much less supply one. Supposing that the world is less than everything that is the case, the claim that God created the world, if true, is a non-trivial explanation only if (a) there is good reason not to include God in the world, and (b) God's existence doesn't otherwise constitute an *explicandum* in a way analogous to that of the existence of the world. Some philosophers believe both (a) and (b), others do not; wherever the truth lies, the difference between non-trivial and trivial explanation of the world's existence hasn't been obvious to many of them.

That issue reflects the mystery of the world. But as I've already implied, to explain why certain things are mysterious it's relatively trivial to say that we have and

¹¹See II. 2, and my discussion of Wittgenstein in II.3.

may always have unanswered questions about them: we already knew that *that* is true, in some way, of everything we ask about. In order to explain something's mysteriousness non-trivially, we should look to characterize it as absolutely mysterious.

We have already seen how hard it is to argue plausibly that something is ENM. But unlike my definition of the ENM, that of the EPM might seem utterly inadequate even to delimiting a class of the mysterious. That definition allows that somebody may be able to explain completely something that is EPM; but to clear up any mystery, isn't it enough to come up with a *complete* explanation of the mysterious something-or-other, not necessarily an "exhaustive" one, whatever that might be? What more than complete, after all, could we reasonably require a true explanation to be? And why think that the world, or indeed anything else, can't be completely explained by someone somehow?

A being (etc.) has been completely explained if its existence (etc.) has been truly and non-trivially explained in just the way, and to just the extent, that is satisfactory for one's main purpose in seeking an explanation of its existence (etc.). Such explanations can be, nay typically are, rather circumscribed. If, for example, Dan's friend

Marian is wondering why he has married Allegra, she might note that Allegra looks like Dan's mother as the latter appears in old photographs, that Allegra is a good cook, that Dan had been wanting to settle down, etc. Without necessitating the outcome, or elucidating a relation between the reasons for and the causes of Dan's marrying Allegra, or even embracing all the relevant factors, such an ensemble of known factors can well suffice, for practical purposes, to explain Dan's marrying Allegra. The same goes for most ordinary explanations. If your car's tire goes flat as you're driving, and you get out and notice a nail driven into the rubber, it's usually a safe bet that the nail punctured the tire and thereby let the air out. To arrive safely at that explanation, you needn't think that all nails driven into tires so puncture them as to let all the air out; you needn't know how to rule out all the alternative possibilities that might conceivably explain your flat tire. And even in natural science, what counts as complete explanation is relative to one's aims and interests, and to the questions they motivate.¹² If the gears on 8-year-old Bobby's bicycle have rusted and, outraged, he asks his

¹²Cf. Munitz 1965, 110ff; Sorabji 1980, 29.

mother why, she might tell him in broad terms what oxidation is, that the rusting of iron is an instance of it, and how things made of iron oxidize when exposed to water. Having learned those facts, Bobby has gotten a complete answer to his initial question. If precocious, he might go on to ask, in effect, what accounts for the relevant regularities. That would be a different question, answerable by citing higher-order, more inclusive physical laws than those of chemical oxidation. Going yet further, some people ask what, if anything, might account for the totality of true physical laws, whatever that totality may be. That's another question still; but whether or not natural science could answer it, answering it is hardly necessary to explain rust, or anything short of the whole universe, for most purposes.

These considerations exhibit the perfectly unexceptionable sense in which countless *explicanda* are either completely explained or completely explicable. Explicability is relative partly to the sorts and extent of explanation sought; ordinarily, and with gradually cumulative success, we look for truths that would answer particular, limited questions in pretty much the way the questioners are after. Let us call such explanations *complete-of-the-appropriate-sort*, or *CAS-explanations*. Most if not all things are CAS-explicable in some way or other.

A good intuitive method for identifying a CAS-explanation is first to find out whether somebody, call her A, asking a question Q is satisfied with an explanation E proffered in answer to Q, and then whether E is true. If A is satisfied with E, then there is good reason to believe that E is relevant as an answer to Q; if E is also true, then there is good reason to believe that E is satisfactory for A's main purpose in asking Q. If A is not satisfied with a true E, there are several possibilities: (a) Q was misunderstood; (b) E is trivial or otherwise uninformative as an answer to Q; (c) E invites a further question that A also wants to raise and that admits of a non-trivial answer; or (d) A's implicit or explicit idea of explanation is inappropriate--as it would be, for example, if she demanded to know why the number four isn't the sort of thing that could be colored. In most ordinary and scientific cases, (a)-(c) don't force us to consider philosophical issues about explanation; one can meet the challenges (a)-(c) pose by supplying the sort of explanation A is seeking. If one proceeds to supply a true explanation E* of that sort, then A has every reason to be satisfied with E*, as it would answer just her question: it would thus be a CAS-explanation. And if one can't supply E* for the time being, one usually has

either a fair idea of what would count as a satisfactory answer to A's question, or the ability to see it as such when it's discovered. That, at any rate, is a key feature of ordinary and scientific CAS-explanations: we know more or less how to recognize them, for they work as answers to the limited questions we most often raise.

Now case (d) may well obtain without our knowing that it does: without her or anybody else's knowing it, A may be seeking a sort of explanation that the subject of her question doesn't admit, even if some other available sort of explanation would be a CAS-explanation. Suppose A asks what antecedent states of the universe, along with the laws of physics, determine that a sub-atomic particle z has velocity v at time t , rather than an infinitesimally different velocity v_i . Physicists don't know at present whether there's any answer in principle to A's question.¹³ Even if there isn't, however, we might still cite statistical laws that, under the known conditions, assign a significantly greater probability to z 's having v at t than to z 's having v_i at t . Statistical explanation often functions as CAS-explanation in sub-atomic physics, especially given that the tidier,

¹³ See the admirably balanced discussion of sub-atomic indeterminacy in Powers 1982, pp. 138-152.

more thoroughgoing sort of explanation A seeks may be unavailable even in principle. In such cases it's unknown, at least for a time, whether the absence of the sort of explanation A seeks is a matter of the *explicandum's* just not admitting that sort of explanation, rather than a matter of our not happening to have learned all that must figure in such an explanation, or of such an explanation's being beyond creatures with our limitations.

There are nonetheless at least two good reasons to think that every non-trivially explicable x is CAS-explicable in some way or other. First, it seems an empirical matter whether some LRK or other, somewhere and at some time, CAS-explains a given x . We can't rule out, and it might turn out, that some LRK non-trivially explains x 's existence (etc.) in just the way, and to just the extent, that is satisfactory for that LRK's main purpose in seeking an explanation of x 's existence (etc.). Thus, there is good reason to doubt that, for some manifest yet manifestly mysterious x , no LRK could ever CAS-explain x . Someday, for example, humans might finally learn what caused the disappearance of Amelia Earhart; some mathematician or computer might prove or disprove Goldbach's Conjecture. And something humans may very well never know--such as how many

planets in the galaxy came to be and passed away before Earth ever was--may yet be known or knowable by other LRKs. Second, if there is an EOK, then every non-trivially explicable x is CAS-explicable. Though hardly needing explanations, an EOK would know an *explicans* of each such x that would suffice to explain x in the best way for any given purpose. Therefore, an EOK would know a CAS-explanation for any non-trivially explicable x , even if no LRK can explain x non-trivially in any way.

Indeed, at the end of this Part I will argue further for the thesis of *omni-explicability*: every being (etc.) is CAS-explicable. But the force of that thesis should not be exaggerated. Even if everything that is non-trivially explicable is also CAS-explicable, it doesn't follow that every such thing is *exhaustively* explicable.

*A being (etc.) x has been exhaustively explained if x has been non-trivially explained in such a way as to show that, given its explicans, x has to exist (etc.) rather than any alternative incompatible with x 's existence (etc.).*¹⁴

¹⁴There is, of course, a trivial sense in which whatever exists (etc.) has to exist rather than any incompatible alternative: necessarily, if x exists, then x , rather than anything incompatible with it, exists. For a more formal version of the present distinction, see II.V.

Thus, whatever is exhaustively explicable is *uniquely determined* by something that would, in so doing, suffice to explain it. But even if, for example, every intentional action is CAS-explicable with reference to some-or-other reason, it doesn't follow that every such action is uniquely determined to be performed by reason(s) or cause(s). That not every CAS-explicable entity must be exhaustively explicable is essential to arguing what I shall say is the case with the world. Something suffices to CAS-explain the world, but the world is not uniquely determined to exist by what suffices to CAS-explain it, and thus is not exhaustively explicable--even though a great many things it comprises may be.

This runs counter to a natural, useful tendency of thought: for good reason, we often strive for CAS-explanations that attain the level, and the unsurpassable power, of exhaustive explanation. Of course, our CAS-explanations needn't always do that. If Marian has successfully explained Dan's marrying Allegra, she needn't have shown that, given what her explanation cites, Dan could not but have married Allegra rather than remain single or marry somebody else. Marian must and need only have shown that Dan's marrying Allegra was quite understandable. But many cases

don't involve such wild-card factors as freedom and love. In such cases, if a true, non-trivial explanation E of x would show that, given the existence (etc.) of some y that E cites, x would *have to exist* (etc.) rather than any incompatible alternative, then E is a better explanation than an explanation E' that would not show this, even if E' would be a CAS-explanation of x. So if E would thus show x to be uniquely determined, then E is ordinarily preferable to E'. Scientists and philosophers tend to seek explanations like E rather than ones like E', even when finding them is unlikely.

Explanations like E, when true, are exhaustive explanations, and the tendency to regard *all* facts as intelligible in terms of such explanations--in principle if not for us--is quite common. That tendency has been encouraged in the Western world by the successes of modern natural science and the concurrent marginalization of religion by the Enlightenment. The success of Newtonian mechanics led people to want to explain all occurrences, including human actions, as the inevitable results of antecedent conditions and the laws of physics. As is well known, this sort of explanation has been thought more enlightened, because more rigorous and practically successful, than Aristotelian teleology and

pious references to divine sovereignty. To be enlightened was to see the world *de-mystified* in a dual sense: every physical occurrence was CAS-explicable as uniquely determined and thus exhaustively explicable; mysteries of religious faith--such as miracles, grace and providence--were exposed as superfluous in explaining how the world works.¹⁵ Now this notion of enlightenment has never been universal, and much of it has been accepted, with qualifications, by some who affirm great mysteries.¹⁶ But to think that there is anything essentially mysterious about the world has seemed, to many modern minds, mere obscurantism.

Nevertheless, it is just such an attitude that I want to undermine. I shall do so by formulating a principle that I think expresses that attitude, and then show why there is no good reason to believe that principle.

¹⁵Laplace was to say of God: "Je n'ai besoin pas de cette hypothèse-là." Given his aim, that was neither surprising nor objectionable.

¹⁶ Newton himself was a devout theist preoccupied in later life with theological issues.

I.4 E_n

If some x is exhaustively explicable, then of course x is CAS-explicable as exhaustively explicable, even if no LRK has the wherewithal to produce a such an explanation. But for the natural and cultural reasons I have been describing, many people would maintain the converse. They would say that if an x is CAS-explicable at all, then some y determines x uniquely and thus would suffice to CAS-explain x as exhaustively explicable (given a question to which such an explanation would be an appropriate answer). Humans might not know or be able to know what y is or just how it explains x ; but an LRK of some other sort might, and an EOK certainly would. That is the view I want to attack; let us formulate it for the purpose as:

(E_n) For all beings, occurrences, and states of affairs x , if x is CAS-explicable, then x is exhaustively explicable.

E_n does not imply that if some LRK CAS-explains x , then that LRK exhaustively explains x . What E_n does imply is that, however a given LRK could or could not explain an arbitrary x , if x is such that the existence (etc.) of some y would suffice to CAS-explain x 's existence (etc.), then x is such that y would suffice to explain it exhaustively and thus CAS-explain it. Hence if E_n , then if x is CAS-explicable, x is not EPM; and if, as I shall argue, E_n is false, then x 's being CAS-explicable does not exclude x 's being EPM.

Some people apparently believe that only exhaustive explanations count as CAS-explanations. Schlesinger (1983, 126) says: "... when we are confronted with an explanandum E and want it to be explained, what we are seeking is information concerning facts that render it inevitable that E is true rather than that it is false." More specifically:

An act of explanation essentially consists in pointing out the unique conditions that exist and that unequivocally require that [an explanandum] E be true. These conditions are such that if we were told that, instead of E, E' was true, we would regard this as inexplicable in the intolerably strong sense that we would be driven to disbelieve the report that E' was true, since the description of the prevailing circumstances logically implied E, that is, the falsity of E' (130).

If such people are right, then E_n should be taken as a truth expressing the generalization of the entailment of certain consequents by corresponding antecedents. But why think they are right? Although he thinks explanations as such invoke covering laws, not even Hempel (1965) thinks that all explanation is assimilable to deductive form, by which the proposition that is the *explanandum* is explained as entailed, and thus as uniquely determined, by statements specifying initial conditions and applicable laws; he readily acknowledges inductive-statistical explanation, by which certain *explananda* are explained only as highly probable. Nevertheless, exhaustive explanation serves as a prescrip-

tion, an ideal, or a heuristic for many human CAS-explanations; and this perhaps explains attitudes such as Schlesinger's.

For example, to explain why $3+2=5$, we do well to say that the laws of arithmetic determine that adding three and two yields a unique result.¹⁷ Or, if Galileo's law of falling bodies is correct, then to explain why a dime falls faster than a feather dropped from the same height, we do well to say that a relevant further factor, air resistance, prevents the feather from falling at the same rate as the dime, and thus explains why the feather fell at the rate it did rather than at the dime's rate. It's been thought that laws like this map paths of "physical" or "causal" necessity. We quite often discover explanations that work as CAS-explanations precisely because they are exhaustive; we generally prefer such exhaustive explanations, though we can't always expect to find them; and we often do well to conduct our inquiries as if they are there to be found, even when they are not.

¹⁷Never mind that, in theory, it's quite possible to construe the arithmetic operator '+' as a name for a function on which the arguments '3' and '2' would not yield '5'. Arithmetic warrants derivation of non-trivial, necessary truths that express a form of necessitation; anyone who says otherwise is willing to sacrifice rationality for something he values more highly.

But not all satisfactory explanations need take such forms. So it doesn't follow that a CAS-explanation must be an exhaustive explanation; still less does it follow that everything CAS-explicable is exhaustively explicable. CAS-explicability doesn't entail exhaustive explicability.

It will be protested: "So what? Given how you define CAS-explanation, I grant that something's being CAS-explicable doesn't entail that it's exhaustively explicable. But why shouldn't we accept a weaker construal of E_n --say, as a generalized material conditional?" This question mounts a sharp challenge. For there are venerable doctrines on which every being, occurrence, and state of affairs--either each and every one individually, or all of them as a single class, or both--are CAS-explicable as exhaustively explicable. If some such doctrine is right, then E_n as a generalized material conditional follows trivially, and nothing is absolutely mysterious.

Now the variety of such doctrines is so wide, their history so long, and their several interpretations so disputable, that we must content ourselves with only the broadest relevant description of the most important among them. Such a description is relevant if it exhibits just how the doctrines in question are committed to a generaliza-

tion of the consequent of E_n ¹⁸ and thus to E_n . But any doctrine committed to E_n is also committed to whatever E_n implies. So if there's good reason to reject a thesis that E_n implies, then there's good reason to reject E_n and any doctrine committed to E_n .

To show that there is such reason, I shall proceed in two stages. First, I shall argue that a thesis implied by E_n seems false on empirical grounds; second, that there's no way to save E_n by appealing to any supposed *a priori* truth, such as the so-called *Principle of Sufficient Reason*.

¹⁸By this I mean a universal generalization obtained by binding the variable of E_n 's consequent with a universal quantifier.

I.5 Determinism

In its strongest and most general form, *determinism* is the doctrine that every being, occurrence, and state of affairs is uniquely determined. However elaborated, determinism in this form is committed to the view that everything is CAS-explicable as exhaustively explicable. That is what indicates its explanatory scope and power. Now by stipulative definition, E_n as a material conditional means the same as, and hence implies,

($E_n D$) For all beings, occurrences, and states of affairs x , if x is CAS-explicable, then x is CAS-explicable in virtue of being explicable *via* some being, occurrence or state of affairs y that uniquely determines x .

General determinism is of course committed to $E_n D$. Therefore, if $E_n D$ is false, so are both general determinism and E_n .

As I said in the previous section, an x 's being uniquely determined means that, given some y whose existence (etc.) may be cited to CAS-explain that of x , x has to exist, occur, or obtain, *rather than* any being (etc.) incompatible with x . Another way of putting this is: x is *non-trivially necessary*. To be sure, everything is trivially necessary: in a trivial sense, it is necessary that everything that exists (etc.) does so rather than any imagined alternative. If three and two make five, they make

five rather than any other number; when a couple conceives a child, then a particular child, rather than any other that might then have been conceived by that couple, has been conceived. But it doesn't follow that whatever exists (etc.) either does so necessarily or is otherwise necessitated. Some actual existent may be sempiternal, unproducible, and unpreventable, and in that sense exist necessarily; unbalanced forces impinging on a body may necessitate the body's moving.¹⁹ If they hold, however, those sorts of necessity don't hold merely in virtue of its being necessary that whatever exists (etc.) does so rather than any alternative. The distinction is that between

(1) Necessarily, whatever exists (etc.), exists (etc.) rather than not

--where the modal operator is that of *logical* necessity and the rest of the sentence is necessarily true in that sense--
and

(2) Whatever exists (etc.), exists (etc.) necessarily rather than not

--where the modal operator is vague and the truth value of the whole sentence depends on how the modal operator is construed. (1) expresses universal trivial necessity; (2) ex-

¹⁹I owe the former example to James F. Ross, the latter to Peter Achinstein.

presses universal non-trivial necessity. (Hereafter I shall mean by 'necessity', 'necessitate[d]', and 'necessarily exists (etc.)' only non-trivial varieties of necessity.) General determinism may thus be stated as some construal of (2).

It would be unfair to construe (2) as a generalization over propositions:

(2') For all existential propositions p , if p , then it is logically necessary that p .

For one thing, it is sometimes said today that no existential proposition is logically necessary. But whether that is right or not, (2') is clearly false: some existential truth is logically contingent.

(2) is more fairly and plausibly construed as the exclusive disjunction: every being (etc.) either necessarily exists (etc.) or, necessarily, exists (etc.) if something else does. Here, to say of something that it necessarily exists (etc.) implies that it is sempiternal, unproducible, and unpreventable.²⁰ But things aren't so clear when it is

²⁰In his "third way" of proving that God exists (*ST* Ia Q2 A3 resp.), Aquinas seems to use *entia necessaria* for spiritual beings he thinks had a temporal beginning in being created by God; but in a contemporary context, using 'necessary' for such beings would be misleading, and so I eschew it for a slightly narrower and more familiar use. Cf. Geach & Anscombe 1973, 114-15.

said of something that it is necessitated to exist (etc.) by something else. Such necessitation could be logical, physical, or of some other variety that I shall just call 'metaphysical' for now. Allowing for this vagueness, (2) may be recast as an expression of general determinism:

(GD) Every being (etc.) x is CAS-explicable in virtue of existing (etc.) always, unproducibly, and unpreventably, or of being logically, causally, or metaphysically necessitated to exist (etc.) by some y that exists (etc.).

Classical theists hold that God necessarily exists in the sense of GD's first disjunct. Moreover, some philosophers would hold that numbers and their relations--though not alive like the God of classical theism--necessarily exist and obtain (respectively). Some would even argue, mistakenly, that matter/energy necessarily exists. But we needn't take seriously the notion that everything over which one can truly quantify exists (etc.) always, uncausably, and unpreventably. The important question for us is whether GD's second disjunct holds of every being (etc.) that its first disjunct does not hold of. In other words, if not everything exists (etc.) always, unproducibly, and unpreventably, is everything that does not so exist (etc.) nevertheless necessitated to exist (etc.) by something else, either logically or physically or in some other, metaphysical way? If

something is neither necessarily existent (etc.) or necessitated in any of those ways, but nonetheless is CAS-explicable, then $E_n D$, general determinism, and E_n are false.

Consider the following definition of determinism by R. Taylor (1967, 359): "...for everything that ever happens there are conditions such that, given them, nothing else could happen." This encapsulates the central idea of event-determinism--a more modest view than GD, and for that a more defensible one. Event-determinists are committed to

($E_n D_0$) For all occurrences²¹ x , if x is CAS-explicable, then x is explicable via some being, occurrence, or state of affairs y that uniquely determines x ,

which is entailed by $E_n D$. So if $E_n D_0$ is false, so are event-determinism and $E_n D$; with them, so are GD and E_n .

I shall attack $E_n D_0$ by showing that there's no basis in either ordinary experience or natural science for believing that every occurrence which is CAS-explicable as physically *caused* is uniquely determined. This will supply what I have advertised as the "empirical" grounds for doubting a thesis that E_n implies, and will thus serve to undermine E_n . To complete the case, I shall argue in II.3 against a *priori*

²¹I use 'occurrence' rather than 'event' so as to prescind from the presently irrelevant question whether some occurrences are *actions* and not just happenings.

doctrines committed to GD. Since most arguments purporting to establish event-determinism *a priori* do so by purporting to establish *general* determinism *a priori*, that argument will suffice for present purposes.²²

It is often thought that causes uniquely determine their effects. Indeed, one form of event-determinism is: every event has some uniquely determining (or: necessitating) cause or causes. Now causality is a philosophical wilderness where many have gone astray, and if determined to do so, one can avoid formulating event-determinism with the horrible little word 'cause'. But when it would be true to

²²Kant, Schopenhauer, and those whose epistemology is relevantly similar are exceptions. But their respective doctrines of causality are intended to apply only to *phenomena*; so even if causes uniquely determine their effects, this only holds for how things appear to humans. In any case, one cannot extract GD from Kant's doctrine of causality, so I shall not discuss it here. As for Schopenhauer, see below, I.6.

Some theists say that since God wills everything that happens and is omnipotent, he therefore necessitates everything that happens. This entails event-determinism, and on some theistic accounts, the existence and nature of such a God can be established *a priori*. But since none of this entails that God necessarily wills whatever he wills, it doesn't entail GD or, hence, E_n via GD. So it is simply irrelevant in this context. To be sure, a few of the theists in question also believe GD, in virtue of what they take to be divine revelation or the meaning of 'omnipotent'. But since theists notoriously differ on those points, there is no clear, relevant position that we must here take account of as "the" theistic one.

say that some y causes some occurrence x , it would be true to say that x is CAS-explicable via y . Hence, if $E_n D_0$, then from any truth of the form ' y causes x ', it follows that some being (etc.) uniquely determines x . So if there's no empirical reason to think that all caused occurrences are necessitated by their causes, there's no such reason to accept $E_n D_0$.

I shall not consider whether all occurrences are caused, though I suspect they are. Nor need we consider whether event-causation is the only sort of causation, though I believe it is not; $E_n D_0$ is formulated *ad hoc* to accommodate either view. I shall argue simply that not all caused occurrences are necessitated by their causes. To that end, I shall expound Anscombe's (1981, Vol.2) argument that "causation...is not to be identified with necessitation" (136).

Before citing examples against causal necessitarianism, Anscombe undermines the conceptual prejudice that chiefly accounts for its plausibility. She ascribes the following "assumption" to causal necessitarians: "If an effect occurs in one case and a similar effect does not occur in an apparently similar case, there must be a relevant further difference" (133). A form of this assumption is common among

philosophers who subscribe to the standard Humean or regularity view of causation. Anscombe characterizes that view thus: "to say that an event was caused was to say that its occurrence was an instance of some exceptionless generalisation connecting such an event with such antecedents as it occurred in" (134). Hume, of course, rightly denied that causes *logically* necessitate their effects; he also denied that we observe causal efficacy in sensible things, taking causal efficacy as a case of necessitation. But he retained belief in a necessary connection between cause and effect by locating the connection "in the human mind's being determined, by the experience of CONSTANT CONJUNCTION, to pass from the sensible impression or memory of one term of the relation to the convinced idea of the other." In its historical context, this "suggested a connexion of the notion of causality with that of deterministic laws--i.e. laws such that always, given initial conditions and the laws, a unique result is determined." To be sure, "a 'Humeian' account of causality has to be given *in terms of* physical things, events etc., not of experiences of them" (137, my emphasis). Assuming this, the standard Humean account has it that the relation of causation between two events is to be expressed by a universal generalization of the form 'Always, given an

A, a B follows'. So if a B-type event *doesn't* follow an A-type event, we haven't relevantly identified both *relata*. The universal generalization applicable *ex hypothesi* to the case at hand, whatever it is, must therefore admit other terms in place of 'A' or 'B' or both.

It is often overlooked that we may justifiably assert that an A is the cause of a B without either meaning or knowing that some generalization of the form 'Always, given an A, a B follows' is true. If you come into contact with a carrier of a contagious disease and ask your doctor whether you'll get it, s/he can often tell you only that "maybe you will, maybe not" (136). But if you do get it, you and your doctor are justified in saying that your contact with the carrier was the cause. Unperturbed, a regularity theorist would reply that, in this case, our knowledge of the cause is only partial: doctors usually don't know any or all of the conditions under which one *invariably* gets a contagious disease. But as Anscombe points out, "this comment betrays the assumption that there is such a thing to know. Suppose there is: the question whether there is does not have to be settled before we can know what we mean by speaking of the contact as cause of my getting the disease." That's because

...causality consists in the derivativeness of an effect from its causes. This is the core, the common feature, of causality in its various kinds.

Effects derive from, arise out of, come of, their causes...Now analysis in terms of necessity or universality does not tell us of this derived-ness of the effect...Through it we shall be able to derive knowledge of the effect from knowledge of the cause, or vice-versa, but that does shew us the cause as the source of the effect...If A comes from B, this does not imply that every A-like thing comes from some B-like thing or set-up or that every B-like thing or set-up has an A-like thing coming from it; or that given B, A had to come from it, or that given A, there had to be B for it to come from. Any of these may be true, but if any is, that will be an additional fact, not comprised in A's coming from B (136, my emphasis).

This is the conceptual sense in which Anscombe says that "causation is not to be identified with necessitation." We can know what we mean, and be within our epistemic rights, in saying, e.g., that contact causes the disease, without meaning or knowing that the disease always follows contact. True enough.²³

All the same, this might be thought an attack on a straw man. "Neo-Humeians" realize that if you "relevantly describe the cause A and the effect B, and then construct a universal proposition, 'Always, given an A, a B follows,' you usually won't get anything true. You have got to describe the absence of circumstances in which an A would not cause a B" (11). A neo-Humean thus strives to say, whenever

²³Cf. Russell [1912] 1917, 184ff; Suppes 1970.

a B doesn't follow an A, what is relevantly different about the conditions of A: what non-standard condition C_i of A is such that, given it, B doesn't follow A. Sought-after universal generalizations must be roughly of the form: 'Under standard conditions, if an A occurs, then a B always occurs, and non-standard conditions are: C_1, \dots, C_n '. The trouble is, however, that "the task of excluding all such circumstances"--or, that of listing $C_1 \dots C_n$ fully--"can't be carried out" (11). This needs no belaboring. Therefore, if offered to explicate the *concept* of causation, rather than just to present an open-ended schema for what may be true of many causes and effects, the neo-Humean form of causal generalization can't be right.

Natural scientists, though, do discover truths of this form: "'If some B-like thing happens to a substance s , and an A-like thing does not then happen to s , there must be some cause'" (138).²⁴ We often know some such causes, and the fact that we don't or can't know *all* that could operate as one doesn't imply that there are no strict regularities *in rebus*. Indeed, such loose regularities as we do experience help us discover truths about substances--truths quite

²⁴This point needs an example; I refer the reader to Anscombe's (138), which is that of the flash-point of matches.

ence help us discover truths about substances--truths quite consistent with there being some strict regularities *in rebus*. Taking this as a cue, the event-determinist might object thus: "Our experience may contain relatively few strict regularities, and our talk of causes needn't rely on them, but that doesn't show that causes don't necessitate their effects. All you've shown is that causation is not expressed, nor need we express it, in exceptionless empirical generalizations. I grant that many, even most, such generalizations are false, and that all are defeasible in principle. But to infer from this that causation *in rebus*--as distinct from our experience and our uses of 'cause'--needn't involve necessitation would be to argue *ad ignorantiam*. In fact, the 'must' in your schema for truths about substances highlights that schema's consistency not only with there being some strict regularities *in rebus*--which you seem to concede--but also with causal necessitation conceived as *compulsion* of effects by their causes. And it is the latter sort of necessitation that I'm affirming." The rest of Anscombe's argument may be understood as a reply to this objection.

At issue now is what I formulate as the thesis of *de re* causal necessitation:

(CN) For all occurrences x and y , if x is caused by y , then x is uniquely pre-determined by y .

Why this formulation? In general,

When we call a result 'determined' we are implicitly relating it to an antecedent range of possibilities and saying that all but one of these is disallowed. What disallows them is not the result itself but something antecedent to the result. The antecedences may be logical or temporal or in the order of knowledge. Of the many--antecedent--possibilities, now only one is--antecedently--possible (141).

And in the case of events, "...to give content to the idea of something's being determined, we have to have a set of possibilities, which something narrows down to one--before the event." Every event is, of course, trivially determined when it happens: necessarily, whatever is-the-case-at-t, is-the-case-at-t. In that irrelevant sense, every event is necessary and thus determined. Moreover, if everything that has already occurred is now unalterable, then the past is necessary and thus determined. But neither of these kinds of determination are what is typically meant by saying that an event is necessitated and thus determined by its cause(s). What is typically meant is that, if an event is determined by its cause(s), then its cause or causes uniquely predetermines it.

For both Anscombe and me, however, neither the causal antecedent(s) of an event nor the event has to be represented by a singular term. What, then, might "narrow down"

the possibilities to one and thus pre-determine what actually happens? Well, determinists often formulate their doctrine thus: "given the past and the laws of nature, there is only one possible future."²⁵ The great advantage of a formulation like this is that it simplifies the tangled and secondary matter of the relevant content of a given event's causal antecedents. No human knows all that is prior to any given moment in time, or all that is now going to be the case; no reputable scientist pretends anymore to know all the laws of nature. Very often, therefore, we can't be sure of knowing all the content of an event's temporal antecedents that would be relevant to specifying that event's determining cause, if there is such a cause; nor can we know enough about the present to predict the one possible future, if there is such a future. Freely acknowledging all this, some people still believe that, for any time t , what occurs before t , along with the laws of nature, determine what occurs at t . Since they can't know the whole of what occurs before t , or all the laws that, along with it, supposedly determine what occurs at t , it's simpler all around just to

²⁵Van Inwagen 1983, 65 uses this definition to introduce the sort of determinism that he expresses more technically for purposes of refuting it. Cf. Anscombe 1981, II, 141.

take an event before t and speak of the former's uniquely predetermining some event at t . Either event could be as large or small, as mutually close or distant, and as fully or sketchily described, as would suffice to encompass the relevant factors. So if the past and the laws of nature uniquely determine the future, then for any t , something occurs before t that uniquely determines something that occurs at t . This justifies Anscombe's and my claim that, for determinists, every event is uniquely determined by an event temporally antecedent to it. Hence, CN fairly formulates the thesis at issue.

Using both real examples and a technically modest imaginary one, Anscombe shows that there is no empirical basis for CN. First, there are cases in which Newtonian mechanics can't be used to calculate the paths of macroscopically large bodies precisely enough to allow prediction of their motion at a given time and place (139ff; cf. Lande 1958). It won't do for the determinist to reply that this is due to the finite accuracy of measurements, and that were our measurements perfectly accurate, we could see how the paths of the bodies in question were uniquely determined some time before being taken. For that would involve measuring to "so small a compass that he'd be down among the sub-microscopic

particles...a region where Newton's mechanics are no longer believed" (140).²⁶ Nor can the determinist now reply that microscopic indeterminacy--if it obtains *in rebus* and does not consist merely in unpredictability--always leaves macroscopic determinacy intact. Another example, cited by Feynman, indicates that microscopic indeterminacy can make for macroscopic indeterminacy: "...a bomb is connected with a Geiger counter, so that it will go off if the Geiger counter registers a certain reading; whether it will or not is not determined, for it is so placed near some radioactive material that it may or may not register that reading" (144; cf. Sorabji 1980, 28). In all these cases, there is a sense in which we are justified in speaking of the events' "coming from," "arising out of," "being derived from," earlier events, and thus of their being caused; but there is no *empirical* justification for saying that they are uniquely predetermined.

This is not to deny that some or even many physical events uniquely predetermine events they cause; nor is it even to assert that Newtonian mechanics, properly restricted in scope, are ever "violated." But:

²⁶Heisenberg's uncertainty principle is not decisive for the dispute. If true, that principle establishes predictive uncertainty but not real submicroscopic indeterminacy; if false, we are still left with the problem of the accuracy of measurement. Cf. Powers 1982, 138-152.

It is one thing to hold that in a clear-cut situation--an astronomical or a well-contrived experimental one designed to discover laws--'the result' should be determined, and quite another to say that in the hurlyburly of many crossing contingencies whatever happens next must be determined (143-44).

To be justified in saying the latter, we would need a true and fully comprehensive physical theory T that would let us predict, from the laws contained in T and any true statement describing the universe's condition at a time t , anything that would occur after t . Only thus would we be justified in saying both that T 's laws cover anything that happens from t onwards, and that there is such a fact as the universe's-condition-at- t expressible in principle as fully covered by T 's laws. But there's no empirical justification for either of these statements. Hence, there's no empirical basis for CN.

If so, then there's no such basis for $E_n D_0$ and, hence, for $E_n D$ and E_n . For $E_n D_0$ would be empirically credible only with the strong accumulation of evidence that physical causes of events--which on any showing CAS-explain those events--uniquely predetermine them. Such evidence doesn't exist and isn't forthcoming. Nor, by the same token, is there any ground for believing that something called "the progress of science" makes event-determinism look more and

more likely. It's not just that physics now is to some extent indeterministic, though that is more important than many admit; rather, the theoretical and observational resources that would be necessary to verify event-determinism *a posteriori* are simply not available to us. We don't know that the laws of physics--whatever the true laws are--will continue to hold in the future, nor do we know that any law that will in fact continue to hold will also exhibit the compulsion of events by their causes, as opposed to mere probabilities. Event-determinism seems to be an article of faith, not an empirically establishable fact.

Of course, some determinists would regard all this as beside the point. They would concede *ab initio* that mere evidence doesn't establish event-determinism, while insisting that some *a priori* truth establishes general determinism (GD). And this, I think, is the only remotely promising strategy for the defender of E_n to adopt. Recall that CAS-explicability doesn't entail exhaustive explicability. Hence, if E_n is true, it is true not as an entailment but as a generalized material conditional. So if we can know E_n to be true, that will most likely be in virtue of our knowing the truth of its generalized consequent; the truth of that consequent follows from the truth of E_n 's generalized con-

sequent; and the truth of that latter generalized consequent follows from the truth of GD. Therefore, if there is some clear *a priori* basis for GD, then there is such basis for $E_n D$ and hence E_n .

I.6 The Principle of Sufficient Reason

The Principle of Sufficient Reason (PSR) is the most obvious candidate; at any rate, it is one of the few that is even ostensibly eligible. And it has enjoyed many adherents since Leibniz first coined the name. But no version I know of entails GD.

Some determinists, for example, might cite as PSR the truism that there are sufficient conditions for anything that happens. But this doesn't even suffice to establish event-determinism, much less GD. Consider

(7) For any *o*, *o* occurs *iff* conditions sufficient for *o* obtain.

The left-to-right half of this biconditional, namely,

(7a) For any *o*, if *o* occurs, then conditions sufficient for *o* obtain,

is construable as a statement an indeterminist could happily accept. As Anscombe (135) says, "'sufficient condition' sounds like 'enough'. And one may certainly ask: may there not be *enough* for something to have happened--and yet it not have happened?". From this point of view, (7a) could be construed as

(7a*) For any *o*, if *o* occurs, then there is *enough* for *o* to occur.

An indeterminist who believes that all occurrences are caused but that not all causes necessitate their effects may happily accept (7a*). He could grant that there is always enough for whatever happens, while insisting that there being enough for some particular thing to happen does not always make that thing happen, or make *it* happen *rather than* something else that could happen under the very same conditions. On the other hand, the right-to-left half of (7), namely,

(3b) For any *o*, if conditions sufficient for *o* obtain, then *o* occurs

sounds very much like a common *definition* of 'sufficient condition' as a term of art, rather than the sort of generalization the event-determinist wants. To get closer to his desired generalization, he should construe (3b) as

(3b*) For any *o*, if there is *enough* for *o* to occur, then *o* occurs.

But in fact he needs something still stronger than (3b*). Recall Taylor's definition of determinism: "for anything that happens there are conditions such that, given them, nothing else could happen." To capture this, (3b*) would have to be changed into:

(8) For any *o*, if there is enough for *o* to occur, then *o* occurs and no *o'* incompatible with *o* could occur.

But (8) is just another way of stating what is at issue, and in no way advances the event-determinist's side of it.

In most versions, PSR is quite consistent with the falsity of GD. One of Leibniz's formulations is: "nothing happens without a reason," which as stated implies only that every occurrence is CAS-explicable.²⁷ Schopenhauer (*FR*, p6) quotes Wolff's stronger and more general version with approval: "Nothing is without a ground or reason why it is rather than not"; but not even this implies that all grounds or reasons necessitate what they explain. Neo-scholastics have employed this or that version for apologetic purposes; Maritain formulated one for which, refreshingly, he tried to argue.²⁸ But though any neo-scholastic would affirm that every being (etc.) is CAS-explicable--as willed by God--no neo-scholastic would affirm GD or maintain any principle from which GD can be shown to follow. More recently, Nozick (1981, 140-42; 671-74) has formulated a weak version covering "truths"; but that version neither entails nor is intended to entail GD.

²⁷I owe this reference to Curley (1972, 96) who cites others as having uncovered it in unpublished texts.

²⁸Maritain 1962, 99-100. For criticism, see Ross 1980a, xxxi-ii, who also cites several other neo-scholastic sources for PSR (291n).

Leibniz did, however, have another formulation that, in light of some things he says about creation, might be construed as entailing GD: "no fact can be true or existing and no proposition veritable, unless there is sufficient reason why it is so and not otherwise" (PPL 1049). And Schopenhauer said that the principle is "the sole principle and sole support of all necessity. For necessity has no true and clear meaning except that of the inevitability of the consequent with the positing of the ground" (FR, p225). But the version of PSR to which Leibniz is in fact committed is: what exists (etc.) necessarily is as such exhaustively explicable, and the existence of the actual world as a whole is exhaustively explicable by what is itself CAS-explicable (hereafter 'PSR-L'); I shall focus on PSR-L's second conjunct, which is more controversial than its first. The version to which Schopenhauer is committed is: each of the world's constituents is exhaustively explicable by some other such constituent that is itself exhaustively explicable (hereafter 'PSR-S'). Neither PSR-L nor PSR-S entails GD. So, if I am right to ascribe them to Leibniz and Schopenhauer respectively, then E_n can't be inferred from the two major historical versions of PSR. But we can learn interesting lessons from examining those versions.

It may seem that PSR-L and PSR-S aren't so much versions of PSR as conclusions of complex arguments in which PSR could be a premise. But one can't understand what Leibniz and Schopenhauer each mean by PSR without some idea of what levels of explanation they think things severally or collectively admit. That requires in turn that one have some idea of what they think there is. PSR-L and PSR-S reflect my effort to meet these requirements. And even if my interpretations are wrong, there is no way to understand the versions of PSR the two men did hold without bringing in theses peculiar to their respective philosophies. That militates against the notion that history reveals a general, plausible form of PSR from which GD follows.

Leibniz thought that God creates the best possible world; in so doing, God "selects, as it were, from an infinite number of all possibilities" (PPL 9). That is supposed to explain why our world is actual rather than any other; but the very notion of a best possible world is dubious, and that by itself should give us pause about Leibniz's metaphysics.²⁹ Aside from this difficulty, Leibniz's

²⁹For arguments that there could not be any such thing, see Ross 1980a, 268 ff; McTaggart 1927, Vol. II, 814-16; Aquinas, *ST Ia Q25 A6 ad3*.

account of creation suffers from a confusion that complicates understanding what version of PSR he really held. I shall now show how ascribing PSR-L to Leibniz isolates and explains the confusion, and thus helps answer the puzzling question in what sense he believed it "certain" that God would *freely* actualize the best possible world. That will in turn show not only that GD doesn't follow from PSR-L, but that Leibniz would have benefited from distinguishing sharply between CAS- and exhaustive explanation.

He denied that the world's actual existence is necessary in one sense:

...though God always assuredly chooses the best, this does not prevent something less perfect from being and remaining possible in itself, even though it will never happen, for it is not its impossibility but its imperfection which causes God to reject it. Now, nothing is necessary whose opposite is possible.³⁰

For consistency's sake, Leibniz cannot say that God's "always assuredly" choosing the best is such that supposing the opposite implies a contradiction. If it did, then the existence of the actual world would be logically necessary in that sense--the denial of which is clearly implied elsewhere in this very passage. So, Leibniz says, "we must dis-

³⁰"Discourse on Metaphysics" xiii, PPL 477-78. Cf. Rescher 1952 and Wilson 1972, 415ff.

tinguish between what is certain and what is necessary," and God's creating the best possible world is thus certain but not necessary. But even if $\neg p$ doesn't imply a contradiction, p may be a truth that is necessary in some other sense. And Leibniz is committed to saying that the proposition 'God creates the best possible world' is necessary in at least one such sense.

Later in the passage, Leibniz draws his well-known distinction between necessity *ex hypothesi* and "absolute" necessity. A being (etc.) x is necessary in the former sense if, given something else y , it is impossible that x not exist (etc.); x is necessary in the latter sense if it is "impossible in itself" that x not exist (etc.), i.e., if the statement that x does not exist (etc.) implies a contradiction. In a letter of 1671, Leibniz had also said that "since God is the most perfect mind...it is *impossible* for him not to be affected by the most perfect harmony, and thus to be *necessitated* to do the best by the very ideality of things."³¹ From this and other passages³² one may conclude

³¹PPL 9; my emphasis. From the context it is clear that this phrase refers to the fixed respective contents of the infinitely large number of possible worlds.

³²Especially in the *Theodicy* (see Ross 1980a, 281ff.), where Leibniz describes God as "the Absolutely Perfect Being" who "must act for the best."

that God's choosing to create the best possible world is hypothetically not absolutely necessary. While God's not creating the best possible world does not imply a contradiction, the "most perfect harmony" of that world necessitated God's creating it: it is impossible *ex hypothesi* for the most perfect mind to do otherwise in face of the most perfect harmony. Now if this sort of necessitation isn't logical, it's hard to see what else it could be.

All the same, Leibniz always insisted that God has thus acted *freely*. What this meant is intensely obscure. The letter quoted above says that God's being necessitated to create the best possible world "in no way detracts from freedom. For it is the highest freedom to be impelled to the best by a right reason. Whoever desires any other freedom is a fool." Being "impelled" to do something--i.e., having a strong impulse or drive to do it--is certainly *consistent* with being free, though not sufficient for it. In the context of this letter, however, the use of 'impelled' seems equivalent to that of 'uniquely determined'. And nothing but bluster has been offered to tell us why we should believe that freely doing A is consistent with being uniquely determined to do A (perhaps Leibniz was influenced by Spinoza in writing the letter). As late as 1697, Leibniz

was saying much the same thing.³³

But of course, Leibniz said other things about God's freedom. E.g., "God sees existent things by consideration of his own free will and his own decrees, of which the first is to do everything in the best way and with supreme reason" (PW 111). This implies that God's creating the world is *contingent* on his first decree, and the first decree seems itself to be free in a sense clearer than that in which the Leibniz of 1671 ascribed freedom to God's creating the world. To specify that sense, it's no use analyzing Leibniz's claim that God was "inclined" without being "necessitated" to create the best possible world.³⁴ But such an analysis does yield an important clue to identifying the central confusion in Leibniz's doctrine of creation--one that will persist in Leibniz's bolder attempt to characterize God's freedom.

God's will is "more *inclined* to the alternative it takes, but is not under the necessity of taking it. It is certain that it will take it without its being necessary for

³³"On the Radical Origination of Things" (PPL 793).

³⁴For a list of references to this distinction, see Wilson 1972, 413n., whose effort to find a way for Leibniz to argue that God is determined but free have helped me formulate my own view.

it to do so." This sounds artificial--at least in the case of humans. To be inclined without being necessitated to do something suggests not that one is certain to do it, but only that one is more likely than not to do it. Worse, Leibniz also says that, although God didn't create the world by the "brute, metaphysical necessity" of Spinoza, he did create it by a "moral necessity."³⁵ This makes things doubly confusing. Leibniz wanted to claim *both* that God could have refrained from acting as he does *and* that God's act is sufficiently explicable by the reason for it. The problem is that he didn't distinguish CAS-explanation from exhaustive explanation, which would have made it easier to say outright that this world's being the best possible is sufficient reason for God's creating it without compelling God to create it. So, having shown necessity out the front door by saying that God was "certain but not necessitated" to create the world, Leibniz brings it in through the back door by saying it was by "moral necessity" that God did so; otherwise--so the fear seemed to be--explanation of the world might remain absent. Now if we assume he used the two

³⁵For these two and parallel references, see Lovejoy 1936, 172, 69n., who calls the distinction between inclining and necessitating reasons "manifestly without logical substance."

quoted terms to express the same idea, he was able to preserve bare formal consistency. Thus it is certain or morally necessary that God create the best possible world, without its being necessary *in itself*--i.e., logically necessary in the sense defined above--that God do so. But it still seems that God's creating the best possible world is necessary *ex hypothesi* given his first decree and the content of this world *qua* possible world. Over the latter God has no choice;³⁶ and one still wants to know the sense in which the former is supposed to be free.

Curley (1972, 96) quotes an obscure passage that seems to give us that sense:

If anyone asks me why God has decided to create Adam, I say, because he has decided to do the most perfect thing. If you ask me now why he has decided to do the most perfect thing, or why he willed the most perfect...I reply that he has willed it freely, i.e., because he willed to. So he willed because he willed to will, and so on to infinity.

³⁶possibles can move God to act because they "exist in a certain region of ideas...namely, in God himself...since, furthermore, existing things can come into being only from existing things, as I have also explained, it is necessary for eternal truths to have their existence in an absolutely or metaphysically necessary subject, that is, in God, through whom those possibilities which would otherwise be imaginary are (to use an outlandish but expressive word) realized. "On the Radical Origination of Things" (PPL 793).

Curley goes on to say that this "the only one of the various ways in which Leibniz invokes infinite processes which seems to me to have any bearing on the problem of contingency." Yet Ross (1980, 300ff.) argues that a regress of choices affords sufficient reason for the world's existence only if it is itself logically necessitated by the divine nature--in which case, given God's omnipotence, the actual existence of the best possible world would, for Leibniz, be logically necessitated. I will question a key premise of Ross's argument in the next section. For now, note that the mere existence of this passage is strong evidence that Leibniz did not think God's first decree to be necessitated by the divine nature in conjunction with the best possible world *qua* possible. Otherwise, why posit an infinite regress of willings to explain God's issuing it? Nevertheless, although he has, in effect, told us what he believes the freedom of God's first decree to consist in, Leibniz fails to answer the question he sets himself. It's important to understand how.

The regress does form an account--albeit an unsatisfactory one--of how God wills the most perfect. But the regress doesn't tell us why God "wills the most perfect" to any greater extent than that to which the most perfect alone

does. If the regress contained a further willing of something other than the most perfect, for the sake of which the most perfect is chosen, then it might help explain why God wills the most perfect. But it doesn't and couldn't. In any case, the question why God wills the most perfect already has a perfectly good answer: nothing is as good as the most perfect. If the actual world is the best possible world, then that answer is explanation enough--even if nothing compels God issue his first decree, and even if there is no regress of willings to explain how God otherwise issues that decree.

To make sense of Leibniz's treatment of creation one must, I think, ascribe PSR to him in terms of his possible-worlds ontology, while allowing that God's first decree may be only CAS-explicable. Hence the second conjunct of PSR-L: the existence of the actual world as a whole is necessarily exhaustively explicable by what is necessarily CAS-explicable. The actual world is the sort of thing--i.e., a possible world--whose actuality has to be explained by something else that determines *this* world to be actual rather than any other possible world. But that something else can't itself be necessary, else ours would be the only possible world. Accordingly, the world's existence is explained

as determined by a necessarily existent being's free but necessarily effective decision to do only the best--a decision that *uniquely* determines that the best possible world be actual. For purposes of explaining the world's actuality exhaustively, it therefore doesn't matter that God could have done otherwise than decree that he would do only the best. Of course, if PSR is to have any force, that decree must be at least CAS-explicable. But for Leibniz, it *is* CAS-explicable: whatever the best may consist in, the best is patently sufficient reason for God's deciding to do only it.

What the most perfect or best possible does, if it exists, is CAS-explain why, given that God *wills* to act *ad extra*, he wills to act one way rather than some other way. One might think that, for Leibniz, the best possible thing is the only thing God could do. I don't see that this is so; but it might be argued that, *ex hypothesi*, each willing in the regress uniquely determines the willing of which it is a willing; for if God is necessarily omnipotent, then each of his willings are necessarily effective; so, his issuing the decree is uniquely determined by his willing to do so. And if the regress served any of Leibniz's purposes in

positing it, this argument would supply good reason to admit that he was committed to holding the first decree to be exhaustively explicable.

But not only does the regress not help explain why God issued the decree, it doesn't even tell us what it also purports to tell us, namely, what the freedom of God's first decree consists in. Leibniz clearly implies that it is in the *regress* of willings that the freedom of the terminal decision consists. But nothing the passage says implies that this regress is not itself uniquely determined by the divine nature and the content of the world *qua* best possible. The fact that the infinity of the regress seems to be thought necessary for the freedom of the terminal decision is irrelevant; for the decree's being free has not been shown incompatible with the *infinite* regress's being uniquely determined by something other than God's choice. And yet, if Leibniz did think the decree's being free compatible with its being uniquely determined by something other than God's choice, he could simply have held to the crudely compatibilist idea of freedom he had expressed as early as 1671. That he was not content to do this is clear just from his dreaming up a regress such as this in the first place. But since the regress doesn't do its job as an explanation

simpliciter, one can't rightly call it an exhaustive explanation. I conclude, then, that the regress is best regarded not as something Leibniz was committed to as an account of the freedom of God's decree, but as an off-handed and hopeless attempt to have things both ways: to depict as exhaustively explicable something that could have been otherwise given what explains it.

It was, I suspect, the intellectual climate of the age that made Leibniz unwilling to come right out and say that the divine decree, unlike the world's existence, is not exhaustively explicable. At the dawn of modern natural science, it was tempting for him to try to stretch CAS-explanation into exhaustive explanation. This is what led him to introduce an infinite regress of divine decisions in the vague hope of fortifying his CAS-explanation of God's first decree with a sort of explanation that might (alone or together with the other sort) do the work of an exhaustive explanation. But he remained committed to holding as exhaustively explicable only the world's and God's existence, not God's first decree, which could consistently be called free in any sense that preserves its reasonableness. This helps explain the transparently inadequate way in which he posited the regress. It is also one reason Curley (1972)

and Brown (1984, 111-12) are right to reject the interpretation by which Leibniz's mature version of PSR puts it as a corollary of the strong *in esse* principle (*praedicatio inest subjecto*) by which all truths are analytic. If that interpretation were correct, the question whether God could have refrained from issuing his first decree would, it seems, have to be answered "no" even by the later Leibniz. Since Leibniz did not stay with that answer, we may doubt that he ultimately held PSR in a form that would have inclined him to stay with it.

Notice that GD doesn't follow from PSR-L alone. For PSR-L leaves open the question whether God's first decree is exhaustively explicable, and so leaves open the question whether everything that does not exist (etc.) necessarily is necessitated by something else. Even if Leibniz was committed to holding the decree exhaustively explicable--which, as I have shown, there is every reason to doubt--PSR-L stands or falls with Leibniz's possible-worlds ontology, whose notion of a best possible world is itself dubious. At any rate, I know of no interpretation that ascribes to Leibniz a more intrinsically plausible doctrine from which GD would follow. Interpreting PSR as a corollary of the *in esse* principle certainly doesn't ascribe such a doctrine to Leib-

niz, aside from the textual demerits of that interpretation. And so Leibniz doesn't pose a serious threat to my denial of E_n . But his confusions do illustrate how useful the distinction between CAS- and exhaustive explanation is.

Schopenhauer expanded and republished his doctoral dissertation *The Fourfold Root of the Principle of Sufficient Reason* as "the basis of my whole system" (FR, p. xxvi). Although I have formulated PSR-S using the phrase "the actual world's constituents," that is only a rhetorical convenience. Schopenhauer had no truck with Leibnizian possible worlds; indeed in his one-paragraph dismissal of Leibniz's contribution to PSR's development, he doesn't even mention them (FR 24). PSR-S "does not issue directly from one kind of fundamental knowledge but primarily from *different* kinds in our mind" (FR 3). To understand what this means is to understand the scope of PSR-S.

The four root-principles of sufficient reason--those of *becoming, knowing, being, and willing*--give rise to the principle "in its universality" by expressing in their several ways a certain sort of "connection" among our "representations." Here is the main passage where this is put forth:

Our knowing consciousness...is divisible into subject and object, and contains nothing else. To be object for the subject and to be our representa-

tion or mental picture are the same thing. All our representations are objects of the subject, and all objects of the subject are our representations. Now it is found that all our representations stand to one another in a natural and regular connection that in form is determinable *A PRIORI*. By virtue of this connection nothing existing by itself and independent, and also nothing single and detached, can become an object for us. It is this connection which is expressed by the principle of sufficient reason in its universality (*FR* 41-2).

The world, as I use the term in stating PSR-S, is thus the whole sphere of human representations--everything interconnected as "objects for the subject." The world's constituents, as I use the phrase in stating PSR-S, are just those objects. What the objects severally are needn't concern us in any detail. The main point is that for Schopenhauer, PSR is an *epistemological* principle, by which any object we can know is connected in a natural and regular way with some other object we can know. This restriction should not be forgotten when we read that "the general meaning of the principle of sufficient reason may, on the whole, be reduced to the fact that always and everywhere each thing exists merely *in virtue of another thing*" (*FR* 232).

Prima facie, it seems superfluous for us to bother any further with Schopenhauer. If PSR-S is just a principle governing the contents of our minds, then GD doesn't follow from it. Indeed Schopenhauer says that PSR "cannot be ap-

plied to the totality of existing things, to the world, including the intellect in which the world presents itself," still less to "the thing-in-itself that manifests itself in the world" (*FR*, 232-233). But to leave things at that would be too facile and would miss an important opportunity. Other passages indicate that the general form of that connection by which each thing exists "in virtue of another thing" is that of exhaustive explanation. And if Schopenhauer's epistemology were essentially correct, then we could never identify a counterexample to E_n --i.e., something CAS-explicable but not exhaustively explicable. For nothing that would be such a counterexample could be an object for us. If true, this would rob the concept of mystery of the sort of interest I claim for it. And so it is worth showing that Schopenhauer hasn't really got an argument for PSR-S.

In *FR* §49, we hear that "there is a fourfold necessity corresponding to the four forms of the Principle of Sufficient Reason." This is

- (1) Logical necessity, according to the Principle of Sufficient Reason of knowing, by virtue whereof, once we have admitted the premises, the conclusion must be admitted without question;
- (2) Physical necessity, according to the law of causality, by virtue whereof, as soon as the cause has appeared, the effect cannot fail to appear;
- (3) Mathematical necessity, according to the Principle of Sufficient Reason of being, by virtue whereof every relation, stated by a true geometrical theorem, is as that theorem affirms it to be, and every correct calculation remains irrefutable.

(4) Moral necessity, by virtue whereof every human being...after the motive has appeared, must carry out the action which alone is in accordance with his inborn and immutable character. This action then ensues just as inevitably as does every other effect of a cause...(226-27).

As the uses of the definite article in (1), (2), and (4) before the *explicanda* suggests, the general form of these necessities is that of unique determination; and (3) is just a way of stating the necessity of all mathematical truths, which we may assume are uniquely determined. Much of the book is taken up with explicating these forms of necessity, in order to exhibit how the existence (etc.) of each object is exhaustively explicable by some other such object.

Now Schopenhauer rejects any attempt to prove PSR (§14), saying "as I hope to show through this essay the different laws of our cognitive faculty, of which the Principle of Sufficient Reason is the common expression, it will follow as a matter of course that the principle in general cannot be proved" (FR 32). But this statement can't be taken at face value. Suppose *arguendo* that PSR is true in *some form or other* as the common expression of the laws of our cognitive faculty, so that one can't adduce a proof of it or anything else without relying on it. The fact remains that the principle is true in *some particular form* only if the laws of our cognitive faculty are such as to verify that

form as their common expression. To show a *priori* what those laws are is precisely what Schopenhauer sets out to do; in that sense, he can be said to be trying to prove PSR in some particular form.

A few lines later his confusion emerges starkly.

Moreover, to seek a proof of the Principle of Sufficient Reason in particular is especially absurd and is evidence of a want of reflection. Every proof is the demonstration of the ground or reason for an expressed judgement which precisely in this way obtains the predicate true. The Principle of Sufficient Reason is just the expression of this necessity of a reason or ground for every judgement. Now whoever requires a proof for this principle...already assumes thereby that it is true...(FR 32-3).

To what, exactly, does the phrase "the expression of this necessity of a reason or ground" refer? It would indeed be "especially absurd" to require proof of the belief that to show an expressed judgment p true one must cite its reason or ground--if we take "reason or ground" simply to mean that in virtue of which p is true. On this reading, PSR means that it is necessarily true that any true judgment is true in virtue of what makes it true. But since one could consistently affirm this triviality and deny PSR-S, it would be fairer to interpret "the expression of this necessity of a reason or ground" differently.

Perhaps it refers to the sort of necessity expressed by

(9) For all p , if p , then for some q , q and q necessitates that p .

This is unclear; on one construal it follows by existential generalization from a trivial truth:

(9*) For all p , if p , then [p & necessarily (if p then p)].

But (b) is clearly not what Schopenhauer wants. What he does want is PSR-S. But then the passage doesn't tell us what would be so absurd about asking for a proof of PSR-S--nor, as the plan of the rest of the book indicates, did Schopenhauer really think it would be absurd to ask for such a proof.

The non-trivial thesis that Schopenhauer didn't try to prove is also to be found in the essay *On the Freedom of the Will*: "as soon as we recognize something to be a consequent of a given ground, we see that it is necessary. This is so because *all grounds are compelling*."³⁷ Lest this be thought to hold only for deductive inference (from either truths or falsehoods) and thus to describe only logical necessity, recall that in his discussion of necessity toward the end of *FR*, Schopenhauer says that "necessity has no clear meaning except that of the inevitability of the consequent with the

³⁷*FW* 6, emphasis added; cf. *FR* 229.

positing of the ground," and that PSR is "the sole principle of necessity." Hence, PSR is the principle that every connection between *explicantia* and *explicanda* is necessitating in the way a logical consequent is compelled by its logical grounds. Schopenhauer does not think that this *established* so much as *exhibited* by the four roots of the principle. But this approach is justified only if all *explicanda* are necessitated by their *explicantia* in the way that the premises of a valid argument necessitate their conclusion. Schopenhauer not only doesn't try to prove this; he gives us no particular reason to believe it.

I can indeed find no principle called PSR that both entails GD and is bolstered by a serious argument. But there is a doctrine that, in at least two of its major versions, does entail GD: the doctrine that the actual world is the only possible world. Since that doctrine also entails that the world necessarily exists, I shall reserve treatment of it for II.3, where I argue that the world is contingent. What I have shown so far is that E_n can't be shown true either empirically or by appeal to what has, historically, been the only major candidate for a universal principle of explanation.

I.7 The Principle of Omni-Explicability

Even if PSR has no clear and plausible form from which GD would follow, it does seem reasonable to believe that every being (etc.) is CAS-explicable: the principle of omni-explicability (POE). We don't know how much humans may learn and explain in the future; and as I said in I.3, even if there are some things humans could never know or explain, we don't know what other LRKs there now are or might come to be; if there are or will be any other LRKs, they might have much greater capacities for knowledge and explanation than we. And it is not impossible that there be an essentially omnipotent knower who would know a CAS-explanation for each.

In a trivial sense, every true proposition has sufficient reason: for every truth has the truth value it does in virtue of its truth conditions, which are sufficient for a proposition's being true. But if POE is true, then there is also a non-trivial sense in which every truth has sufficient reason. For each existential truth, general or particular, would be such that what it says exists (etc.) is CAS-explicable. Moreover, every true universal generalization is true in virtue of beings (etc.) that are members of the domain of its quantifier(s). Now if POE is true, then the existence (etc.) of each and every one of those beings (etc.) is CAS-

explicable. Anything in virtue of which a universal generalization is true is thus CAS-explicable; hence, so is any true universal generalization.

Of course, if every truth has sufficient reason in this sense, we must relativize 'sufficient' to the aims of this or that inquirer. Every true *p* is such that its truth can be explained in a way satisfactory for some inquirer's main purpose is seeking an explanation of the existence (etc.) of what *p* says exists (etc.). This means that every being (etc.) can be explained in a way *sufficient for* satisfying the aim of that sort of inquiry.

As I noted in my discussion of 'sufficient conditions' at the beginning of the previous section, 'sufficient' sounds like 'enough'. This does not give the sense of the term of art that many employ in talk of sufficient conditions or sufficient reason. By 'sufficient' they mean 'necessitating'. Thus Ross (1980a), who believes that God created this particular world but that nothing necessitated God to create anything at all, thinks that this entails the falsity of PSR (294ff.). This is why he says that if God's choice to create is not necessitated by the divine nature or anything else, there isn't sufficient reason for the world's existence. But if POE is true, this doesn't follow. Not all sufficient reasons need be necessitating.

Ross also acknowledges (293) that God's goodness can be called a reason for God's freely choosing to create; and as I am using the term 'sufficient', this reason is sufficient for God's creating this particular world. In general, there can be enough for some *x* to exist (etc.) without *x*'s existing (etc.); and an *explicans* can be enough to explain some *explicandum* that does exist (etc.) while not necessitating the *explicandum*'s existence (etc.). I shall now proceed to argue that the existence of the world is best regarded as both EPM and CAS-explicable by God's creating it intentionally. God's intention, I shall later argue, is to manifest his goodness by creating the world. The world is thus properly mysterious; but as such, the world has reason enough for its existence.

PART II: THE MYSTERY OF THE WORLD

"The uneasiness which keeps the never-resting clock of metaphysics in motion, is the consciousness that the non-existence of the world is just as possible as its existence."

--Schopenhauer,
Parerga and Paralipomena

II.1 The Form of the Question

Why does the world exist?

With that deceptively succinct query we can attend to, and better yet, elicit a sense of, the mystery of the world. By 'mystery' here, I allude to more than the truism that our query (henceforth 'W_?') touches on vast, perhaps inexhaustible topics. I want to argue that the world is essentially and positively mysterious (EPM): the world's existence is CAS-explicable but not exhaustively so--and something about the world, not just our epistemic limitations, explains why that's so. Moreover, the world is properly mysterious: it is CAS-explicable by someone's having effectively intended that it exist.

Philosophical theories that would dismiss questions like W_? as pseudo-questions are debatable enough themselves, and so shouldn't deter us from treating W_? as meaningful. As to its meaning, I shall show that W_? is best understood as asking for a reason for the existence of the world.

Still, I shall leave aside another question more disconcerting than W_? but possibly asked in the same spirit: "Why is there something rather than nothing?"¹ Taken

¹See Heidegger [1959] 1973, 1; Nozick 1981, Chapter 2; but cf. Leibniz, "On the Ultimate Origination of Things," *PW* 136.

seriously, this question (call it 'W_S') casts an even wider net than W_?. Nothing falls outside its scope: W_S asks not about anything in particular, but about there being something-or-other as opposed to nothing-at-all. In face of this, it's hard to see what one could denote in a relevant answer that's not at least part of what is being asked about. Short of giving up on W_S, one would have to answer that something or other--or the totality of what there is--is *self-explanatory*. That would mean that something falls within the question's scope, but so figures in a correct answer that, at a certain stage of inquiry, asking why it exists would be otiose. One might sum up such an answer as "Because _____ has to be"; in other words, something necessarily exists.

But in order to make such an answer work as an explanation rather than a dogma, one would have to focus first on the meaning of '_____ necessarily exists' and on what is thus said to exist necessarily. In Section II.5, I will indeed argue that the world is produced by a necessary existent, and in so doing will say a good deal about what that means. But if a correct characterization of the mystery of the world implies that something necessarily exists, one shouldn't make that necessary existent one's primary focus

in characterizing what's mysterious about *the world*. For unlike W_S , $W_?$ doesn't by itself call for focusing on the necessarily existent by way of giving a genuinely explanatory answer, unless the world itself necessarily exists; and as I shall use 'the world', it will turn out false that the world necessarily exists.

Indeed, if $W_?$ is to be mooted fairly, we must settle on a relevant yet untendentious definition of 'the world' by which the world is neither just all-there-is nor the sort of existent--such as a positive integer--about which it would be pointless to raise the question why it exists. We must also do so without either arbitrariness or debate over tangential complexities. But far from imposing a burden that answering W_S might avoid, that task is common to pondering of W_S , $W_?$, and any similarly framed question. That's because clarity about such questions requires that we highlight that which *actually and uncontroversially exists*, but which isn't manifestly self-explanatory; so asking about the world, in some *limited* sense of 'the world', is the obvious point of departure. To begin answering $W_?$, then, I will first craft an *ad hoc*, stipulative, but minimally controversial definition of the world, and then assert in as logically perspicuous a way as possible that the world thus defined exists.

I shall then launch the inquiry by arguing that the existence of the world so defined is both logically contingent and contingent in at least one other sense. It won't follow at once that the world as a whole is metaphysically contingent upon something extramundane. But I shall go on to argue that there's no other way the world's existence could be CAS-explicable, and that one could only argue *ad ignorantiam* that the world's existence is only essentially but relatively mysterious (ERM), or negatively mysterious (ENM). And so it will turn out that the world is best thought both metaphysically contingent upon something else and EPM. The sense of this is exhibited most clearly in classical theism.

My argumentative strategy is largely to expose the inadequacy of the main alternatives to my position. *Prima facie*, that kind of case can only be persuasive rather than probative. But as I hope will become clear, our topic by its very nature makes the inadequacy of the alternatives as strong a philosophical basis as there could be for the position I shall take up. To illustrate why, I shall engage Munitz (1965) at several stages.

II.2 'The world exists'

No construal of 'the world' would be both relevant and uncontroversial. We know what the planet Earth is, and some know what it is, along with the flesh and the devil, that young people used to be warned about. But looking for what else is needed seems endless. Taken as rough synonyms, for example, 'the universe' or 'the cosmos' denote some totality, describable as the collection of all physical objects or--perhaps better--as the system comprising that collection in a dynamic whole. But the observable universe might not be the whole physical world, and we may doubt that the physical world is the whole world. In any case, whatever the future progress of science, there is a deeper objection to the very notion of specifying "the" referent of 'the world'.

Any attempt to specify a candidate would have to be made within some theory drawn from natural language or constructed formally. If so, we must face the likelihood that there is more than one theory of sufficiently general scope and equal explanatory merit, each of which contains statements inconsistent with, or domains incommensurable with, those of the other(s). In this situation, we would lack means of adjudicating among mutually incompatible candidates

for the sought referent of 'the world'. So there would be theory-dependent ways of giving sense to $W_?$, but no best way: 'the world' bears no unique sense, and its referent actually varies with theory.²

Though the background of this objection affords ample room for controversy, let us concede that there is no theory-independent way to describe what 'the world' refers to. Nevertheless, there is a world, apart from theories of it, to which any such theory must be adequate--however one states, within some theory, what the world is and regardless of what it is, relative to some theory, to be adequate to the world. For present purposes, an adequate theory need not be a complete theory, and a theory complete for all intents and purposes isn't forthcoming anyhow. What we need and can develop is a definition that identifies what any adequate theory of relevant scope must cover--and thus what $W_?$ must be taken as asking about. That any such definition would be stipulative and theory-dependent is as irrelevant as it is unavoidable.

Accordingly, we must look to define the whole world in question, and do so in a maximally general way. This will let us identify the world in question without following the

²For the best contemporary version of this view, see Goodman 1978.

late George Abbott, Archbishop of Canterbury, whose slim volume *A Brief Description of the Whole World* is much too long for our purpose; for $W_?$ arises without our having compiled a compendium of the kinds of things the world includes, and would still arise even if we did so. I shall therefore formulate a definition that serves to identify a certain totality under a description that covers, but does not enumerate, all the kinds of constituents included by the world in question.

To the very idea of such an undertaking, somebody might object as follows. "We probably don't know all the all the kinds of things the world includes; until we do, $W_?$ either has no clear sense at all or can't be posed about the whole world it would arise about if we did know all the kinds of things the world includes. Why not? Because without knowing all the kinds of things the world includes, one can't say how they are all related to the world as a whole, and therefore what sort of whole the world is; if one can't say what sort of whole the world is, one can't be sure what would count as explaining its existence; and if one can't be sure of that, then either one can't be sure what would count as a good answer to $W_?$, or such an answer might CAS-explain not the whole world but some other, more limited totality

that is the world we know about. So either $W_?$ is unclear or it isn't asking about the whole world it would arise about if we knew all the kinds of things the world includes." Now if identifying the world for our purpose required saying how each kind of world-constituent is related to the whole, this objection would be well taken; for we can do no such thing--at least not now--any more than we can now list all the kinds of things the world includes.

But we need do no such thing. What we should and can do is identify the world $W_?$ asks about as *the actual world*, using a sense of 'actual' that is sometimes overlooked today.

For most contemporary philosophers, the actual world is a totality posited in possible-worlds semantics. That totality is typically taken to include whatever exists as opposed to whatever else might have existed, and thus excludes any and all other possible worlds. From this point of view, one shouldn't take $W_?$ as asking about other possible worlds--certainly not about the collection of all possible worlds; one should take $W_?$ straightforwardly as asking only about the actual world. Plausible though that stricture is, however, a particular disadvantage lurks for us in interpreting 'the actual world' in the present sense--which

I'll call the "conventional" sense--and a general disadvantage in interpreting 'the actual world' according to any version of possible-worlds semantics.

Claiming that the actual world, in the conventional sense, exists commits one to claiming that it is a contingent truth that ours is the actual world, and thus that the existence of the actual world is a contingent state of affairs.³ So, to identify the world $W_?$ asks about as the actual world in the conventional sense would suggest that $W_?$ arises only on the assumption that the world enjoys the particular modal status of contingency. But that would be false. Granted that the actual world, in any sense of the phrase, enjoys some-or-other modal status, $W_?$ can and does arise without one's knowing that the world in question enjoys any particular modal status. One therefore should not claim that the actual world enjoys a particular modal status in order to identify what $W_?$ should be taken as asking about. Of course, I believe it to be both true and relevant that the world is contingent; but one should argue this, not assume it at the outset. That is what I shall do: after

³The most prominent exception to this is Lewis (1986), who argues unabashedly that all possible worlds necessarily exist.

defining 'the world' and analyzing what it means to say that the world so defined exists, I shall argue that the world's existence is contingent both logically and in some other way.

But at no stage shall I use the method of possible-worlds semantics. This is not to deny that, as a way of interpreting the syntax of formal modal logic, possible-worlds semantics is heuristically useful. It is, after all, one of the few means available for evaluating modal reasoning. But getting started with possible-worlds semantics involves embracing a particular axiomatization of modal logic and then banking on its intuitive appeal to quell doubts that later ontological commitments may arouse. As a highly speculative substitute for common-sense ways of speaking, such a strategy is unlikely to convert the unconverted, especially when coupled, as it often is, with extravagant ontological commitments. Some philosophers, for example, think that if there could have been different worlds, then our world exists as one of an infinity of possible worlds and is chiefly distinguished from them by bearing the unanalyzable property of *actuality*.⁴ Others describe our world as simply one

⁴See, e.g., Plantinga 1974, 49ff. According to Adams 1979, 200, Descartes and Leibniz adhered to this notion of actuality.

among infinitely many "maximal consistent sets of propositions" (see Adams 1979). The most radical theories go further: actuality is a merely a world-indexed property, so that every possible world is actual to its inhabitants and possible to outsiders (Lewis 1986). A prominent modal realist has even said that the only feature of our world that makes it seem singular is that it's the one "we vulgarly call the actual world." We ought instead to seek a definition of 'the world' that spares us the ontological burdens of all these theories, and yet lets us identify the world $W_?$ asks about as the actual world.⁵

Thus, using Geach's (1969, 71-2; 1972, 322) notion of "real" change⁶ and J.F. Ross' (1980b) notion of "ontological parasites," I propose the following:

(WD) The world =_{def} the totality comprising all and only beings that really change ('BRCs' for short) and what is ontologically parasitic on them ('OPs' for short).

⁵For a trenchant critique of extreme modal realism, see Schlesinger 1983, 161ff.

⁶I mean 'real' as opposed to 'Cambridge' change. Thus, all changes are Cambridge changes, but not all changes are real changes. To illustrate: If Jack and Jill are the same weight at time t_1 , and Jill gains y pounds over the time period $t_1 \dots t_2$ and thus Jack, whose weight is the same at t_2 as at t_1 , becomes lighter than Jill, then Jill has undergone real change and Jack has not. Real change is Cambridge change, but not all Cambridge change is real change in the object that changes.

Henceforth, I shall use the capitalized definite description 'The World' to denote the world as defined by WD. (Why a definite description is useful will emerge later, when I discuss how 'The World exists' should be analyzed logically.)

I introduce WD in lieu of many inviting past formulations of what is meant by 'the world': e.g., 'Nature', 'the aggregate of finite things',⁷ 'the set of contingent but actual states of affairs'.⁸ Each of these has its uses. But I want to argue that the world, defined non-modally, has a particular modal status, without being more or less specific than need be. Hence 'the aggregate of finite things' is not specific enough; 'Nature' connotes only the physical as an ordered system; and 'the set of contingent but actual states of affairs', aside from other difficulties, already defines the world modally. For though 'the set of contingent but actual states of affairs exists' is not an explicitly contingent statement, the obtaining of any contingent state of affairs that obtains must itself be a contingent state of affairs. Therefore the existence of

⁷Leibniz, "On the Ultimate Origination of Things, *PW* 136.

⁸J.F. Ross 1980a, 296ff.

the set of contingent, actual states of affairs is a contingent state of affairs. To define the world as The World, however, is not to define it modally. If we can imagine a being that never undergoes real change, though it could, that is of no significance here; such a being is not included in the world $W_?$ asks about. But in order to appreciate why, and in what sense, we should regard The World as the actual world, it is essential to understand first what is and what is not involved in my defining The World as a totality.

The constituents of The World are the same as the members of the set of BRCs and OPs. But the metaphysical notion of a totality is broader and less formal than the logico-mathematical notion of a set. Although 'the totality of F's and G's' can, in some contexts, mean the same as 'the set of F's and G's', a totality *comprising* all and only F's and G's might be an actual, integral complex whole,⁹ which

⁹I define an integral complex whole ICW as an entity meeting the following conditions:

- (a) ICW contains, by some relation(s) other than that of set-membership, parts that can be quantified over as individuals in first-order predicate logic;
- (b) ICW itself can be quantified over as an individual in first-order predicate logic;
- (c) ICW contains all its parts (i.e. is not missing any parts).

it would be wrong-headed to regard as the set of F's and G's. So my defining the world as the totality comprising all and only BRCs and OPs in no way entails, and should not be confused with, defining the world as the set of BRCs and OPs. That is important because, no matter what other sort of totality the world might be or what it should be taken to comprise, we should not define the world as a set for purposes of mootng $W_?$. Nor, for that matter, should the world be defined as a collection--though I don't know how, and will not need, to rule out the possibility that the world is a loose collection rather than a complex whole.¹⁰

Non-empty sets are ontologically parasitic on at least their members. Whatever its members, the set of world-constituents is therefore an OP, and its existence is CAS-explicable as such. So if the world be defined as the set of its constituents, one could answer $W_?$ just by pointing out that each and every member of the set exists. But that would plainly be to trivialize the question. Nobody doubts that the set of world-constituents is CAS-explained by that

¹⁰If *The World* is a loose collection, then it is an OP and hence comprises itself. The queerness of this result is a disadvantage of WD only if there are strong independent grounds for regarding The World as a loose collection. As we shall see, I think there are stronger grounds for regarding The World as a complex whole.

of all its members; by the same token, nobody who finds $W_?$ worth asking would regard citing that certainty as an answer to the question.

To be sure, defining the world as a set--call it $W\{\}$ --doesn't commit the definer to trivializing $W_?$ by pointing out that each and every world-constituent exists. He could better argue that it might be possible *in principle* to answer $W_?$ by answering, for each member of $W\{\}$, the question *why* it exists. If that latter question-form is truly answerable for each member of $W\{\}$, he would say, then the question about $W\{\}$ itself is answerable in principle by conjoining true answers about each and every member of $W\{\}$. That there might not be such an answer for each member of $W\{\}$, or if there is, that no human could know and cite every one of them, would on this showing be irrelevant to specifying what would count as answering $W_?$. For there would be a truth of the matter that, if known and cited by some sort of rational knower, would either show $W_?$ unanswerable or constitute a perfectly good answer to it.

But this would not address the possibility that the world is a richer sort of totality than a set, such that $W_?$ calls for an explanation of the world's existence *qua* just such a totality. Consider an analogy. To answer truly the

question, for each State of the United States, why it exists, and then conjoin all such answers, need not and might not answer the question why the United States exists. That's because the United States is not the set of the States, but a complex whole that comprises them all in a special, humanly prescribed way. To ask why the United States exists therefore calls, among other things, for an account citing certain persons' intentions that there be that whole. Such an account need not be included in or implied by a conjunction of true statements saying, for each State, why it exists; so, such a conjunction might be at best trivial as an answer to the question. And to pretend that a conjunction that didn't include or imply such an account would suffice as an answer would be to try to trivialize the question. Of course, I have not shown that the world is a complex whole such that a CAS-explanation of its existence, if there is one at all, would involve reference to some (effective) intention that there be that whole. But neither do we know that the world *isn't* such a whole; and many who have found W_2 worth asking find it so partly because they are willing, for one reason or another, to believe that the world *is* such a whole. If it is, then even supposing someone could truly answer, for each member of

W{}), the question why it exists, a conjunction of every such answer might not be a good answer to $W_?$.

Suppose, for example, what many believe--that some such conjunction contains truths that would severally serve to CAS-explain each member of W{} in terms of the existence or activity of other members of W{}. That conjunction would serve to CAS-explain W{}, and perhaps few of the conjuncts need cite some-or-other intention; for the question "why" needn't always be construed as seeking a reason for an intentional action. But the members of W{} might, for all that, also be parts of a integral complex whole whose existence, if non-trivially explicable at all, is thus explicable only as the product of an effective intention. If they are, then that intention need not (even though it could) be cited or implied by a conjunction of explanations of the sort in question. Offering such a conjunction, then, may fail to show how the existence of the world with just these sorts of constituents, standing in just these sorts of relations to each other, is explicable in terms of an effective intention by which the world is produced as, or as belonging to, an integral complex whole. $W_?$ would not be answered in the way that the truth would call for and that many who ask $W_?$ are after. Or--to put the same point in the

slightly more technical language I used to define the sense of 'explanation' in II.2--the answer's indication that the conjunction accounts for the world's existence would be mistaken. Hence, the answer would not be a true explanation.

Of course, many people would wave aside this discussion of sets as irrelevant. They would regard any set as a merely abstract entity, unlike the world, which some would liken more to a (concrete) collection; and this certainly is a more plausible way to conceive the world than is conceiving it as a set. But defining the world as a collection presents us with a difficulty analogous to that with defining it as a set.

For one illustration, just substitute 'collection' for 'set' in the analogy to the United States a few paragraphs back. For a subtler illustration, consider collections of chess pieces. Collections of artifacts are such that one can say, for each item, why it exists: some person or group intentionally made it. As for a collection of chess pieces, one is often able to say how each piece got to be where it is--e.g., somebody put each into a particular box where they all are now. But whether all that would answer the question why a given collection of chess pieces exists depends on

whether all the pieces are parts, and were intentionally produced as members of that collection to be parts, of a particular chess set.

Suppose, for example, that collection C_1 is not complete, but consists of pieces taken from different sets by a curious pair of toddlers who aimlessly left them piled on the floor. In this case, one might truly answer the question, for each piece, why it exists and why it is where it is, and explain the existence of C_1 by conjoining every such answer, without implying that C_1 exists for any reason at all. The existence of C_1 *qua* collection--as distinct from the existence and disposition of each member of it--would not indeed admit any non-trivial explanation. Alternatively, suppose that another collection C_2 contains ten odd wooden shapes that were produced by the absent-minded whittling of two elderly family members, but were later gathered and used as chess pieces by another member, Jill, who had lost some pieces from her good set. In this case, the existence of C_2 *qua* collection admits a non-trivial explanation in terms of Jill's intention, but that explanation would not tell us either how or why any of the members came to be. Suppose, however, that another collection C_3 forms a full complement of pieces of a uniform style, arrayed on an

æsthetically complementary chessboard. One should then answer the question why C_3 exists by saying that its members were made as part of an integral complex whole--a chess set--for the purpose of playing chess. With all its parts, the chess set embodies an intention by which it was produced, and C_3 both comprises what it does and belongs to the set in virtue of that intention. In this case, an answer that merely cited why each piece exists and got to be how it is, without citing the intention embodied by the chess set as a whole, ordinarily wouldn't be a good answer and thus a true explanation.

Analogously, defining the world as a collection, while prescinding from the possibility that the members of the collection belong to a complex whole embodying an intention, risks inviting a bad answer to $W_?$. This is not to deny that the world may be a loose collection (where by 'loose collection' I mean a collection whose members do not all belong to or make up a particular complex whole). Nor is it to deny that, quite often, such collections neither call for nor admit a CAS-explanation distinct from a conjunction of explanations of each of its members' existence and/or disposition (e.g., the collection of all the objects to be found on the floor of Lake Michigan at a particular moment). In such

cases, there is no true answer to the question why the collection exists, other than a conjunction of answers to the question, for each member, why it exists and/or got to be where it is. The whole--for explanatory purposes at least--is nothing but the sum of the parts, and the collection *qua* collection is thus only trivially explicable. The same goes for any collection of objects that all belong to the same intentionally formed complex whole but need not be treated as such for purposes of a particular inquiry. And the world can be treated as a loose collection no matter how else its members may be unified. But if it is so treated, $W_?$ is not being faced squarely.

That question is being faced squarely only if one so defines the world as to allow for the possibility I have been emphasizing. For whether a conjunction of CAS-explanations for the existence of each member of a collection would non-trivially explain the existence of the collection sometimes depends on whether the members of the collection form or belong to an intentionally produced complex whole and belong to the collection at least partly in virtue of doing so. If they do, then the question why the collection of them exists should ordinarily be answered by citing that fact, even if they are severally CAS-explicable without

citing it. Hence, if the constituents of the world make up or belong to an intentionally formed complex whole, then there may be an answer to W_2 that would not be supplied just by saying how (i.e., in virtue of what) or why each exists. Therefore, just as the world should not be defined as a set for purposes of mooting W_2 , so it should not be defined as a collection.

Usage alone recommends allowing that the world may be a totality more richly unified than many sorts of collection. For when we talk about a "world," we are typically talking about a totality more richly unified than, say, a mere heap. In "the news spread all over the world," 'the world' refers to the totality of those settled areas of the Earth that form spheres of local interest intersecting with others, such that the human residents of each sphere knowingly interact with other people living in other such spheres--i.e., to nearly all the settled areas of the Earth. Each constituent of this totality is actively linked to at least one other such constituent, and thus the world in the present sense forms a totality unified in various ways. That worlds typically exhibit an actual unity--distinct from and sometimes explanatory of their constituents' membership in this or that set or collection--is still clearer when we talk

about social realities like "the chess world" or "the world of finance." However imprecise their boundaries may be, such worlds form communities of interest that include all who share the relevant interests. It is unclear, of course, whether or how all so-called worlds form complex wholes (e.g., is the world of numbers such a whole?). But entities typically called 'the world' do form such wholes: the Earth and--assuming the reliability of present scientific cosmology--the physical universe. Even if the Earth doesn't qualify as an integral complex whole and thus as a totality of sorts, the physical universe may well qualify.

Philosophical uses of 'world' are usually analogous to such others. Even when worlds have been thought to arise out of man-made "symbols" (Cassirer 1946, 8) or from mutually irreducible "systems of description" (Goodman 1978, Ch.I), the worlds in question exhibit the rich unity of myths, theories, and other comprehensive mental constructions. More traditionally, the world has been conceived as a single, integral complex whole--from the myth of Plato's *Timaeus*, where its unity is portrayed as that of a living being (30a-31b), to the systematic metaphysics of McTaggart (1927, Vol.I, 135), who thought of it as that "substance of

which every other substance is a proper part."¹¹ But because I can't digress to consider them in their respective historical and philosophical contexts, I don't propose faithful adherence to any of these precedents. My aim in citing them is simply to adduce further evidence that conceiving the world as a totality more richly unified than a loose collection is the most natural way to conceive it, and is thus part of what gives $W_?$ its force. That is another reason why we should allow that the world is such a totality.

Perhaps the most familiar way of so conceiving the world is as an integral, *causally unified* complex whole, such as some have conceived the physical universe to be. But I am not concerned at this stage with entertaining possible answers to the question: What would constitute the world's being an integral complex whole?¹² For suppose what some believe: necessarily, given the sorts of world-constituents there are, a particular set of causal laws holds,

¹¹See Geach 1979, 68ff. Curiously, McTaggart's notion reminds one of Plato's (*Timaeus* 30b), by which the living being that is the world "resembles as much as possible that of which all other beings individually and generically are parts."

¹²I will be concerned with that question in the Conclusion of this thesis.

by which each world-constituent is related to some-or-other such constituent. The world may thus be an integral complex whole whose parts are unified by that causal order of which the laws collectively express the form. If the world is like that, however, saying so would answer not $W_?$ but the question: How do the world's constituents form a complex whole? The question we would want to answer is the further one: Why does that whole exist at all? Pointing out that a particular body of causal laws explains how world-constituents come to be, interact, change, and cease to be, and that those laws give the world its form as a whole, would help *describe* the world; and this may be quite relevant to a particular sort of CAS-explanation of the world's existence. But since it would not tell us why the world exists, it would not by itself serve as an answer the question at hand. If non-trivially answerable at all, it might only be so answered by citing an extramundane intention by which the world is made as (or as part of) a complex whole comprising the sorts of things it does in ways expressible by causal laws.¹³

¹³I can find no reason to stipulate or otherwise affirm that all actual complex wholes are causally unified. So if the world is a complex whole, the relation(s) in virtue of which it is may not be causal. As far as I can see, however, the same requirements on answering $W_?$ would hold.

Equally important, the same considerations apply even if the world is not a complex whole but a loose collection including sub-worlds that are complex wholes. That the world is some such collection is not a far-fetched idea: we can reasonably affirm that the physical universe is a causally unified whole while doubting that the world is identical with the physical universe or with some larger complex whole comprising it as a part. If the world is such a collection, however, it might for all that be produced by a rational agent who could realize a single, ultimate intention of his by producing it. What such an intention might be, or how it might be embodied by the sort of world I am hypothesizing, is irrelevant here. All I want to stress, for purposes of identifying the world $W_?$ should be taken as asking about, is the possibility that that world, whether complex whole or loose collection, embodies *qua* totality a particular intention by which it is produced.

Of course, I cannot rule out demonstratively that the world is a loose collection whose existence neither calls for nor admits a non-trivial explanation. Nor can I rule out that the world might be an integral complex whole but still not be such that its existence *qua* totality calls for or admits a non-trivial explanation; such is the belief of

many physicalists. And so it would be prejudicial to leave out either possibility by definition. But it is not important that I rule out either here: whatever the truth of the matter, WD leaves the inquiry open to it. By WD, I define the world as a totality while leaving open the question whether it is a complex whole or a loose collection, and the questions whether or how it is non-trivially explicable as either. Hence, unlike a definition of the world as a set or collection, WD neither trivializes the inquiry nor runs the risk of misdirecting it.

One is justified in defining the world as the totality comprising such-and-such only if one is justified in claiming that it includes all and only such-and-suchs. Now even a loose collection is a totality of sorts: the totality of its members; so even if the world is nothing but a loose collection, we are justified in speaking of *the* world and in defining it as comprising all and only such-and-suchs, so long as we are justified in identifying the such-and-suchs in a way other than just as the members of the world-collection. Similarly, any complex whole that comprises all its parts is the totality of its parts, whatever the part-whole relation(s) may be. So if the world is a complex whole, and its parts are so specified that one may justifiably say that

the world includes all and only those parts, then one may justifiably define the world as the totality of its parts (and thus as an integral complex whole). Our next task, then, is to describe the constituents of the world $W_?$ asks about so that we are justified in saying that that world comprises all and only those sorts of things. That will also clarify how the world $W_?$ asks about is the actual world.

Whatever else metaphysical ambition must finally encompass, the world in question is *the sphere of what happens*. This is not to imply that there is only one such sphere, if by 'sphere' is meant a spatially continuous or causally unified whole. It is rather a way of taking account of the fact that whatever happens belongs to the world about which $W_?$ arises. Admittedly, how any sphere of what happens might fail to be a spatially continuous or causally unified whole is difficult to envision, and I shall not try to envision it here. But though not all that happens may happen as part of such a whole, whatever happens can be understood to belong to some totality, whether complex whole or loose collection, that includes all events. And since it is about just such a totality that $W_?$ should be understood to arise, the world $W_?$ asks about may be called the sphere of what happens.

Now the world in question needn't be described primarily via an ontology of events; nor is $W_?$ chiefly concerned with what happens to happen in that world. Without actual beings, nothing would happen and there would thus be no events; given the beings there are and have been, it's at least logically possible that things will happen differently from how they are now going to happen. So, I use 'The World' primarily to denote the entity comprising the actual beings that have been, are, and perhaps will be. I say 'perhaps' about future beings, since I want to shelve the question whether the future is determinate in such a way that all statements about it *always* have a truth value, or simply acquire them when what they say will be the case does or does not come about. Settling that question is unnecessary here; the future will include events, and hence the actual beings that, as such, are participants in events. Among participants in events, actual beings are always to be found, for those beings are the ones to which things happen: they undergo real change: hence I include all BRCs in the world, and with them all that is consequent on them, namely OPs.¹⁴ And since there are events, however one individuates

¹⁴ I shelve argument for causal efficacy in actual beings; that beings undergo real change is less controversial than any theory of agent causation.

events, I secondarily denote by 'The World' whatever events go with the actual beings there have been, are and perhaps will be, on the assumption that events are ontologically parasitic on their participants.

But why include the past and the future? After all, it might be objected that, since there are obvious senses in which the past and the future do not exist, they are not part of the world. And if $W_?$ must be read as present-tense, this objection carries weight. But $W_?$ needn't be read that way and isn't meant to be by those who find it significant. If the world is the sphere of what happens, then $W_?$ can be rephrased, consistently with what motivates it, as "Why is there a sphere of what happens?" Putting $W_?$ like this emphasizes that the world being asked about is *temporally spread out*, not just what happens to occupy the present: time as a continuum is an essential feature of the world that presents itself for our inquiry. Whatever has happened, is happening, and will happen happens in the world of $W_?$ --notwithstanding that what has already happened is unalterable, and that what is going to happen has not yet happened. As I will argue in the next section, this limits what counts as a relevant answer.

Many philosophers--let's call them "weak" Platonists--hold that much more than events "goes with" BRCs: states of affairs, relations, propositions, numbers, and a variety of other ontologically troublesome entities. Other philosophers--let's call them "strong" Platonists--go further and insist that BRCs are only *entia secundum quid*; things like properties and forms are the *entia simpliciter*. For these, BRCs "participate in," "exemplify," "instantiate," or are "bundles of" some such entities--to quote just a few of the terms used to posit the relations of actual beings to what constitutes them. Weak Platonists have common sense and their numbers going for them, but I know neither which are closest to the truth nor how to discredit all versions of strong Platonism. Fortunately, however, attention to the thrust of W_2 invites brevity about how to include abstract entities.

Whatever else the world comprises, it comprises BRCs and OPs, and W_2 applies to whatever The World in fact comprises. Now if clear sense be given to the reasonable belief that *there are* relations, states of affairs, and propositions--to take an unavoidable set of examples--then W_2 clearly applies to some of them. That's because some of them are OPs: if there were no BRCs, there wouldn't be the

relata of which some relations hold; there wouldn't be constituents for all the states of affairs that obtain; and there wouldn't be anything for many significant propositions to be about. Some abstract entities are therefore comprised by The World, which thus includes part of what many Platonists, weak and strong, want to include in the world.

Matters seem different with other abstract entities, such as mathematical ones. The most we can say without due controversy is that mathematical *truths* seem to hold irrespective of what else is the case in the world. But beyond the concomitant consensus that we can, at some levels, justifiedly quantify over them, there is nothing but dissensus about the ontological status of mathematical entities. If some of them, such as negative numbers, are human inventions, then they are comprised by The World; if all are discovered rather than invented, they may or may not be so comprised as OPs. I therefore allow that at least some mathematical entities may belong to the world to which $W_?$ applies, without asserting as much.

Matters darken still further with the things Platonists have posited in their explanations of what BRCs are. Forms such as Plato's or Aristotle's, essences, natures, and all the other denizens of the Platonist heaven traditionally

grouped under the rubric "universals" enter so differently into such divergent accounts that one can't safely say which should be included in a relevantly comprehensive theory of the world. On the endlessly controverted assumption that some of them can clearly and truly be said to exist, I find no agreement among Platonists about how to describe their relations to whatever incontrovertibly exists. So, we must content ourselves with a hedge: if some do exist, the question of how they are related to BRCs remains; if some are OPs, no special difficulty arises with including them under The World.

In fact, the world $W_?$ asks about comprises all and only what exists *contingently*; this needs further argument that I will supply soon. For now, note that using WD accomplishes my aim for it: we can thereby describe, with maximal generality, what an adequate theory of the world *must* include in the world, and thus what $W_?$ must be taken as asking about. Even so, in order to emphasize that The World is the whole world $W_?$ asks about and not just part of it, I point out that *The World is the actual world*, in the sense of 'actual' I am employing. This makes it plausible to argue that The World is contingent; for it seems that *there might have been no actual world, in this sense, at all.*

Again, this is not a notion of actuality predominant among possible-worlds semanticists, for whom the actual world comprises whatever individuals are quantified over in true existential generalizations without modal operators, along with whatever is consequent on there being such entities. Thus, the actual world is not identical with The World, and, necessarily, some world or other is actual; for even if there were no individual BRCs, there would still be true existential generalizations over abstract or otherwise changeless individuals. But this usage is degenerate and facilitates absurd results.

To say that something's belonging to the actual world means only that it verifies an existential generalization doesn't distinguish actual existence from any other sort of existence,¹⁵ which is why quantifying over possible worlds mesmerizes some people into thinking that there really are such things as possible worlds. To avoid this nonsense, one should construe 'there are other possible worlds' as a way

¹⁵As, apparently, did Frege. In the preface to Volume I of his *Grundgesetze*, Frege claimed that "psychological" logicians "have no right conception of those judgments we express by 'there is'. This existence is confused by Erdmann with actuality, which, as we have seen, is not clearly distinguished from objectivity" (Geach & Black, 1980, 126).

of saying that some BRCs and OPs other than those comprised by The World might have existed (and thus that 'The World' might have designated something different from what it does). One should construe 'there might have been no actual world' as a way of saying that nothing might have happened, i.e., that there might have been no BRCs and their OPs and that 'The World' might thus have been an empty description. For as I have already implied, it is BRCs that, in the present sense, are actual: their existence is the actualization of real potentialities, and that in turn is necessarily equivalent to things' happening, i.e., there being a sphere of what happens. A world in which nothing happens would not be an actual world in the present sense, and it would be a metaphysical conceit to call it a world at all. The actual world, as I am taking it, is identical with The World; and since there might have been no BRCs, there might have been no totality comprising them (and what is consequent on them).

So much, then, for defining 'the world'. To explain what it means to say that the world might not have been, there must be some logically perspicuous way to analyze and assert the sentence 'the world exists' without using any explicitly modal notion. Introducing 'The World', though it

supplies the logical subject of such an analysis, doesn't complete the analysis; and there are obstacles to completing it.

One obstacle arises in Wittgenstein's early philosophy. Consider the following passage:

Man has the urge to thrust against the limits of language. Think for instance about one's astonishment that anything exists. This astonishment cannot be expressed in the form of a question and there is no answer to it. Anything we can say must, *a priori*, be only nonsense. Nevertheless we thrust against the limits of language...But the tendency, the thrust, *points to something*...I can only say: I don't belittle this human tendency...I take my hat off to it...For me the facts are unimportant. But what men mean when they say "The world exists" lies close to my heart. (Rhees 1965, 7).

Now something very much like "what men mean when they say: The world exists" is part of what I shall mean by saying that The World is contingent (see below, II.3). But for Wittgenstein, this can't be expressed, any more than "astonishment that anything exists" can be expressed in the form of such questions as W_S or $W_?$. Why not?

Wittgenstein had earlier asserted that "the world is everything that is the case" (1). The meaning of that assertion depends on the theory of meaning the *Tractatus* was meant to offer. That theory has it that propositions *picture* what they say is the case; true propositions picture

what *is* the case; and what is the case is the existence (and non-existence) of "atomic facts" (2). The world is also describable as "the totality of facts" (1.1). That this totality might have been different from what it is is indeed quite conceivable. Now one might think that on the *Tractatus* theory, there is in principle a meaningful way to say that the world exists: the totality of facts is picturable by the conjunction of all true elementary propositions (call it C_w). But this wouldn't be faithful to the *Tractatus*. For C_w doesn't include the proposition that C_w includes all true elementary propositions (cf. 1.11): the proposition saying that these are all the atomic facts that exist wouldn't be included in the list of all the atomic facts that exist, and so wouldn't be what Wittgenstein called a "significant proposition" (5.525).

Moreover, C_w , even with that added proposition, would not be "what men mean when they say: The world exists." For in so saying, we intimate that the world is somehow *gratuitous* or *happenstance*; nothing about it seems to tell us that it must exist; that the world exists rather than not seems, indeed, *unaccountable*. Though consistent with that, C_w doesn't say it. And according to Wittgenstein, it's inconceivable anyway: "it is nonsense to say that I wonder at

the existence of the world, because I cannot imagine it not existing" (Rhees 1965, 8). We shouldn't be misled here by Wittgenstein's use of 'cannot imagine'; what is at stake is not what he was psychologically incapable of, but what he thought could meaningfully be said. If the world is the totality of facts--no matter what those facts may be--it is meaningless to say that for all we know the world might not have been. For that would be equivalent to saying that there might not have been any atomic facts, and thus that nothing might have been the case. Since such a pseudo-proposition couldn't picture anything, it is nonsense, neither true nor false.

From the above and other sources, however, it is plain that Wittgenstein, far from disdaining the metaphysical impulse behind the questions and claims I want to advance, had the profoundest respect for it. He insisted that what cannot be said is far more important than what can be; the chief aim of the *Tractatus* was to point to or "show" the inexpressible--"the mystical" or "the ethical" (see Fann 1969). But the theory of meaning on which he demarcated the sayable from the unsayable is one he was later to modify radically, especially with regard to its logical atomism. Aside from that theory, the famous injunction to silence at

the end of the *Tractatus* doesn't apply so forcefully. Someone might object, of course, that the later Wittgenstein, catholic though his account of meaning may have been, didn't weaken relevant constraints on the meaningfulness of sentences. But even if that's true--which wants argument--we do well to recall that "Wittgenstein regards the sentences contained in the *Tractatus* as helpful, in spite of their being strictly nonsensical according to the very doctrine they propound" (Anscombe 1959, 162). Even on his most astringent account of meaning, Wittgenstein found some use in trying to say the unsayable: "not how the world is, but that it is" (6.44; see 6.45ff). Perhaps that's relevantly identifiable, without being sayable on a dubious theory of meaning.

The only major, recent effort to make the identification is Munitz's. Posing "the mystery of existence" in the form of the question "Why does the world exist?", he rightly conducts a preliminary analysis of 'the world exists'. We can bypass several *cul-de-sacs* by reviewing and criticizing that analysis.

After discarding several alternative uses, Munitz concludes his fourth chapter with the apparently unexceptionable observation that 'the world' "serves as a per-

fectly adequate name for that entity...to which the observable world, and such order and contents in it that we have already succeeded in identifying, belong" (71, emphasis added). Now by treating 'the world' as a name, Munitz is bound to treat 'exists' in an oddly metaphysical way that I shall criticize shortly. But his approach does point up two important facts. First, even though we don't know all that the world comprises, we may and do use 'the world' to denote some entity we identify by having identified some things as belonging to it. Such is the case with 'The World', which is a definite description of a totality some but not all of whose constituents we have identified (an analogous example might be 'the galactic supercluster to which NGC 5128 belongs'). Second, even though the merits of Munitz's interesting suggestion that 'the world exists' be classified as "analytic a posteriori" (83-4) are debatable, I know of no one prepared to concede the meaningfulness of 'the world exists' who would deny its truth, or that its truth is manifest in our experience; and those natural beliefs Munitz defends very well.

For brevity's sake, let me represent the two main analyses of 'the world exists' that Munitz rejects as

- (1) 'The world' describes something

and

(2) For some x , x is the world.

What (1) and (2) have to recommend them is that they both avoid use of 'exists' as a predicate. But the trouble with (1) is serious enough: (1) is about the use of a phrase, not directly about the world. Certainly (1) is true as far as it goes; but the question "Why does the world exist?" asks not about the use of a phrase, but why *there is* that which the phrase can be used to describe. And that question calls for analysis of what it means to say that the world, relevantly described, exists.

Though more to the point, (2) contains ' is the world' as a predicative expression. Now Munitz professes (87ff.) to accept Strawson's (1955, 196) analysis of statements of the form ' x 's exist'. I'm not sure Munitz has gotten Strawson right, but that issue is secondary. Given his brand of Strawsonianism, Munitz's pivotal objection to (2) is that by treating ' is the world' as standing for a property that something or other *has*, (2) "presupposes" the existence of something to have the property; but this "presupposition" is the very truth we were taking (2) to explain. So Munitz thinks we must instead analyze 'exists' in 'the world exists' as a predicate standing for something distinctive of the world.

On the analysis Munitz proceeds to give, 'exists' is a weak synonym for a verb of the sort used to stand for a characteristic activity. To use my own example: when we say that Ronald Reagan exists, we mean that Reagan is carrying on in a way characteristic of beings of his kind: he *lives*. But--to draw the analogy to Munitz's examples--because we don't get far saying things like 'the world worlds' or 'the world does what the world does', we must content ourselves with 'the world exists'. To be sure, this seems to bring in a universal: the world's existing presents itself as an "instance" (95) of some property that more than one actual individual might share, just as Reagan's existing is an instance of human life. But we have no experience of other worlds and, in this context, no grounds for allowing sensibly that there are any others. So, says Munitz, let 'exists₁' stand for "the unique activity of the world," and let 'exists₂' mean "there is an instance of so-and-so." The proper way to say that the world exists is thus 'there exists₂ that which exists₁' (98). For Munitz, only the world exists₁.

Unfortunately, this only muddies the waters. Munitz's stated *desideratum* is to assign a clear sense to the supposition that something having the property of being-the-

world exists. By introducing 'exists₁', he does indeed both reconstrue 'exists' as a syntactically unremarkable predicable and obviate the hopeless task of showing how the world's existing is logically distinct from and metaphysically prior to something's being the world. But what 'exists₁' stands for is even more obscure than what 'the world' refers to. To assert that "there is an instance" of something of which 'exists₁' can in turn be predicated, is to imply that 'exists₁' means a universal instantiated by at least one particular. The difficulty is not so much that there's no clear and generally accepted account of [the] instantiation relation(s): we might, after all, recast Munitz's analysis by understanding the universal in question as a Fregean "concept" under which only one actual existent falls. Such language would, I think, be clearer than Munitz's. But no advance will have been made in clarifying what the world's unique activity is supposed to be, and no reason, other than its amenability to a particular technical treatment, will have been given for believing that the world exhibits it. So dubious an outcome is hardly suited to elucidating the naturally believed truth that the world exists.

In order to interpret and formalize 'the world exists' for our purpose, we might begin by stipulating that

(3) The world = The World,

and then assert

(4) For some x , $x = \text{The World}$.

Now if, like Munitz, we used 'The World' as a name, (4) would be merely a theorem of first-order predicate logic; hence

(5) The World is contingent,

would be false, and I could not, as I intend, devote the next section to developing and arguing for a version of (5).

But if, as I specified when introducing WD, 'The World' is used as a definite description, then (4) is a well-formed formula interpreted in a first-order predicate logic with identity. Unfortunately, however, we cannot use (4) and remain sufficiently open to two major possibilities we should accommodate, viz., that The World is either a complex whole or a loose collection.

If The World is the former, then there is no difficulty; we could answer the question what the quantifier in (4) ranges over (what our domain of discourse is) as follows. "The World is not an individual in the sense customary in first-order models, but comprises individuals in a sense stronger than that of mere class- or set-membership. A class can exist even if it has no members and

so is the null class; but *ex hypothesi*, this doesn't hold of The World: the relation of its constituents to it is that of parts to whole. And since (4) identifies something-or-other with The World, our domain of discourse should include not only such individuals as BRCs and OPs, but also The World itself. This is not as strange as it may seem. There's no *a priori* difficulty with treating BRCs and OPs as individuals in first-order models that include predicates expressing part-whole relations among them, and it's quite arguable that all BRCs, as well as at least some OPs, are themselves complex wholes. Hence, there's nothing untoward about treating complex wholes as individuals for logical purposes, or about including in a single domain both complex wholes and individuals, distinct from those wholes, that are themselves complex wholes and/or comprised by other complex wholes. So The World should be included in a domain of discourse that also includes (a) every individual The World comprises and (b) some (changeless) individual(s) The World does not comprise (so as not to identify one member of the domain as comprising the whole domain)."

If The World is a loose collection, however, treating it as an individual for logical purposes would be very difficult to justify; hence (4) would itself want justification

and would not help clarify 'The World exists'. The wiser course here, given that we shouldn't define the world as a set, would *prima facie* be to represent The World as a set in some *n*-order model, and use 'The World' or some logically similar phrase as a definite description of that set. Indeed, since we could follow this course even if the collection of BRCs and OPs also forms a complex whole, it might seem that we ought to use 'The World', for purposes of logical analysis, as just such a description.

But that would risk trivializing W_2 in a way analogous to the way I said we would if we simply defined the world as a set. Recall a possibility I said I could not rule out: even if The World is a loose collection, it might still embody *qua* totality an effective intention by which it is produced. If so, then to represent The World as a set might allow, as a CAS-explanation of each and every member of the set and thus as a conjunctive CAS-explanation of the set itself, an explanation that did not also explain the collection being represented as the object and product of an effective intention.

Aside from all this, the obvious difficulty with either major alternative--treating The World as an individual or as a set for logical purposes--is that, since it would be rash

to say whether The World is a complex whole or a loose collection, one may end up asserting what is false if one stipulates either that 'The World' denotes an individual or that it denotes a set or class. We must content ourselves, then, with leaving 'The World exists' without a formal analysis while taking its truth for granted.

For several reasons, the residual ambiguity of 'The World exists' presents no obstacle to our inquiry. First, the world can bear a definite description, and hence be truly asserted to exist under that description, without our knowing whether the world so described should be treated as a logical individual or not. Second, the truth-value of the construal of (5) on which I will ultimately settle doesn't depend on whether The World is a complex whole or a loose collection. Finally, and most important, the interest and the burden of $W_?$ remain the same whether or not The World is a complex whole or a a loose collection. Why that is so will, I trust, be clear in light of what follows.

II.3 The World is Contingent

What, then, does (5) mean, and why should we believe it? To say that it means The World might not have been is true in some sense, but merely indicates non-technically what must now be clarified. Let us begin by noting that (4) is *logically* contingent. Now if a true existential generalization is logically contingent, then the existence of each being (etc.) that satisfies it is a logically contingent state of affairs. So, part of what I mean by (5) is that The World's existence is a logically contingent state of affairs.

That The World is thus logically contingent is both true and essential to my argument. But to assert this without further explication would be quite feeble. Even Spinoza allowed that states of affairs whose necessity some don't know about could be called contingent (*Ethics* I, P33 S2); for all I have said so far, this might be the only way in which any state of affairs is contingent. For if Spinoza's system is the truth, then some state-of-affairs-that-*p* is contingent in two senses, even though it couldn't have been otherwise. Thus, not-*p* isn't formally a contradiction, and the state-of-affairs-that-*p* is contingent on many others, even though every state of affairs "follows" by

deductive necessity from the divine essence--something that the run of humans is unfit to grasp. More radically still, Parmenides implied that the only meaningful existential propositions are truths (see below), so that 'The World exists', if it were true, couldn't be meaningfully denied. Of course Parmenides would have regarded 'The World exists' as meaningless anyhow, because it entails the reality of change, and on his showing nothing can meaningfully be said to change. It is only if Parmenides and Spinoza are wrong that The World can be truly be called contingent in some robust and relevant sense.

I treat Parmenides and Spinoza as proponents of *monomodalism* (MM): the doctrine that the actual world is the only possible world. From MM it follows (a) that the world necessarily exists, which is incompatible with (5) as I want to analyze (5); and (b) that GD is true, which establishes E_n . Mark: I am not taking any single axiomatization or interpretation of modal logic as uniquely correct, nor is doing so necessary for my purpose, which is to remove a general obstacle to the central claim of this thesis. Now if Parmenides and Spinoza can be interpreted to show that they aren't committed to the versions of MM I shall ascribe to them, then there is significantly less support for MM. I

say "significantly" because, as far as I can see, it is the cachet of association with great names that lends to MM a good part of such appeal as it has. But if they are committed to MM, it is worth arguing, rather than just assuming, that they are wrong. After arguing this, I will specify the further senses in which The World may be called contingent.

The main reason Parmenides and Spinoza fail to establish the doctrines I shall ascribe to them is that they offer no independent argument for the debatable ideas they deploy as guiding principles. And there's no reason to believe anybody could succeed where they failed. For there doesn't seem to be a way to defend whatever such idea is in dispute without relying on it in one way or another.

Of course, MM's plausibility varies with different construals. One might take MM to mean simply that it is impossible that more than one possible world be actual. Though that seems true, it is not at issue here. Or MM might mean that the actual world is the only logically possible world: there is only one maximally consistent set of propositions by which a possible world is expressible, and that is the set expressing the actual world. Though that is false, an effort to ascribe it to either Parmenides or

Spinoza would only complicate matters with a needless anachronism. Or MM might mean that, although many worlds are logically possible, the actual world is the only such world that could be actualized, in a non-logical sense of 'could be...'. This is what many have thought Leibniz believed. But to ascribe such a way of thinking to Parmenides would be absurd, and to ascribe it to Spinoza would be a gross distortion.

Still, one version of MM might be that all possibilities--whatever they are--are necessarily actual as a *unitary object*; and this seems to be Parmenides' view (henceforth 'MM-P'). Another version of MM might be that all possibilities are necessarily and severally actual in a *particular order*; and this seems to be Spinoza's view, (henceforth 'MM-S').

That MM-P is false seems intuitively obvious. For one thing, it entails the unreality of change. To overcome the counter-intuitiveness of this result, Parmenides' argument would have to be very strong indeed. This requires not only that the argument be sound--i.e., valid with true premises--but that its premises be assessable as true by some clear,

public method.¹⁶ But the pertinent arguments seem valid only on an assumption that, with the resources of modern logic, we do well to assess as false.

One of Parmenides' arguments is this:¹⁷

It is the same thing that can be thought and can be.
What is not can't be.
Ergo, what is not can't be thought.

Call the second premise 'NP.' Clearly, there is one sense in which what is not can't be:

(NP_C) Necessarily, whatever does not exist does not exist.
This is NP taken *in sensu composito*, and is a rather trivial truth. For if NP_C were false, the same could both exist and not exist, which is self-contradictory. But if NP be read this way, the argument is invalid. Moreover, one wants to say that, in another sense, what is not can be: what doesn't exist can come to exist, and is thus possible. Surely some things that don't exist are in fact *going* to come to exist--even if married bachelors never will. This too would make Parmenides' argument invalid. For we thereby imply that one can somehow pick out, from among things that are not, some

¹⁶For an explanation of the *assessability* of an argument's premises, and an argument for *assessability* as a necessary condition of an argument's being good, see Ross 1980a, 21ff.

¹⁷The translations are Anscombe's 1981, x; it is her discussion to which I am indebted here (see vii-8).

that are going to be; and this in turn implies that something that is not is thinkable--which negates the argument's conclusion.

Notoriously, however, Parmenides thought that *becoming* is impossible. He argues:

What can be thought can be.
What is nothing cannot be.
Ergo, whatever can be actually is.
Ergo, whatever can be thought actually is.

If we understand this argument as an enthymeme premising that "what is not is nothing," we can see why Parmenides would deny that becoming is possible. If what is not is nothing, then there just *isn't* anything to come to be. Indeed, the pseudo-thought expressed by saying something like "Something that does not exist can come to exist" is not about anything. So NP taken *in sensu diviso*, namely (NP_d) Whatever does not exist, necessarily does not exist seems true; and assuming all other premises, both arguments I have cited are valid.

The first conclusion of the argument I have cited in the previous paragraph means the same as

(6) Whatever possibly exists actually exists.

Now the second conclusion of that argument--i.e., "whatever can be thought actually is"--and the conclusion of the argument I cited before--i.e., "what is not can't be thought"--

are equivalent. As a premise for another argument, take either and conjoin it with "what is not is nothing." This new argument implies that *passing away* is also impossible. For if anything that existed ceased to exist, it would then be nothing, and therefore unthinkable. Hence, its ceasing to be is unthinkable. But since what exists *is* thinkable, what exists can't cease to exist. If this is right, then Parmenides is committed to

(7) Whatever possibly exists necessarily exists.

Now Parmenides clearly regards what we may translate by 'being' as a name of the only thing there is. And from the conjunction of NP_d , (7), and what Parmenides says exists, MM-P follows.

If Anscombe is right, his mistake is to suppose that "Something that does not exist can come to exist"--or a form of words meaning the same--is not *about* anything. She says he assumes that "a significant term is a name of an object that is either expressed or characterized by the term" (1981a, x). Such an object would, of course, have to exist for its name to be a name of something or other. E.g., on the assumption in question, asserting "Nothing has a self-contradictory predicate true of it" posits the existence of at least one self-contradictory property.

But in fact we can form and assert significant sentences whose predicates neither name nor hold of any actual existent. We can talk, for example, about how the apples next fall are likely to turn out, without supposing such apples must exist now to provide us with something to talk about. We can say that nothing is F and not-F, without saying that an entity named 'F and not-F' exists in any sense, now or ever. So we needn't accept the notion that the sentence "what is not is nothing," if true in some sense, rules out the significant use of terms predicable of what doesn't yet exist or no longer exists--or which couldn't at any time exist. Parmenides' way of sweeping aside our natural objection to NP therefore fails, and with it, so do both the arguments of his I have cited. Moreover, we needn't regard 'being' as a name of a unitary object that is all and only what there is, of which Parmenides' other names are 'one', 'changeless,' and 'like the mass of a well-turned ball'.

Conducting a tactical retreat, Parmenides might still object: "You claim to have a logical technique for saying significant things about what doesn't exist. Thus you license formulating things like 'For some x, Fx' when no F's exist. So even if you have shown how to talk about non-

existents, some forms of words you want to use to talk about them--if such forms are statements at all--can't be true statements. So rather than make a logical move whose only benefit is to introduce a whole class of falsehoods, why not just say that the statements of which you are so fond aren't meaningful at all--aren't *about* anything?"

The trouble with this reply, however, is that it conflates asserting that an F exists now with asserting that something falls under the concept for which 'F' stands. The patriarch Abraham, though long dead and thus non-existent now, still falls under the concept for which '_____ is a man' stands; next fall's apples, though merely potential and thus non-existent now, nevertheless fall under appropriate concepts (e.g., fruit). Indeed, the only way to try to justify Parmenides' conflation would be to argue that an existential statement could only have meaning if it is both true and verified by something that exists now. Thus, statements just couldn't be about what doesn't yet exist or no longer exists. But this sounds suspiciously like: only what actually exists now is *thinkable*; only then can one meaningfully assert, e.g., some existential generalization that it alone verifies. That would indeed follow from Parmenides' assumption about what the significance of terms consists

in--but that is just the assumption we have been undermin-
ing. Parmenides cannot, it seems, defend himself without
appeal to the very thing being disputed. That principle,
whose application yields such counter-intuitive results,
thus seems to lack any independent support. So much, then,
for MM-P.

Its pretense to deductive rigor doesn't mask the fact
that Spinoza's monomodalism is almost, if not quite, as
counter-intuitive as Parmenides'. That Spinoza is committed
to MM-S I shall show by showing that he is committed to each
of the following in *Ethics* I:¹⁸

- (a) The one substance and its attributes--God--necessarily
exists;
- (b) God necessarily produces whatever is not God or an at-
tribute of God;
- (c) Everything so produced is necessarily produced in a par-
ticular order;¹⁹
- (d) Everything that could be so produced is so produced.

From (a)-(d), MM-S follows.

¹⁸The edition I am using is *Opera*, Vol. I, Van Vloten and
Land, eds., 1895. The translations are my own. Proposi-
tions are named 'Pn', definitions 'Dn', and axioms 'An.' For
the idea of attributing MM to Spinoza, I am indebted to
Hampshire 1956, 42ff. and Lovejoy 1936, 150ff.

¹⁹I needn't address the knotty question whether, or if so
to what extent, that order is temporal. For a plausible
answer to this question, see Curley 1969, 73-4. Cf. *Ethics*
I, P24cor; *Ethics* II, A1.

Consider the following three items: "God, or substance, consisting of infinite attributes--each of which expresses God's eternal and infinite essence--*necessarily exists*" (P11, emphasis added); the definition of "attribute" as "that which the intellect perceives, concerning substance, as constituting its essence" (D4); and "The existence and the essence of God are one and the same" (P20). From these it is clear, *inter alia*, that Spinoza regarded the attributes as not different in being from substance (cf. P10 S). He also says that there is "only one substance," namely God (P14 cor 1). I conclude that Spinoza is committed to (a).

Further, we hear that "there is nothing besides substances and modes" (P15 D; cf. D5, A1). Hence, to show (b) is to show that God necessarily produces everything not really identical with himself--i.e., all the modes. Consider P33: "Things could not be produced by God in any way or in any order other than those in which they are produced." This is equivalent to (c), rather than to (b). But P33 D. cites P16 and P29 in this condensed form: "For all things follow necessarily from the givens of God's nature, and by the necessity of God's nature are determined to exist and act in a particular way." The first conjunct of this cita-

tion is equivalent to (b)--assuming, as the context suggests, that the verbs translated as 'are produced' and 'follow from' are meant to express the same relation. I conclude that Spinoza is committed to (b) and (c).

To see how Spinoza is committed to (d), consider first P16: "From the necessity of the divine nature must follow an infinite number of things in infinite ways--that is, all things that can fall under the divine intellect." I shall soon inspect Spinoza's alleged proof of this vague but central proposition. For now, we should turn to a passage in P17 S. that clarifies what he has in mind in asserting it. The immediate context is an attack on unnamed theists, who are presented as arguing to this effect: if God "had created all things that are in his intellect, he would not then be able to create anything more"; but since God is omnipotent, he is able to create something more than what he has in fact created; therefore, he has not created all things that are in his intellect. Assuming that God is omnipotent, Spinoza attacks this argument as follows:

I think I have shown clearly enough (see Prop. 16) that from God's supreme power, or infinite nature, an infinite number of things have flowed (*effluxisse*) in infinite ways--that is, all things have flowed by necessity, or always follow (*sequi*) by the same necessity; in the same way as from the nature of a triangle it follows that its three angles equal two right angles, from and for eter-

nity. Wherefore God's omnipotence has been in act from eternity, and will remain in the same actuality for all eternity. And in this way God's omnipotence, in my judgment at least, is shown more perfect by far. Nay, my adversaries seem (it must be said openly) to deny God's omnipotence. For they are forced to confess that God understands infinitely many creatable things that he nevertheless will never be able to create; for otherwise, if he created everything that he understands, he would on this showing have exhausted his omnipotence and rendered himself imperfect. Therefore, to establish that God is perfect, they are thereby reduced to having to show at the same time that he cannot effect everything to which his power extends--something than which, it seems to me, nothing could be more absurd or repugnant to God's omnipotence.

Note how this clarifies what Spinoza intends by P16: God necessarily effects *everything* "that can fall under the divine intellect," which is co-extensive with "everything that he understands." It remains to show that this "everything" is also co-extensive with everything that could possibly exist (etc.).

Let us begin with a difficulty that Geach (1972, 5) and Delahunty (1985, 142) find in P17 S. If they're right, Spinoza is committing a quantifier-scope fallacy. In outlining the extent of God's power, he is confusing "God can effect *anything* to which his power extends" with "God can effect *everything* to which his power extends." Spinoza's theistic adversaries affirm the former and deny the latter. Whatever one may think of their reasons for doing so,

Spinoza seems to think them inconsistent in doing so. But they are not. For not all things that are severally possible are collectively compossible; hence, an omnipotent being may be able to effect each possible state of affairs, but nobody can effect every such state of affairs, because that is logically impossible.

Spinoza, however, is not just committing a textbook fallacy. Elsewhere, he seems aware of the distinction that Geach and Delahunty say he is ignoring, but he has an argument for collapsing it. P11 D1 says that

To each thing a cause or reason must be assigned why it exists or why it does not...Now this reason or cause must be contained either in the nature of the thing or in something outside it. E.g., the reason why a square circle does not exist is shown by its own nature; namely, because it involves a contradiction...But the reason why a circle or triangle exists, or the reason why it does not, does not follow from their nature, but from the order of universal corporeal nature. *From that order it must follow either that a triangle necessarily exists or that it is impossible that it should exist. These things are self-evident. From them it follows that that necessarily exists for which there is neither reason nor cause which prevents it from existing.* (Emphasis added.)

Something whose nature, such as it is, involves a contradiction is obviously not possible in any sense. But as regards the second class of non-existents, we shouldn't be misled by 'prevents' into forming a picture of possible things struggling to emerge into actuality but being kept down by the

other possible things fortunate enough to have bulled their way into actuality. Spinoza is simply implying here that not everything whose nature does not involve a contradiction --and which might in that sense be called possible--need be compossible with the way things actually are. But he seems nevertheless to think that, however clear this distinction may be *prima facie*, nothing which is impossible with the way things are is possible in any sense at all. And the argument for this is part of the argument for (d).

According to P16 and the passage I quoted from P17 *S.*, both the contents and the order of nature are necessitated by God, and at least the order of nature is necessary in the way in which triangle is related to the sum of its angles. Hence, there is no sense of 'possible' in which it is both possible that the order of nature be different and yet not possible that the sum of a triangle's angles be different. Given what Spinoza is known to have thought about Euclidean geometry, this means that there is no sense of 'possible' at all in which it is possible that the order of nature be different. So, given also what he says in the emphasized part of the passage I quoted from P11 *D.*, it follows both that whatever is not compossible with the order of nature is not possible at all, and that whatever is compossible with the

order of nature necessarily exists. If so, and if God necessarily produces in some particular order everything that he understands, then he must produce all that is compossible with the order of what he produces--which is co-extensive with all that is possible for him to produce. So if (a)-(c), then (d): Spinoza is committed to MM-S.

Schopenhauer said that Spinoza's system depends on a conflation of the ground-consequent relation with the cause-effect relation (FR 17-22). Though one may doubt that there is only one sort of ground-consequent relation or cause-effect relation, Schopenhauer's point is well taken. The fundamental weakness of Spinoza's system, and thus of MM-S, is that he apparently can't justify that conflation.

With characteristic acerbity Schopenhauer notes that in P11D, Spinoza uses the phrase *ratio seu causa* "eight times on one page in order to cover up the fraud" (FR, p20). What is the fraud? Consider Spinoza's notion of *causa sui*, which means "that whose essence involves existence" (D1).²⁰ God or substance is of course *causa sui*. What it means, in

²⁰Of this notion Schopenhauer says: "The proper emblem for *causa sui* is Baron Munchhausen on horseback and sinking into the water, gripping his horse with his thighs and lifting himself and the animal up by means of his own pigtail, with the words *causa sui* underneath" (FR 21).

turn, for God's essence to involve his existence is indicated in the P8 S2: "Now as it forms part of the nature of substance to exist, its definition must involve its existence as something necessary, and consequently its existence must be inferred (*concludi*) from its mere definition."²¹ Hence, something is cause of itself just in case its existence is inferrable (better: deducible) from its definition. But Spinoza assimilates all causes to reasons or grounds by ultimately reducing all explanation to deduction.

If I have been interpreting Spinoza aright, then for him everything "flows" or "follows" (see P17 S) from God's essence or nature with the same necessity as God's existence does.²² For if everything other than God follows from his

²¹Quoted by Schopenhauer, FR 20. This particular translation of Spinoza seems to be Payne's.

²²Delahunty (1985) quotes Samuel Clarke (A Demonstration of the Being and Attributes of God, 1705) in support of this interpretation: Spinoza "must affirm that it is in itself and in terms a Contradiction, for any thing to be, or to be imagined, in any respect otherwise than it Now is. He must say 'tis a Contradiction, to suppose the Number, or Figure, or Order of the Principal Parts of the World, could possibly have been different from what they Now are." Though sympathetic to it, Delahunty hesitates to adopt Clarke's interpretation because he believes Curley (1969) has shown that Spinoza regarded some states of affairs as logically contingent. Suppose Curley is right. It still is consistent with Spinoza's understanding of the term 'contingent' (P33 S1) that some truths be logically contingent, in that they can't express all the causes of the states of affairs they express, even though those states of affairs are ultimately deducible from the divine nature.

nature with the same necessity as that with which the sum of a triangle's angles follows from the nature of a triangle, then the existence of everything other than God is actually deducible from a *description* of God's nature. For purposes of specifying the source and the sort of derivation involved, a description of God's nature is not different from a definition of it in any way that is important for us. A description of God's nature would just be a more or less detailed rendering of the attributes, each of which expresses that nature--as does a definition. Hence, the existence (etc.) of the modes is in fact derivable in same sort of way, and from the same source, as God's existence. The use of 'flows' and 'follows' as synonyms to this effect is explicable in light of A3: "from a given determinate cause an effect necessarily follows."

One might object that God is not, even for Spinoza, the cause of everything else (P16 cor.1; P33) in the same sense in which he is cause of himself. For God causes things whose essence does not involve existence, as well as himself. Unlike God, those things do not exist (etc.) merely in virtue of the sorts of things they are. And so they cannot exist (etc.) with just the same necessity as does God. Indeed, Spinoza does acknowledge more than one sense of

'necessary': "a thing is called necessary either by reason of its essence or by that of its cause" (P33 S1). God is necessary in the former sense, his modes in the latter. Nevertheless, if MM-S is true, then there is no sense of 'necessary' in which, say, a theorem's following from axioms and other theorems is necessary and yet something's being caused by the divine essence is *not* necessary. Hence, God's existence follows from his essence with just the same necessity as does everything else that exists (etc.)--the same necessity by which the sum of a triangle's angles equals that of two right angles. And so we may say that Spinoza conflates *causa* and *ratio* in roughly the way Schopenhauer says.

Why shouldn't we accede to the conflation? Spinoza is implying, among other things, that as *explicantia* both *causae* and *rationes* work in the same way. Thus given their causes and reasons respectively, effects and consequences *have to be*, and have to be just as they are. To be sure, causal and logical necessity are conceptually distinct. We can think of something as necessitated by its cause without thinking of it as being deducible from its cause; whereas if we think of *p* as logically necessitated by *q*, we are *ipso facto* thinking of *p* as deducible from *q*. Furthermore,

causation and deduction seem to be relations among entirely different sorts of entities. But somebody might reply: "All the same, effects are deducible from their causes and the applicable *laws of nature*; and when p is deducible from q , it is deducible not from q alone but from q and the applicable *rules of inference*. In this way, there is at least an analogy between causes and grounds and between effects and consequences." The sort of position underlying this reply is by no means uncommon--though the implied analogy between laws of nature and rules of inference is dubious (see Carroll, 1895). And if MM-S is true, then Spinoza's conflation of *causa* and *ratio* is justified.

But the conflation is as much an *assumption* as a consequence of MM-S; in this sense, Spinoza's system is circular. To see how, recall first that P16 is essential to the argument for (d), which in turn is the key component of MM-S. Spinoza tries to demonstrate P16 thus:

...from the given definition of anything the intellect infers a number of properties, which really do follow necessarily from that same definition, that is, from the essence of the thing itself; and it derives more properties the more reality the definition of the thing expresses--that is, the more reality the essence of the defined thing involves. Since, however, the divine nature has absolutely infinitely many attributes (by D6), of which each expresses infinite essence after its kind, infinitely many things must follow necessarily in infinitely many modes

from the necessity of the divine nature (that is, all things that can fall under the infinite intellect).

The curious thing about this enthymeme is how quickly it slides from affirming that infinitely many attributes of God are deducible from his definition to affirming that everything else must be too. (That Spinoza means the latter has, I hope, been made plain already.) He could have filled out the enthymeme by invoking P14: "Besides God no substance can be granted or conceived"; and P15: "Whatsoever is, is in God, and nothing can be conceived to be without God." With minor tinkering, that might have yielded a formally valid argument for P16. But not even that would have sufficed to yield a formally valid argument for what Spinoza really means by P16. Something else is necessary--something that, it seems, he thought so obvious at this stage as not to be worth mentioning. Indeed, a brief examination of the alleged proofs of P14 and P15 will lead us back to that something--and that, in turn, will lead us back to the conflation in question.

P15 *D.* duly cites P14, and P14 *D.* gets round to P5 thus::

Since God is an absolutely infinite being, of whom no attribute that expresses the essence of substance can be denied (by D6), and he necessarily exists (by P11); if any substance besides God ex-

isted, it would have to be *explained* by some attribute of God, and thus two substances of the same attribute would exist, which is absurd (by P5)...(emphasis added).

The rest is superfluous, and the result is familiar: there can be only one substance. But even the part of the proof I have just quoted seems superfluous. The reasons are most revealing.

In P5 D. Spinoza clearly implies that the result in question can be got directly from D3--the definition of substance--and something else: Van Vloten and Land (1895, 39) read A6, two other editions they cite (39n) read D4 and D6 respectively. Thus:

leaving aside its modifications (*affectiones*) and considered in itself--that is, truly considered--a substance cannot be distinguished from another substance (by D6 and A6[D3][D4])...

Since A6 says "a true idea must fit with its ideate"--and thus seems least suited as a ground for the inference Spinoza draws--I prefer one of the alternative readings, each of which concerns the attributes. Now D3 says: "By substance I understand that which is in itself and is conceived through itself: that is, that whose concept does not require a concept of something else, by which concept it has to be formed." And the first alternative reading--D4--says: "By attribute I understand that which the intellect per-

ceives, concerning substance, as constituting its essence." It is, I fear, no easier to conclude from D3 and D4 that there can be only one substance than it would be to do so from D3 and A6. But the second reading--D6--says: "By God I understand an absolutely infinite being, that is, a substance consisting of infinitely many attributes, each of which expresses its eternal and infinite essence." This is the reading I shall adopt.²³

Now recall the route we have traced from P16 *D.* back to D3 and D6 here. Is it not likely that, by the phrase 'infinitely many attributes' in D6, Spinoza means all the attributes there could possibly be--which helps explain what he meant in P16? This helps explain why substance, whose essence by D6 consists of just those attributes and which by D3 "requires" no other concept, must be unique--and that God is thus *the* one and only substance. And it thus explains what is otherwise both textually and logically obscure about the inference in P5 *D* I have quoted.

²³It is worth noting that if, as Latin grammar permits, one were to put the definite article before the two *definienda* in D6, one could derive Spinoza's desired result without further ado. I have not translated D6 thus because it seems plain that Spinoza didn't want to build explicitly into the definition a result he preferred to derive.

Moreover, we can now state the "something," the hidden premise in P16 *D*, that I have said Spinoza thought too obvious to mention: *the one God or substance consists of all the attributes that could possibly be. So if everything else flows necessarily from what the attributes express, then everything else is everything else that could possibly be.* That is what Spinoza meant by P16, and from there it is a short way to MM-S.

Why should anybody agree to accept D3, which looks like an arbitrary departure from an older notion of substance? The scholastics thought God was a substance, but neither Aristotle nor his scholastic followers thought that there is only one substance.²⁴ Nor were any of them logically bound to think so, given what they severally did believe about substance. We have seen why Spinoza introduced his own definitions of substance and God; but by design, he offers no prior, explicit argument to justify introducing them. He seems rather to have believed that the explanatory power of the system as a whole would compel the assent of any mind fit for genuine knowledge (*scientia*).

²⁴Cf., e.g., Aquinas, *ST TP Q77 A1 ad2*.

One cannot say here: it is the *truth* of the system as a whole that justifies its initial postulates, i.e., its definitions and axioms. The truth of the system is logically posterior to that of the postulates, and it is the truth of the latter that is now at issue. We must look to something else about the system if it is to compel assent, as a whole, to these parts. If it does so, it does so in virtue of its explanatory power. But the system's explanatory power is compelling only if one assumes that any explicable being (etc.) must, as such, be either necessarily existent (etc.) or logically necessitated by what is necessarily existent (etc.). Spinoza seems to have no basis for recommending this assumption, and the conflation of *causae* and *rationes* it involves, other than the truth of the system. And since that is posterior to that of its postulates, which can't be recommended without the assumption in question, I conclude that Spinoza has no independent argument for his guiding principle of explanation.

It may seem that he has one: showing that competing *sorts* of explanation can't explain the world as those who employ them intend. He evidently found the chief competition in classical theism. Some of his criticisms of classical theism assume the truth of his system. Thus nothing is

contingent (P29), and calling something contingent indicates merely that one doesn't know what makes it necessary (P33 S1). Accordingly, in P33 S2 he calls the standard theistic view of creation, whereby God was free either to create or not create the world, "a great obstacle to knowledge." But other arguments are strictly *ad hominem*, charging theists with various inconsistencies in their account of God's attributes. I shall argue in II.5 that arguments of this form can, in general, be met by conceptual clarifications that preserve what is essential to classical theism. But Spinoza clearly found classical theism defective in a fundamental way that would render defensive adjustments of its particular tenets idle. He seemed to take for granted that genuine knowledge involves exhaustive explanation of a particular kind. Hence, any view on which the existence (etc.) of the world is not explained as deducible from what could not be otherwise he could only attribute to ignorance. This was as much a prejudice suited to his temperament as a judgment licensed by his system. But the system is compelling only to those who confuse that prejudice with knowledge.

Neither Spinoza nor Parmenides can establish MM, and I know of no other views from which a relevantly strong construal of MM would follow. The same goes, *mutatis mutandis*,

for any of the historically recurrent forms of the belief that all possibilities in the universe--or the totality of "universes"--are eventually realized.²⁵ Suppose that is true. To establish MM, one must also show that such possibilities include all possible BRCs and OPs. Nothing I know of establishes this. Indeed, nothing establishes even that the *order* in which possibilities are actualized in The World is the only one possible, given the BRCs that The World does comprise--surely not the provisional results of natural science, which hardly establish even the initial supposition.

MM, therefore, has little to recommend it. One result of this is that E_n is not established by MM.²⁶ And if there is no reason to believe that the actual world is the only possible world in any of the senses I have considered, then there is no reason to believe that 'The World exists' is, in any interesting sense, a necessary truth. For The World is the actual world but is not the only possible world. So The World's existence is a logically contingent state of affairs just in case 'The World exists' can be denied without con-

²⁵The standard history of this topic remains that of Lovejoy 1936.

²⁶via GD; see the end of I.4.

tradiction (even though its denial is false) and is in no other (non-trivial) way a necessary truth. Let us call something 'contingent₁' if its existence (etc.) is a logically contingent state of affairs in the ways just indicated. Now '_____ is contingent₁' is the first conjunct of the conjunctive predicate into which I shall analyze (5)'s predicate. Thus I assert that The World is contingent₁.

It may seem that what I have said so far doesn't clearly preclude The World's existing necessarily in the sense of GD's first disjunct (see above, I.5). If The World did exist always, unproducibly, and unpreventably, it would be contingent only in that the denial of 'The World exists' wouldn't be formally a contradiction. Worse yet, The World wouldn't be contingent in a way consistent with its being properly mysterious; for if The World existed necessarily, its existence would be exhaustively explicable as such.

Now in one sense, it is absurd to say that The World always exists. Even if there is no time at which no constituent of The World exists, the fact remains that there is no time at which at which everything The World comprises exists. Thus there is no one time at which The World, as distinct from some of its constituents, exists; indeed there is no *period* of time, short of all the time for which it ex-

ists, for which The World, as distinct from some of its constituents, exists. But as I have defined it, The World is temporally spread out, so as to include past and future as well as the present; and if time neither begins nor ends, then there is no time at which The World begins or ends. In that sense, The World would always exist: it would be spread through infinite time. That is one way of expressing what is meant by saying that the world has always existed and always will exist. And many people are prepared to believe that the world always exists in that sense.

If true, however, this belief doesn't rule out either The World's being producible or The World's being preventable. It doesn't rule out The World's being producible because it doesn't preclude the possibility that some being not comprised by The World produces The World. Moreover, if the passing of time is consequent on there being BRCs--which might be the case--then the time through which The World is spread is itself an OP, and so The World's always existing could hardly rule out its being produced. Aside from all this, even if The World always exists and is unproduced, it is not the only possible world. If The World isn't the only possible world, then some BRC other than those comprised by The World might have been actual. If some such BRC had been

actual, then The World wouldn't be the actual world. If the actuality of some possible BRC or other would entail that The World isn't the actual world, then The World is in that sense preventable. And if The World is in any sense preventable, then it doesn't exist necessarily in the sense I have defined. So, The World's being contingent₁ also means that The World doesn't exist necessarily in the sense I have defined.

Nevertheless, one can't conclude from this either that The World is, or that it is not, mysterious in any of the ways in which I have said something can be mysterious (see above, I.2). So if The World's being contingent is to help us characterize its mysteriousness, The World has also got to be contingent in some sense richer than that of 'contingent₁'. This is not just an *ad hoc* requirement; for as I shall later argue, something's being contingent₁ is, in general, equivalent to its being contingent in some-or-other richer sense. In order to flesh out the meaning of (5), therefore, I now turn to such senses.

There is a very broad sense in which something can be *contingent on* something else. In this sense, your health is contingent on the relation of antibodies to pathogens in your body, and your existence is contingent on something

your parents did. If some being (etc.) x is contingent on some being (etc.) y , then the existence (etc.) of y is a necessary condition of x 's existence (etc.).²⁷ Typically, a necessary condition in this sense is not a sufficient condition: a necessary condition of your being in good health is that your antibodies have the pathogens in your body well in hand, but that is not enough for good health; and besides having been conceived, you depend for your existence on all sorts of other conditions. Now by definition, 'The World' denotes something that comprises all things of certain sorts (BRCs and OPs). The existence (etc.) of all its constituents is therefore a necessary condition for The World's existence, and The World is thus contingent on all it comprises. In this respect, The World is like a state or quality such as health, but unlike the complex wholes that it comprises. Those wholes can lose many constituents and still exist; e.g., a lake can lose a lot of water and still

²⁷The converse does not hold. If some y is a necessary condition for some x , that may only be because x non-trivially necessitates y , so that x exists or occurs only if y does. In this sense y is a logically necessary condition of x ; but it would be artificial and misleading to say that x is contingent on y . Moreover, any logical truth is a necessary condition of all other truths, but it would not distinguish any beings (etc.) from any others to say that the existence of every being (etc.) that does exist (etc.) is contingent₂ on logical truths.

exist. But its comprising all its constituents is a logically *sufficient* condition of any complex whole's existence. Hence, The World is contingent on what is both necessary and sufficient for its existence. This is not a typical use of 'contingent on'; indeed we are at the border of the region where 'contingent on' has any distinctive meaning. So, to say that the existence of The World is contingent on that of all of The World's constituents doesn't ascribe a rich sense of 'contingent' to The World. For that reason, I shall not include 'contingent on' in an unqualifiedly broad sense in my analysis of (5)'s predicate.

As I have suggested by choice of example, however, *x's* being contingent on something can also mean that *x* is *produced* by something; and none of The World's constituents can be said to produce each such constituent. So The World's being contingent might involve its being contingent on something it doesn't comprise, in virtue of being produced by something it doesn't comprise. This is a more common sense of 'contingent on', as used for a complex whole, than that in which such a whole's existence is contingent on some or all of its constituents. And it is this sense of 'contingent on' that is relevant to characterizing The World's mysteriousness.

Let us indicate that sense by 'contingent₂'. If The World is contingent₂, then its existence is non-trivially explicable as such; thus it is not essentially and negatively mysterious (ENM). And as I will argue in the next section, The World is contingent₂ only if what thus produces it doesn't both exist necessarily and necessarily produce The World; otherwise, The World would not be contingent₁. Now via the version of (5) I will end up asserting, I shall not assert that The World is contingent₂; I shall assert only that The World is both contingent₁ and either contingent₂ or contingent in some other sense to be specified.

Although most if not all BRCs and OPs are temporally posterior to many things on which they are contingent in the broad sense, many are also thus contingent on some things with which they are contemporaneous. E.g., the position of somebody's heart at t is contingent not only on her having gotten to a certain position by t , but also on her being in that position at t . Indeed, if some x is contingent on some y , it doesn't follow that there was any time before which x existed (etc.). Yet there is a sense of 'contingent' by which beings (etc.) are called contingent if they *come to be*, i.e., begin at some time (cf. Munitz 126ff.).

Let us indicate this sense by 'contingent₃'. Most if not all BRCs are both contingent₂ and contingent₃, inasmuch as they come to be at some time in virtue of being produced at that time. The same goes for most OPs. This might lead somebody to think that if anything is contingent₂ it is also contingent₃--i.e., if something is produced, it is produced at some time, before which it didn't exist. But if that is true, it is not a necessary truth--not, at any rate, what some might call a "conceptual" truth. That something's being contingent₂ doesn't entail its being contingent₃ is, I think, important if (5) is to be analyzed into a readily defensible form.

Assume that the first law of thermodynamics is true--that matter-energy is neither created nor destroyed in the interactions of the objects composed of it. Suppose also that neither matter-energy nor The World, which includes matter-energy, has a temporal beginning. (This supposition is by no means nonsensical; it may even be true). From these premises one may infer that something comprised by The World--matter-energy--has no temporal beginning. But it doesn't follow that nothing produced The World. For it might also be the case both that The World contains BRCs other than those composed of matter-energy, and that matter-

energy, with the rest of The World, is created by an actual and really changeless being--i.e., God--that needed no pre-existing material in order to create. Thus, The World may yet be created *ex nihilo* by something it doesn't comprise. If it occurs, creation *ex nihilo* is a form of production. And if classical theism is true, then creation *ex nihilo* is that to which all intramundane forms of production are, in varying degrees, analogous.

Whether or classical theism is true or not, this aspect of it can help to show why x 's being contingent₂ doesn't entail x 's being contingent₃. Thus Aquinas, for one, believed that God causes the world to exist by creating it *ex nihilo* (*ST*, Ia Q45 A1 resp.). He also held that God's causing the world to exist can be established by reason (Ia Q2 A2 resp.), but the world's having begun at some time can only be believed as an article of faith (Ia Q46 A2 resp.). So, it doesn't follow from the world's being contingent₂ (in virtue of being created *ex nihilo*) that the world had a beginning and is thus contingent₃. Supposing *arguendo* that the doctrine of creation *ex nihilo* (hereafter 'CEN') is false, it still doesn't follow that something's being contingent₂ entails that it is also contingent₃. It may be a fact that everything which is contingent₂ is also con-

tingent₃; but to establish that contingency₂ entails contingency₃, one must show that it is logically impossible that something be contingent₂ but not contingent₃.

In effect, Munitz tries to show this in the course of arguing that there is no good basis for saying that the world is contingent (Chapter VIII). His position seems to be that one can't meaningfully ascribe contingency to an entity in a *de re* sense--that is, to the *res* itself, not just to the statement that it exists--without ascribing both contingency₂ and contingency₃ to it. Hence, something's being contingent₂ entails its being contingent₃. This view is by no means uncommon, but Munitz is one of the few to argue for it at length. His arguments fail, and it's useful to see why.

Let us begin with what he says about the sentence 'the world might not have been': "it is the most primitive form of theistic philosophy that gives whatever meaning there is to this statement. In the absence of this background, the statement lacks meaning; with the use of this background, it begs the question" (159). To explain why Munitz makes this extraordinary claim is also to explain why he thinks that if

something is contingent *de re*, it is both contingent₂ and contingent₃.²⁸

Apparently, the form of theism in question is any form committed to CEN:

Greek philosophers, from the pre-Socratics through Plato, do not look for an answer to the question "Why does the world exist at all?"; rather, they ask "How did the world get to be the way it is now?" It is a question they answer by citing some pattern of development, or transformation, out of antecedently existing materials or stages ...Between the time of the Greeks and Leibniz, however, there had intervened the momentous development of creationistic theism. At the core of this philosophy was the dogma that God created the world out of nothing...(157)

For purposes of his book, Munitz evaluates theism chiefly as an effort to resolve the mystery of the world by answering the question "Why does the world exist?" Thus, for him, CEN is the most pertinent feature of theism because it is CEN that represents theism's answer to that question. CEN is thus what is most relevantly characteristic of the most primitive form of theistic philosophy.

Munitz also says that 'the world is contingent' is only meaningful in terms of CEN. He considers two possible ways of construing 'the world is contingent'. The first is as

²⁸In II.5, I shall explain and attack what Munitz means by saying that the use (he means the assertion) of 'the world might not have been' with its theistic background begs the question. Here, I focus only on what he takes to be the meaning of that statement.

'there might have been nothing at all'. He takes great pains to show that on this construal, 'the world is contingent' is nonsensical (141-51). Let us grant this. The second way Munitz construes 'the world is contingent' is as 'the world might not have been'. And he claims (152-55) that the "ordinary uses" of 'might not have been' exhibit "two important features": "*conditionality* and *temporality*." Thus a sentence of the form 'x might not have been' is "well-formed" only if it is construable as equivalent to some (understood) counterfactual conditional, and as such means that (i) x is, or is an outcome of, an event or process that begins at some time; (ii) x is preceded by a set of conditions C; and (iii) x is explicable by C and either a scientific law or the free choice of some agent. (This a summary paraphrase of Munitz's own account, but in no way, I think, do they misrepresent him.) After giving this account, Munitz says that CEN means not just that God created the world, but that "had it not been for God's creative agency, there would have been no world" (157). This is the counterfactual conditional (call it 'CW') that Munitz thinks "assigns the only clear meaning" to 'the world might not have been'. And if 'the world might not have been' assigns in turn the only clear meaning to 'the world is contingent',

it follows that *only* by citing CEN that we can assign a clear meaning to 'the world is contingent'.

Given that Munitz entertains no meaningful sense of 'the world is contingent' other than 'the world might not have been', I surmise that he does so because he thinks statements of the form 'x is contingent' should all be so construed. If this is what he thinks, and if, as he clearly thinks, all statements of the form 'x might not have been' are to be analyzed along the lines of (i)-(iii), then he is committed to thinking that all contingent beings (etc.) are both contingent₂ and contingent₃. For by (ii) and (iii) they are all explicable in terms of antecedent conditions that include beings or occurrences which bring them about; and by (i), they all begin at some time. That's why CEN must mean CW if it means anything at all.

Many theists would accept CW on some construal or other. But as Aquinas' view helps to show, CEN needn't be construed as meaning a counterfactual conditional that is tensed in the sort of way CW is. An adherent of CEN could just as well say 'If God did not will that the world exist, the world would not exist'--a belief more widely shared among theists than the belief that the world began at some time. Of course, many theists would *add* that God has

revealed that the world began at some time. And if they're right, then the counterfactual I have just introduced is materially equivalent to CW. But Aquinas and other adherents of CEN would not believe that CEN is meaningful only if it means CW so construed.

To this, Munitz's reply would appear to be that, in the thought of such theists as Aquinas, CEN's "original meaning" is "attenuated." (156ff.). And if this were Munitz's only reply, we could dispatch his argument by pointing out that he is confusing the meanings of sentences with what people believe when asserting them. From the fact--if it is a fact--that traditional theists believe CW as Munitz construes it, and that they don't assert CEN without believing CW so construed, it doesn't follow that CEN *means* CW so construed. Therefore, the meaning of CEN doesn't attenuate just by CW's not being included in it. That is what Aquinas' view shows us. But Munitz seems to have another reply. He could say that if some traditional theists think that CEN doesn't mean that the world began in time, they ought to think so. They ought to think so because if they want to express the contingency of the world via CEN--as they clearly do want--they must express it as CW. After all, they wouldn't want to express the world's contingency

via 'there might have been nothing'--which is nonsense--and the only other alternative is to express it as 'the world might not have been'. Ordinary usage tells us the kind of thing sentences of the form 'x might not have been' mean, i.e, they mean sentences of CW's form; therefore, CEN should be taken to mean the same as CW.

But there are two difficulties with this reply. First, Munitz's argument just doesn't establish that 'the world is contingent' can only mean 'the world might not have been' construed as a past-tensed counterfactual. I have already produced a counter-example, and will soon produce another (contingency₄; see below). Second, if 'the world is contingent' does mean 'the world might not have been', Munitz offers no argument that his account of the ordinary use of counterfactuals restricts how 'the world might not have been' can be construed. For even if that account is adequate (which nothing shows), Munitz offers no argument that the ordinary use of counterfactuals is the only legitimate kind for theists, or anybody else, to employ for present purposes.

So, Munitz hasn't made his case. And the reasons that indicate why he hasn't made his case permit us to conclude that something's being contingent in some-or-other *de re*

sense doesn't entail that it is contingent₃. For Munitz's basic reason for saying that CEN entails that God created the world at some time is his belief that something's being contingent in any *de re* sense at all must mean, among other things, that it began at some time. But as we've seen, theists as such aren't committed to this belief, and as we will see, there's an atheistic alternative to it as well. I conclude in particular that there's no reason to believe that the world, if contingent₂, must be contingent₃.

This result is important, because to include '_____ is contingent₃' in (5)'s conjunctive predicate would make it that much more difficult to defend (5). There's no good philosophical argument or scientific evidence that The World had a temporal beginning: there are only theories, and a particular construal of a statement some people believe to be revealed by God (*Genesis* 1:1). But since there is no reason to believe that The World's being contingent in any *de re* sense entails that it is contingent₃, it is that much more plausible to allow that The World is contingent *de re* in some sense richer than that of 'contingent₁'. Accordingly, I shall not include 'contingent₃' in (5)'s analyzed predicate, even though The World may in fact be contingent₃.

The non-theistic evidence that Munitz is wrong is that even if The World is neither contingent₂ nor contingent₃, there is a sense of 'contingent', besides that of 'contingent₁', in which we can meaningfully call it contingent. This is the sense best suited to expressing the "what men mean when they say: The world exists": the felt contingency of which some writers are enamored.²⁹

Consider the sort of contingency that we readily ascribe to coincidences. If somebody A is walking under a house-painter's ladder at time *t* and, to mutual chagrin, the painter's bucket of paint falls on A's head at *t*, we can explain why A was walking under the ladder at *t* and why the bucket fell at *t* where it did; but we can't explain in the same way why A was where he was at the same time as the bucket. If this latter question has a non-trivial answer, it won't be a mere conjunction of the respective explanations of A's position and the bucket's (cf. Hamburger 1979). Nobody asking the question why A was where he was at the same time as the bucket would be satisfied with that sort of answer. To answer the question, one would have to

²⁹See, e.g., Sartre's famous description of Roquentin's nausea in *Le Nausée* (Cumming 1975, 62-3); see also Wittgenstein (above, II.2).

cite someone's *effective intention* that A's head and the bucket converge when and where they did. Only thus would the state-of-affairs-that-A's-head-is-under-the-ladder-at-the-same-time-as-the-bucket be non-trivially explained in a way distinct from what could in any case be the conjunctive explanation of its constituents. We might of course look into the matter and discover that there was no such intention. And indeed, things like the bucket incident are contingent in the present sense precisely when there is no such intention. So if the bucket incident is contingent in that sense, then the question why A's head was where it was at the same time as the bucket does not, in fact, have a non-trivial answer. There isn't an explanation of the-state-of-affairs-that-A's-head-is-under-the-latter-at-the-same-time-as-the-bucket that would explain its constituents in a way distinct from how one could in any case explain those constituents severally. Coincidences and mishaps are thus contingent in the sense of 'happenstance'.

Now suppose *arguendo* that The World's constituents are severally CAS-explicable without reference to divine intention. One can't pretend that the conjunction of such explanations--whatever it is--counts as a non-trivial explanation that would answer the question *why* The World exists,

any more than one can pretend that the such an explanation of the bucket incident would explain non-trivially why A was under the ladder just when the bucket was under it. A theist, of course, might say that mishaps all fit intelligibly into a divine plan--say, for developing human virtue. Thus, he might CAS-explain the bucket incident by saying that God, *via* just the causes that respectively account for A's head's being where it was at *t* and the bucket being where it was *t*, caused A to have a mishap that would remind A of his vulnerability and encourage him to greater humility. The bucket incident might thus be CAS-explained in a way distinct from that in which each of its constituents could in any case be CAS-explained. And if God created The World intentionally, then that is a CAS-explanation of The World's existence, in virtue of answering W_2 . But if The World's existence can't be thus explained, then it may be contingent in something like the sense of 'happenstance'.

Not, however, in just the same sense. There are indeed two ways in which The World's existence is like many coincidences or mishaps. First, it is a logically contingent state of affairs. Second, and more immediately relevant, "What men mean when they say: The world exists" is something

like "Strange that *this* should be" as opposed to "Oh, this is just the sort of thing one would expect." The World's existence isn't the just the sort of thing one would expect. But that's because, unlike coincidences, the likelihood of The World's existence can't be measured in light of some prior course of events. Coincidences are unusual by comparison with the usual course of events, and yet are coincidences only if somebody's effective intention hasn't so molded the course of events as to bring them about. The World, however, comprises everything that happens, usual and unusual. So if The World is both contingent and yet not produced intentionally, that won't be because there is some usual course of events by comparison with which The World's coming about is unusual, and thus some particular course of events that happens not to have been molded intentionally to bring about The World but that has, surprisingly, brought about The World anyway.

Rather, The World's existence would be contingent because nothing at *all* has brought about the sphere of what happens--i.e., The World. Thus, not only would nothing would explain *why there is any sphere of what happens*--except in the trivial sense that, for some particular occurrences, we can explain why *they* happen--but nothing would explain *how*, or in virtue of what, The World has come about.

The World differs from coincidences like the bucket incident in another respect. The bucket incident is very small-scale and is the sort of thing a human could engineer; but the larger the scale of a coincidence, the less likely we are to say that it is the sort of thing that somebody might have engineered but, in fact, didn't. When solar flares appear in a given month and so disrupt certain radio frequencies used on earth as to block important messages, it would take a very powerful and knowledgeable extra-terrestrial to have so influenced the Sun that it would give off flares *in order to* block messages that would otherwise be broadcast on the frequencies in question. For any solar flare-up, such an explanation is extremely unlikely--unless there is a God who intends each occurrence for some-or-other reason subsumable under his general purpose in creating. Now if anyone deliberately brought The World about, only a God did. But The World doesn't seem to be the sort of thing that is brought about but might or might not be intentionally brought about, the way the bucket incident might or might not be engineered by a human, or even the way global radio interference might or might not be engineered by highly advanced extra-terrestrials.

The reasons for this entail that if The World isn't produced intentionally and without some prior course of events, then it couldn't depend, for its existence, on any being (etc.) it doesn't comprise.

For suppose *arguendo* that The World isn't intentionally produced. No BRC or OP could bring about The World; for since any BRC or OP is comprised by The World, no view on which The World is produced by some BRC or OP could tell us what brings about The World--whether the bringing about is thought to be intentional or not.³⁰ Thus I rule out *tout court* any view--such as process theism--that purports to explain the world as brought about by a BRC or OP. By the same token, The World can't be a feature--either essential or accidental--of some *y*. If The World were such a feature, then each of its constituents would be; thus the *y* of which The World is a feature would have BRCs as features; moreover, every BRC would be such a feature for as long as it

³⁰For example, as Geach 1972, 322 says, "...if God is changed by the changes of creatures, then God will only be one more ingredient in that aggregate of changeable beings which we call the world, and will not be the Maker of the world. Even if we could consistently think of such a God as causing *all the rest* of the world....even then the causal questions that arise about other changeable beings could rightly be raised about such a changeable God; as Schopenhauer said, you cannot pick up an argument like a cab and pay it off when it has taken you as far as you want to go."

exists. Now if a feature of some *y* really changes while being a feature of *y*--as, e.g, a hair on your head really changes while being a feature of you--then *y* really changes. And if *y* really changes, it is comprised by The World rather than having The World as a feature. Therefore, The World is not a feature of some *y* it doesn't comprise--whether it has "come about" as such a feature or is otherwise dependent on *y*. Nor can The World be produced out of some pre-existing stuff that would thus really change. That would explain not how The World exists, but how something The World comprises changes.

Indeed, it would be misleading to speak of The World as "coming about" at all. It would be better to speak of The World as being *metaphysically dependent* (for its existence) on something changeless of which The World is not a feature and which doesn't produce The World intentionally.

Some might want to look to *emanationism* for some version of this hypothesis. Emanationist theories, however, are notoriously difficult to interpret. I don't know, for example, whether the hypothesis is exemplified by Hegel's notion of the self-embodiment of the Divine Idea in Nature,³¹ or by Plotinus' notion of the One's necessarily

³¹I use the term 'emanationist' to characterize Hegel's cosmology in the same way as Taylor 1975, 97-102.

"overflowing" in its perfection.³² But a general theme of emanationism is that the γ from which the world emanates is somehow *continuous in being* with the world. The World thus either is a *dilution of* or *devolution from* the being of the γ it emanates from--which is roughly the Neoplatonist view--or is that by which γ constitutes itself or completes itself--which is roughly the Absolute Idealist view. Whatever specific shape it takes, the theme of the continuity of being is an essential feature of emanationism that distinguishes it from classical theism's CEN. But if one asserts that The World is continuous in being with the γ it emanates from, one would be hard put to deny both that The World is a feature of γ and that γ really changes. Like process theists, emanationists can't tell us why that from which the world supposedly emanates doesn't belong in the world. In most forms, emanationism doesn't afford a clear instance of what it would mean to say that The World is metaphysically dependent on something it doesn't include.

Emanationism aside, it would be merely idle to hypothesize a being--call it "God"--who is able to produce The World intentionally, but produces it non-intentionally.

³²For a standard if problematical interpretation, see Lovejoy 1936, 62ff.; for the most sensitive interpretation of Plotinian emanationism, see Rist 1967.

To suppose that there is a God who can act intentionally but, in some instance, does not, is to suppose that we can apply to God a distinction analogous to that which the scholastics drew between *actus humanus* and *actus hominis*: roughly, the distinction between intentional and non-intentional overt behavior in humans. Thus we sometimes control our own behavior, and sometimes are caused to behave in ways over which we have no control. Now if God is subject to external causal influences, he is included in The World--as he would be if subject to internal causal influences that entail his *becoming* actual in any respect; so we may rule out the hypothesis that something causes God to act involuntarily. One might say that God's producing The World is utterly arbitrary: he just *does* produce it without reason or cause, though he could have produced it intentionally (see Aquinas, *SCG* II.24.7). But given that the bigger the totality, the less likely we are to think that it could have been but wasn't intentionally produced, such a hypothesis would be of no explanatory value whatever. Still more idle would be the hypothesis that there might have been a God who would have produced The World intentionally but, alas, happens not to exist.

I conclude that there's no plausible hypothesis on which The World is metaphysically dependent on something it doesn't include and which didn't produce it intentionally. So if The World isn't intentionally produced by something changeless, of which it isn't a feature, then The World's existence isn't dependent in any sense at all on something it doesn't include.

The World's existence is thus contingent in a way both like and unlike that of happenstance states of affairs. It is like such states of affairs in that, unless there is an answer to the question *why*, there's no explanation of the totality distinct from how the constituents of the totality might in any case be explained. It is unlike happenstance states of affairs in that, if there isn't an answer to the question *why*, then The World isn't the sort of thing whose existence would admit of *any non-trivial explanation at all*.

Let us indicate this sort of contingency by 'contingent₄'. The World is contingent₄ *just in case* it is not contingent₂, and I can find no other meaningful sense, beyond that of 'contingent₁', in which The World might be called contingent. Thus I conclude my consideration of the *de re* senses of 'contingent' richer than that of 'contingent₁'. The version of (5) I want to assert, then, is

(5*) The World is contingent₁ and either contingent₂ or contingent₄, but not both

which ascribes a robust contingency to The World without entailing either that The World is, or that it is not, non-trivially explicable by something else.

(5*) gains still more plausibility when one considers that in general, a being (etc.) is contingent₁ just in case it is contingent in at least one of the richer senses I have discussed. This certainly seems to be true of BRCs and OPs. A being is contingent₁ just in case it doesn't exist necessarily, and no BRC or OP exists necessarily; moreover, I know of no BRC or OP that isn't either contingent₂, or contingent₃, or happenstance, or a just a feature of something that is either contingent₂ or contingent₃ or happenstance. So, a BRC or OP is contingent₁ just in case it is contingent in at least one, but not all, of those other senses. I suspect that this equivalence is necessary. But I shall not argue that it is, for we needn't settle the matter here. Necessary or no, what helps explain the equivalence also helps explains why The World, besides being contingent₁, is either contingent₂ or contingent₄--whether or not it is also contingent₃.

If x doesn't exist (etc.) necessarily, then x is contingent₁. If x is contingent₁, then its existence (etc.) is not self-explanatory. If x 's existence (etc.) is not self-

explanatory, then it is either non-trivially explicable by that of something else--i.e., hetero-explicable--or only trivially explicable. This is true of each BRC and OP; it is also true of The World. Now in general, if x 's existence (etc.) is hetero-explicable, then x is either produced by some y and is thus contingent₂, or is a feature of some z , or both. But if The World's existence is hetero-explicable, then The World is contingent₂ and not a feature of any z . If, on the other hand, The World's existence is not hetero-explicable, then it is only trivially explicable--via the several explanations of its constituents--and thus contingent₄. And it follows neither from The World's being contingent₂, nor from its being contingent₄, that it is also contingent₃. Therefore, The World is either contingent₂ or contingent₄, but not both, whether or not it is also contingent₃.

II.4 The World is Absolutely Mysterious

If The World is contingent₂, then it is intentionally produced by some (i.e., at least one) being that it doesn't include--an unchanging being (call it a 'UB').³³ So if (5*) and The World is contingent₂, then it is explicable *only* as produced *intentionally* by some UB. The World is thus CAS-explicable. If, however, The World is contingent₄, its existence is only trivially explicable and thus The World is essentially and negatively mysterious (ENM). By (5*) and the above considerations, then,

(8) The World's existence either is CAS-explicable only as intentionally produced by an UB or is ENM, but not both is established.

If we can't know which of (8)'s disjuncts is true, then by clause (a) of the definition of 'essentially and relatively mysterious' (ERM) in I.2, The World is ERM. But it doesn't follow that The World is not also absolutely mysterious. Our being unable to know which of (8)'s disjuncts is true doesn't affect the truth values of those disjuncts. And if the second disjunct is true, then The World's exis-

³³Whether such an unchanging being is also unchangeable I shall soon consider.

tence is absolutely mysterious by definition--for no one could explain The World non-trivially, even if we can't know that no one could.

Indeed, we may go further and say: *if (8), then The World's existence is absolutely mysterious--whether or not we can know which of (8)'s disjuncts is true. For as I shall now argue, if (8)'s first disjunct is true, then The World is essentially and positively mysterious (EPM).*

To say that The World's existence is EPM means that it is CAS-explicable and yet not exhaustively explicable, i.e., not uniquely determined by something whose existence (etc.) can be cited by way of CAS-explaining it. By (8), The World's existence is CAS-explicable just in case The World is (intentionally) produced by some UB. Such a UB exists either necessarily--i.e., always, unproducibly, and unpreventably--or contingently in some-or-other sense. Let us begin with the supposition that such a UB exists necessarily.

By definition, x is uniquely determined iff some y (non-trivially) necessitates x , so that x is thus CAS-explicable; and x is thus necessitated iff, given y 's existence (etc.), x has to exist (etc.) rather than anything incompatible with x 's existence (etc.). That some UB produces

The World only *trivially* necessitates that *The World* exist: necessarily, if something produces a particular *a*, then *a* exists (etc.) rather than anything incompatible with *a*. But if some UB produces some *x* or other, it doesn't follow either (a) that some UB is the sort of thing that, if it exists at all, produces something-or-other, or (b) that, if some UB is the sort of thing that produces something-or-other if it exists at all, then it produces *a* in particular. *The World* is *non-trivially* necessitated by some UB that produces it iff necessarily, if that UB exists at all, it produces *The World* in particular rather than anything incompatible with *The World's* existence.

Now *The World* is the actual world, and the existence (etc.) of any BRCs other than those it comprises would entail that *The World* is not the actual world; thus, the existence of any such BRC is incompatible with that of *The World*. So if *The World* is necessitated by a necessarily existent being, it follows that *The World* is the only possible world. For if some UB(s) that exist(s) always, unproducibly, and unpreventably is or are such that, given it/their existence, *The World* has to exist rather than anything incompatible with its existence, then no BRC other than those comprised by *The World* could possibly exist. But *The World*

isn't the only possible world. Hence, *The World's existence can't be necessitated by any necessarily existent UB, even if it is produced by such a UB.*

On the other hand, the hypothesis that The World is produced by one or more contingent UB/s is difficult to formulate with the remotest plausibility. First, in order to express the hypothetical contingency of the UB/s in question, one must say more than that the statement that it/they exist/s is not a logical truth. No predicate \bar{U} of first-order predicate logic is such that it is a logical truth that \bar{U} has extension; so it is not a logical truth that there is some UB; but this doesn't distinguish the UB/s in question from anything necessarily existent in the sense I have been employing. *Ex hypothesi*, whatever else may characterize the UB/s in question, if it/they exist contingently, then it/they do/es not exist always, unproducibly, and unpreventably--i.e. necessarily, in the sense I have been employing. Yet when one runs through some of the logical permutations of this negative condition, there seems to be no hypothesis that is both cogent in itself and clearly excludes x from The World.

If, for example, the UB/s in question do/es not exist always, then it/they begin/s or end/s at some time. Typically, if some individual being begins at some time, it has

been produced as the outcome of some temporal process and develops while coming to be; and if something ends at some time, it is either destroyed from without or in due course undergoes dissolution. *Ex hypothesi*, none of this could be true of the UB/s in question; otherwise, they would be comprised by The World. Some theists, of course, would cite *angels* as exceptions to what I have said is typically true of individuals that begin or end. If angels begin at some time, they do not do so as the outcome of some temporal process; they cease to be only if annihilated by God.³⁴ But angels are nonetheless BRCs. So even if such created beings are neither "generated nor corrupted," they are still to be included in the world. A desperate expedient here might be to suggest that a UB that produces the world just pops into existence at a particular time and/or suddenly ends at a particular time. But nobody who proposes explaining The World's existence as produced seriously proposes this hypothesis, because there is no reason to believe it--surely not in aid of "explaining" The World's existence. The only reason, it seems, for not also including our hypothetically contingent producer/s of The World in The World is that the

³⁴See Aquinas (also known as the "Angelic Doctor" of the Catholic Church), *ST Ia Q50 A5*.

producer/s can't be so included if it/they is/are to be said to have produced the world. This is scarcely convincing.

Next, suppose that the UB/s in question exist/s always but preventably. If some x is preventable, then the actual existence (etc.) of some possible being (etc.) y is incompatible with that of x . If a preventable being x exists always, then no possible y incompatible with x 's existence ever actually exists (etc.). Now in virtue of what would some UB that produced The World always exist and yet be preventable?

Well, if some existent UB is not only changeless but *unchangeable*--i.e., immutable--that would certainly CAS-explain its existing always. For such an immutable and always existent being--call it an 'IBA'--can neither dissolve of itself nor be destroyed. So, if an IBA is preventable, that can only mean that its never having existed is possible, in the sense that *had* some possible y existed, the IBA would not have existed. But such a y could never come to be in The World and could not be produced by whatever produces The World. That such a y is possible at all, of course, means partly that the statement that y exists is neither formally contradictory nor inconsistent with any necessary truth. But I don't know how otherwise to charac-

terize such a *y*--except to say that if *y* had existed, the IBA would not--and I suspect nobody else would either. So the hypothesis of our UB's/s' immutability, while it would help explain why it/they always exist/s, leaves us at a loss to explain what it is in virtue of which some possible *y* is such that, were it actual, our UB/s would not exist. Thus, the hypothesis of a preventable IBA is an idle one.

If, however, the always existent UB/s in question is/are *merely* changeless, then there is no reason to think they are the sort of thing that can't dissolve or be destroyed. We would say that it/they do/es not happen to dissolve or get destroyed; moreover, it so happens that nothing incompatible with it/them exists. Now very few empirical generalizations are exceptionless; but one candidate for such a generalization is: if *x* can dissolve or be destroyed--say, by dying or being annihilated--then at some time *x* dissolves or is destroyed. What reason is there, then, for anyone to believe that something that could dissolve or be destroyed never does dissolve or get destroyed? None--unless one believes that some humans or things are kept from this fate by divine favor. And the notion that something keeps UB/s that produce *The World* from the normal fate of corruptible things, and thus keeps them from belong-

ing to The World, would just be a hollow expedient for defending a hypothesis that lacks explanatory merit on its own account. The same goes for the notion that nothing incompatible with changeless but changeable UBs happens to exist, though it could. One might explain the nonexistence of such a possible thing by saying nothing happened to produce it, or that it didn't happen to pop into existence. But here again, we are raising possibilities-outside-the-world that nobody would waste time expounding, except to defend the hypothesis that the UB/s that produce/s The World are somehow contingent *de re*. Why bother?

I shall not bother with other permutations of the hypothesis that The World is produced by some contingently existing UB/s--whether The World would thereby be necessitated or not.³⁵ That hypothesis drives us straightaway into the realm of metaphysical fantasy, when there is a tra-

³⁵If Christianity is true, then The World has been created by an immutable but tri-personal God. Given my definition of 'contingent₂', it may seem that two of those persons--the Son and the Holy Spirit--can be said to be contingent₂: the former is produced by being begotten by the Father, the latter by proceeding from the Father (and, if Catholicism is true, from the Son as well). But since these modes of production are necessary, timeless relations among necessarily existent entities that are otherwise exactly alike, the Son and the Holy Spirit could only be called contingent in a Pickwickian sense. So I do not use 'contingent₂' to cover them.

ditional and more plausible alternative--i.e., that The World is produced by something necessarily existent that doesn't necessitate The World's existence. But I shall assume henceforth that the necessarily existent UB/s that *ex hypothesi* produce The World is/are also immutable; otherwise, there is nothing other than a requirement of an hypothesis to tell us why it/they do/es not happen to change and thus do/es not happen to belong to the world.

We may now recast (8) as

(8*) The World's existence is either CAS-explicable but not exhaustively explicable as intentionally produced by at least one necessarily existent and immutable being, or is ENM, but not both.

Classical theism is the clearest version of the view that something necessarily existent and immutable intentionally produces The World without doing so necessarily. That is the version on which I shall rely. Classical theists call such a producer 'God', and the mode of The World's production 'creation'. Thus, I recast (8*) as

(9) The World's existence is either CAS-explicable and not exhaustively explicable as intentionally created by God, or is ENM, but not both.

Given (9), is there any more reason to affirm one of its disjuncts than to affirm the other?

II.5 The World is Properly Mysterious

I shall argue in this section that there is better reason to affirm the first of (9)'s mutually exclusive disjuncts:

(9a) The World's existence is CAS-explicable but not exhaustively explicable as intentionally created by God;

than its second:

(9b) The World's existence is ENM.

From (9) and the definitions of the EPM and the properly mysterious,

(10) The World is either properly mysterious or ENM follows.

Hence, if my argument is successful, there is better reason to affirm the first of (10)'s mutually exclusive disjuncts than its second: The World is best regarded as properly mysterious.

Against this and assuming (9), one might argue for (9b) in roughly two ways. First, one might argue directly--without any prior, explicit attack on (9a) or any doctrine committed to it--that The World, as distinct from any particular constituent of it or group of such constituents, doesn't call for something it doesn't comprise to have produced it. If such an argument were successful, and if, as I

have argued, The World can't be a feature of anything else, then The World *qua* totality would only be explicable in terms of its constituents. Thus, if each such constituent is CAS-explained by citing some other such constituent, then everything about The World that calls for explanation has been explained. Another way of putting this is: there being any sphere of what happens is explicable only by whatever BRC/s and/or OP/s may explain some-or-other occurrence; there being *this* sphere of what happens is explicable only by the (infinite?) conjunction of the several non-trivial explanations of each occurrence by BRCs or OPs. There being such a totality as The World would not be explicable except by how one might explain each of its constituents in terms of other such constituents. The World's existence *qua* totality, as distinct from the existence (etc.) of each of its constituents, would not be non-trivially explicable. The World's existence would thus be ENM.

Second, one might argue indirectly--without any prior, explicit argument that The World isn't the sort of thing that calls for something to have produced it--that we should reject (9a). So if (9), then (9b). This, I think, is the method a proponent of (9b) must adopt. Once I have shown

why, and what the prospects of such a method are, it will be that much easier to show that there is better reason to accept (9a) than (9b).

We don't know all that the human race will learn or might have learned, and if there are other limited rational knowers (LRKs), we don't know what their explanatory resources may be. Hence, in order to establish (9b), one would have to argue that The World just isn't the sort of thing that could count as an *explicandum* distinct from its constituents. One would conclude what it used to be fashionable to assert dogmatically: $W_?$ is one of those questions that "doesn't arise." Now when people set out to establish rather than just assert this, they very often produce an argument of the form: the concept of _____ is such that to treat the world as an *explicandum* distinct from its constituents is to misuse that concept; thus (9a) is wrong-headed, necessarily false, or meaningless. Assuming (9), this is to attack (9a), and thus to try to establish (9b) indirectly. Yet such attacks have no force apart from a wider, more thoroughgoing sort of attack on doctrines committed to (9a)--mainly classical theism.

To take the most obvious example first, suppose one tried arguing for (9b) by arguing that it would be wrong-headed to describe The World as caused. To explain some-

thing as intentionally produced is, after all, to explain it as caused; if (9), then The World is CAS-explicable as caused if CAS-explicable at all; and on Hume's influential view of causation, The World isn't the sort of thing that we could explain as caused.

In Part II of the *Dialogues*, Philo addresses himself thus to the question of the origin of the world:

When two *species* of objects have always been observed to be conjoined together, I can infer, by custom, the existence of one whenever I see the existence of the other: And this I call an argument from experience. But how this argument can have place, where the objects, as in the present case [God and the world], are single, individual, without parallel, or specific resemblance, may be difficult to explain. And will any man tell me with a serious countenance, that an orderly universe must arise from some thought and art, like the human; because we have experience of it? (DNR 185)

We may take Philo as here representing Hume's own mind. For underlying Philo's argument is the well-known Humean view that we may infer that an A causes a B only if we have experienced the regular ensuing of B's on A's. Substituting 'The World' for 'the world' so as to get an argument for (9b), I call 'Philonian' the two-pronged argument that (i) since humans weren't around to observe The World's existence ensuing on God's--if it did so ensue--they have no basis for inferring that God caused The World; and (ii) even if, per

impossibile, one of us had been present at the creation, there is only one God and one The World, so that it would be wrong-headed to *describe* The World as related to something else as effect to cause.

Only the Philonian argument's first prong seems valid (I do not say sound): *given* how they arrive at causal judgments, humans can't infer that The World is an effect of some cause. To make (ii) valid, one must invoke a further premise to be found in Hume. And when we focus on that premise, it will become clear why the Philonian argument doesn't establish (9b)--unless other arguments show that (9a) and any doctrine committed to it are false.

The needed extra premise is *not* that one can't identify God and The World in terms general enough to make 'The World ensued upon God's action' a substitution-instance of 'A B ensued upon an A.' For one could identify God as 'an agent' and The World as 'an orderly complex whole'; thus one could form the substitution-instance 'An orderly complex whole ensued upon an agent's action'. This would at least give us a sentence of the proper form; there are many instances in which orderly complex wholes have ensued on an agent's action, such that even by Humean standards we would be justified in saying that an agent caused an orderly complex

whole. That there is, *ex hypothesi*, only one God and one world isn't *by itself* a reason to deny that God caused The World. Rather, we aren't *justified in saying* that a particular A is a cause of a particular B unless, before observing the particular A and B in question, we have already observed A's and B's to be constantly conjoined. And nobody observed God's causing The World at all, much less observed it after having observed something like it. But to infer (ii), Hume needs still more. He has to say that a necessary condition for the truth of a substitution-instance of 'An A causes a B' is that the B's ensuing on the A be observable by some intelligent being like us, who could compare the observation with past ones stored in his memory, and then infer that he is confronted with an instance of the constant conjunction of A's and B's. From this point of view, the concept of causation is only an epistemological concept: the conditions of *justification* for our ascription of causal connections to pairs of observed events are the same as the conditions of *truth* for any statement of the form 'For some x and some y, x causes y'. I take this to be close to Hume's actual view (cf. *DNR* 176), and to be the extra premise that the Philonian argument needs.

If I am interpreting Hume correctly, then we may sum up the Philonian argument as: The World isn't the sort of thing that so enters our experience that we could identify it as a further instance of some B's ensuing on some A; therefore, it would be wrong-headed to describe The World as the effect of some cause. If sound, this argument establishes (ii). And if (ii), then The World isn't the sort of thing that calls for something to have produced it. If it were, then it would call for something to have caused it, which by (ii) would be a wrong-headed thing to say; and by (9), there's no other way for The World to be non-trivially explicable. So, The World doesn't count as an *explicandum* distinct from its constituents, and (9b) is true.

Why should we believe the key extra premise of the Philonian argument? For one thing, if there's good independent reason to believe (9a), then there's good reason to believe that any account of causation that is incompatible with it is defective. If it be protested that the Humean view of causation--considered in itself and aside from its atheological consequences--plainly is an adequate account of what causation is, I point out that this has already been argued against in I.5. The regularity view of causation

isn't so cogent that the falsity of any belief incompatible with it may be inferred without further ado.³⁶ More--much more--is necessary.

The very context of the argument I have quoted suggests that Hume realized implicitly what more is necessary. That argument is offered as an attack on a class of a *posteriori* arguments used in theistic natural theology. But the *Dialogues* contain other such attacks, as well as attacks on other sorts of arguments in natural theology. If citing his view of causation sufficed by itself to show it wrong-headed to say that The World is the effect of some cause, then Hume's aim in the *Dialogues* could have been achieved just by expatiating on the Philonian argument. But his underlying view of causation could appear as an adequate account of what causation is, rather than just as an attempt to describe how we make causal judgments, only as part of a cumulative, successful case against classical theism (and relevantly similar doctrines). The same would go for any view of causation incompatible with (9a). And so I conclude that one can't establish (9b) directly by so limning the

³⁶Two recent accounts critical of and incompatible with the regularity view of causation are Emmett 1985 and Cartwright 1983.

concept of causation that it would be wrong-headed to assert anything implying that God causes The World. One must also deploy other arguments to dispose of (9a) and any doctrine implying it. The most important such doctrine is classical theism.

Munitz (207) also quotes the passage from the *Dialogues* I have quoted, arguing that "none of the features commonly found in the experience of objects having been made are found in the existence of the world" (208). Wisely, he doesn't commit himself to Hume's view of causation. But the basic plan of attack is similar. It is to argue that our way of judging that some x is \hat{U} must assume such-and-such a form and be made under such-and-such sorts of circumstances; therefore, a statement that x is \hat{U} is both meaningful and rationally justifiable only if it expresses a judgment of that form and is made under some such circumstances. The details of Munitz's account of human judgment are unimportant, but the strategy is important. I shall call it 'the normative-concept-of-_____strategy' ('NCS' for short).

Though his main strategy is NCS, Munitz's thesis is more modest than Hume's in the *Dialogues*. It is that, because all we've got are certain methods of judgment, we haven't got any "rational method" either for answering $W_?$ in

a particular, non-trivial way or for concluding that $W_?$ has no non-trivial answer (Chapter XII). A consequence of this is that there's no rational way for us to decide between (9a) and (9b). One might think this more defensible than any outright claim that (9b) is true; and if Munitz were right, then the most I could argue is that the world is absolutely mysterious. But Munitz's thesis hinges on an independent argument against the rationality of believing classical theism. That argument doesn't work.

It runs roughly like this:

- (i) The most serious argument for "theism" uses a "metaphysical" version of PSR as a premise to argue for God's existence (this is the burden of Chapter VI).
- (ii) That version of PSR is justifiable iff the existence of the world can be explained (125).
- (iii) To say that the world exists necessarily means nothing more than that the world exists, and thus can't explain why the world exists (this is the burden of Chapter IX).
- (iv) Ergo, PSR is justifiable only if the world is contingent.
- (v) 'The world is contingent' can only mean 'the world might not have been', and 'the world might not have been' is meaningful only in terms of the most primitive form of theistic philosophy (see above, II.3).
- (vi) Ergo, the world is contingent iff the most primitive form of theistic philosophy is true.
- (vii) Ergo, PSR is justifiable only if that form of philosophy is true.
- (viii) Ergo, assuming PSR as a premise in arguing for theism is justified only if the most primitive form of theistic philosophy is true.
- (ix) Ergo, the most serious argument for theism "begs the question."
- (x) Ergo, there are no rational grounds for believing classical theism.

Premises (i), (iii), and (v) of this argument are false. In II.3, I have already refuted (v); but there's little point now in undertaking a refutation of (i) and (iii). What is worth noting is that Munitz's use of NCS depends on this way of identifying and refuting the "rational" case for theism. Only if he has rightly identified and refuted that case does NCS come into play. Thus, only if the argument of the previous paragraph is successful has he supplied grounds for thinking that all meaningful, rationally justifiable assertions are of the forms he takes to be normative. Since that argument is unsound, I leave Munitz behind for good.

Those who are more ambitious than Munitz and want to argue for (9b) also realize that, without independent reasons to reject classical theism, NCS is unserviceable against (9a). That is why they tend to run NCS together with the only strategy that *might* effectively serve--and it is to this latter strategy that NCS often gives way altogether. I shall illustrate how with two more examples that may be found in Hume *et al.*

The first is the argument that the concept of *necessary existence*, under which classical theists say God falls, is necessarily empty. For Hume (DNR 232-33) and those who

guard the deposit of Humean faith, to say that x necessarily exists means that to deny that x exists "implies a contradiction"; no existential proposition is such that its denial implies a contradiction; hence, nothing necessarily exists; hence, God doesn't necessarily exist.

If this argument were sound, then (9a) would be false. And it does work well against some characterizations of God's necessary existence (e.g., Descartes' in the *Fifth Meditation*). But (9a) in no way implies that the denial of 'God exists' implies a contradiction. All the same, God necessarily exists: he exists always, unproducibly, and unpreventably. This holds of numbers as well (cf. Prior 1976, 58). Thus 'God exists' could never be false, because what it says exists could never fail to exist. To object that this is not an instance of "what it means" to say that something exists necessarily would be a gross *petitio*. Somebody might want to argue, of course, that nothing *concrete*--as opposed to such *abstract* entities as numbers--could exist always, unproducibly, and unpreventably. But I know of nothing to show *in general* that nothing could so exist.

For good reason, the customary atheological move here is to try to show that the God of classical theism *in par-*

ticular could not possibly exist.³⁷ This is the point of, e.g., arguing there being evil in his creation implies that God can't be both omnipotent and perfectly good (DNR 234ff; cf. Mackie 1955; 1982). Of course, if such an argument were sound, it wouldn't follow straightaway that (9a) is necessarily false and hence that, given (9), (9b) is true. For classical theists ascribe many attributes to God that don't come explicitly into (9a); for all (9a) says, the creator of The World might lack some such attributes; and it sometimes seems that it is just the attributes that don't come into (9a) whose ascription occasions the major worries for classical theists--the problem of evil chief among them. But classical theism is far and away the best-developed and most widely held doctrine committed to (9a). Hence, if the richer conception of God typical of classical theism could be shown either internally inconsistent or inconsistent with some proposition that all reasonable people--including reasonable theists--would accept, then (9a) would lose much of the plausibility it has for thoughtful people. This is to adopt a stronger strategy than NCS--one that would, if suc-

³⁷ The most recent examples of this strategy, employed almost to the exclusion of all others, are Kenny 1979 and Mackie 1982.

cessful, make the validity of the sort of conceptual account employed in NCS a probable conclusion from the falsity of classical theism rather than part of a demonstrative argument for the falsity of (9a).

To see how, consider a second example of NCS: the argument that the concept of intentional agency calls for all agents to be BRCs. (see Hume, *DNR* 196ff.) Thus, e.g., people sometimes talk like this: if God is to be conceived as an agent, he must first deliberate for some (perhaps infinitesimal) time while drawing on the prodigiously ample information available to him, and then execute his doubtless very wise plan at some later time--sometimes while overcoming the resistance of the refractory materials with which he is obliged to work. As I have already implied, such a God, if he existed, would have to be regarded as part of the world. Some *soi-disant* theists seem to welcome this result. But atheists have also used the present argument against classical theism's (9a)--and so the argument is for (9b), no matter who is using it.

Like the Philonian argument, this one would work in isolation only on the assumption that a certain sort of conceptual account is correct. Defenders of (9a) will of course reject any such account. In order to show that they

aren't justified in doing so, one would have to show that no intentional agent is describable in a way that (a) conveys something close enough to what classical theists mean by God's performing an act of creation, and (b) is consistent both internally and with other, relevant propositions that all reasonable parties to the dispute would accept. To state these requirements is only to hint at how difficult it is to meet them. One certainly can't meet them just by noting that (9a) doesn't conform to some putative account of the ordinary concept of intentional agency. One has to show that defenders of (9a) can't consistently employ *anything like* a concept of intentional agency.

Critics of the claim represented by (9a) often overlook this. One thus hears not that the Creator can't be consistently described in the relevant way, but that the critic can't conceive what a being so described would be like. But if made without implementing the sort of *ad hominem* strategy I have just outlined, such a complaint could simply be met with the reply "So much the worse for the critic." And the same goes for all the other concepts that have been so explicated as to show that classical-theist descriptions of God eviscerate, distort, or otherwise misuse those con-

cepts.³⁸ If one wants to argue for (9b) over (9a), then, one must try showing that God can't be described in terms that are *both* faithful to classical theism *and* consistent in both of the ways I have indicated.

And yet, *not even this strategy could ultimately succeed*. Let the term 'a God-description' mean 'a sentence of the form "God is _____"', where the predicate is conjunctive. There are indeed some God-descriptions so patently inconsistent, in one or both of the ways indicated, that theists do well to modify or eschew them.³⁹ But without beginning a potentially endless consideration of the challenges they face, it's clear that classical theists who accept the principle of non-contradiction won't adhere either to any God-description that turns out to be internally inconsistent or to any proposition that turns out to be in-

³⁸Thus Kenny 1979 argues that an immutable being can't know the time, because knowing the time entails existing in time. But a classical theist could simply offer a different account of what such knowledge must entail, and the argument would go back and forth. A similar point could be made against Kenny's contention that an unembodied mind seems to be impossible. As J.F. Ross has acidly remarked, "after centuries of failure to explain how an *embodied* mind is possible ..."

³⁹One student wrote on an exam: "Descartes says that God is so omnipotent that He could make Himself exist even if He didn't."

consistent with a God-description to which they really are committed.⁴⁰ This is not to say that they may claim the special privilege of shifting their ground whenever it suits them. Indeed, far from requiring classical theists to commit themselves to inconsistent formulations, intellectual honesty requires that they do not. They must, can, and do progressively refine their God-descriptions and their wider beliefs to purge such inconsistencies as may crop up from time to time. In practice, this sometimes involves settling provisionally for descriptions of divine attributes that avoid formal inconsistency--both severally and jointly--but aren't provably consistent with every belief to which all reasonable parties are as such committed. Outside limited formal systems, however, absolute consistency-proofs are well-nigh impossible to attain. So the fact that classical theists can't provide a consistency-proof of their concept of God is nothing special. They can admit that, at any given time, they haven't got a God-description that is provably both self-consistent and consistent with everything else they profess as reasonable people, without thus provid-

⁴⁰A brilliant example of this, in which neither classical theism nor reason are sacrificed, is Plantinga 1965, Chapter V, on the problem of evil. Cf. Ross 1980, xiii.

ing evidence that their God can't be described consistently in those ways. Atheists sometimes object, of course, that the difficulty of rendering descriptions of God consistent all around is itself evidence that the classical theistic concept of God is incoherent. But the ongoing task of reconciling cherished beliefs is by no means unique to theology--and if the God of classical theism exists, one can hardly fault believers for not resolving all such difficulties to general satisfaction.

Let us pause to note the point we have reached. To argue for (9b) is to argue that The World isn't the sort of thing that calls for something to have produced it. In order to argue, not just assert, that The World isn't that sort of thing, one has to argue that anything implying that it is is wrong-headed, meaningless, or false. Given (9), this is equivalent to attacking (9a). But such an argument can't be: we don't know (9a) is true although, for all we know, it *could* be true. One has to argue that, for one reason or another, (9a) *could not* be true. And I have now ruled out two sorts of argument for this: the argument that (9a) misuses the concepts it seems to use, and the argument that one can't show the consistency of the God-descriptions contained in (9a) and of the wider classical-theist set of

beliefs that includes (9a). With this result, it is not difficult to show that there is better reason to believe (9a) than (9b).

Assume *arguendo* that no human knows that (9a) is true. First, apart from the *a priori* grounds for rejecting (9a) that I have removed, there's no reason to deny that, for all we know, (9a) could be true. And if (9a) could be true, then given 'The World exists' and (9), it is true. In other words, given that The World exists and that it is either intentionally produced or ENM, if it could be intentionally produced at all, then it isn't the sort of thing that *couldn't* be non-trivially explained. So (9b) is false, and (9a) is true. Therefore, for all we know, (9a) is true.

I have heard people argue, in effect, that they needn't admit that (9a) could be true unless and until it is shown to be true. To justify their attitude, they point out that, consistency-proofs aside, the most obvious way to show that some *p* could be true is to show that *p* is true. But to demand that this way be taken is in most cases unreasonable, and is particularly unreasonable here. For one thing, people inclined to make such a demand will always find a way not to count an argument as showing (9a) true. One maneuver is to claim that, even though classical theists may dodge

this or that charge of inconsistency, non-theists can always generate another such charge--and we may find that one of them finally sticks. The polemical logjam thus remains unbroken, and nothing is settled. But if I tell you, e.g., that there could be more than a trillion galaxies in the universe, I don't have to show you that there are that many in order to elicit your assent that there could be. It's enough to know that this hasn't been shown impossible in light of what we know about the universe. This also goes for propositions that necessarily have whatever truth-value they have. If I tell you that Goldbach's Conjecture could be true, you can admit as much while recognizing that it could turn out to be necessarily false; for although Goldbach's Conjecture is necessarily false if false, we don't know that it isn't necessarily true. Propositions whose truth-values we don't know are such that, for all we know, they could be true. In the absence of an inconsistency-proof of it, this goes for (9a) too. And to acknowledge that, for all we know, (9a) could be true is to acknowledge that, for all we know, it is true.

Second, The World's existence is not self-explanatory; in this respect, The World is like each of its constituents. Now as I pointed out in I.7, it is reasonable to believe the

principle of omni-explicability (POE): every being (etc.) is CAS-explicable. When I say it is reasonable to "believe" POE, I mean that it is reasonable to assume its truth until it has been falsified, and reasonable to be very reluctant to admit that any particular failure of explanation falsifies it. POE is in fact a weak version of PSR; and it is some such version that motivates inquiry into what is not self-explanatory. Typically, we look for an explanation of some non-self-explanatory being (etc.) until our questions are answered--and then we have attained a CAS-explanation. Sometimes, we shall have to look for a long time before attaining such an answer; sometimes, when such answers don't seem forthcoming, we re-think our questions, which often involves redescribing what we've been asking about so as to get an answerable question. I mention these truisms only to emphasize that, when we encounter something non-self-explanatory, we don't readily concede that there's no non-trivial explanation of its existence (etc.). We say that if we haven't got firm hold of a CAS-explanation now, we will someday; or that if we couldn't ever, maybe someone else can--for all we know. There's no *a priori* reason not to take the same line about The World *qua* totality; given that (9a) is true for all we know, we should be unwilling to em-

brace (9b) and thus reject a principle whose natural adoption represents our quest for intelligibility. And if (9a) is true, then The World is intelligible in a way it otherwise couldn't be.

Some would reject my comparing The World *qua* totality with its constituents for purposes of identifying the former as a *explicandum* analogous to each of the latter. They would deny that there's reason to believe that each of The World's constituents are non-trivially explicable, because some scientists are quite prepared to allow that certain events--such as the universe's initial (or latest) expansion in its first few milliseconds, or the motions of some subatomic particles--are truly random; and if some contingent, intramundane events are truly random, why not the very existence of the universe? This objection arises from a needless confusion. When people realize that some events with physical participants can't be convincingly explained as uniquely determined by the past and the laws of nature, they leap to the conclusion that some things are uncaused, and to the further conclusion that some things are *thus* ENM; so, they ask, why not think that the universe is ENM, given that it isn't uniquely determined by anything? It is supposed that every event is a change of matter/energy, that all

causation of events must be necessitation, and if an event is non-trivially explicable at all, it must be explicable as caused; therefore, if something happens that isn't necessitated by the past and the laws covering matter/energy, then that event is ENM. But as I showed in I.4, the falsity of such physicalist event-determinism entails only that E_n is false, not that some event is ENM. So the objection breaks down.

We have seen so far that (9a) is true for all we know, and that partly for that reason, there's no reason to give up our quest for intelligibility in the case of The World *qua* totality. But there is a final and, to my mind, more appealing reason to believe (9a). If (9a) is true, then (10)'s first disjunct

(10a) The World is properly mysterious

is true: The World is CAS-explicable as the non-necessitated product of a personal being's action; and the sense in which this is so makes The World a fit object of permanent wonder.

To see why, consider first a possible objection to my claim that The World is not necessitated, given what CAS-explains its existence. According to the sort of natural theology on which I am relying to give sense to (10a), God is both sovereign and omnipotent:

(11) Necessarily, for all p , p iff God wills that p .⁴¹

By (11) and 'The World exists', God wills that The World exist and necessarily, if God wills that The World exist, The World exists. God's willing that The World exist thus entails that The World *has to exist rather than anything incompatible with its existence*. By definition, x is (non-trivially) necessitated iff some y 's existence (etc.) may be cited to CAS-explain x 's in such a way that, given y 's existence (etc.), x has to exist rather than anything incompatible with x . By (11), God's willing that The World exist is necessarily effective; hence, given (9a), God's willing that The World exist is necessarily equivalent to his intentionally creating it. Therefore, God's willing that The World exist is necessarily equivalent to what CAS-explains The World's existence; and God's willing that The World exist CAS-explains The World in that, given that God wills its existence, The World has to exist rather than any alternative to it. The World is thus necessitated by what explains it; by definition, its existence is thus exhaustively explicable; therefore its existence is not EPM and not properly mysterious.

⁴¹For this formulation, I am indebted to Jonathan Jacobs, who points out that, on (11), 'wills that' needn't be understood univocally for each object.

I happily admit that God's willing that The World exist explains The World's existence *non-trivially*. But it doesn't follow that it also *non-trivially* necessitates The World's existence. As I pointed out in the previous section, The World's being produced only *trivially* necessitates its existence; and for the same reason, God's effective willing that The World exist only *trivially* necessitates that it exist--and it matters not that God's will is necessarily effective. If The World is *non-trivially* necessitated, then God *has* to produce it in particular; but God doesn't have to do so. Nor does God's willing that The World exist CAS-explain The World's existence--and this is consistent with asserting that The World is CAS-explicable by God's intentionally producing it.

For 'God wills that The World exist', though *necessarily equivalent* to 'God intentionally creates The World', doesn't *mean the same* as the latter. God wills whatever is the case, but he doesn't create everything he wills, and not everything he wills is such that he necessarily wills it. In particular, since God necessarily exists, he cannot necessarily will any logically contingent state of affairs. Therefore, to say of some state-of-affairs-that-*p* that God wills it doesn't tell us what *p*'s modal status is; unless we

know what *p*'s modal status is, we can't know in what way God wills that the state-of-affairs-that-*p* obtain; and unless we know in what way God wills that the state-of-affairs-that-*p* obtain, the fact that God wills it doesn't CAS-explain the state-of-affairs-that-*p* *in particular*, as opposed to non-trivially explaining each and every state of affairs in general.

If (9a), then God's *intentionally* creating The World answers *W*?. But if so, there must be something that, under some description, is a *reason* for God's creating The World (Anscombe 1957, 24-28). So God's creating The World must itself be CAS-explicable by a reason for creating it. Such a reason can't be a cause in the sense in which reasons deliberated upon can move one to action; for if God is reduced from a potential to an actual state by anything, he really changes and is thus comprised by The World. Yet there is a classical-theist account of creation on which God's creating the world is CAS-explicable by what we may call a reason, even though neither that reason nor anything else can cause God to create the world or in any way necessitate him to do so. God creates *freely*, in such a way that the existence of the world duly occasions permanent wonder. What the account in question is, and what broader lesson we may draw from it, I shall now indicate by way of conclusion.

CONCLUSION: MYSTERY AND FREEDOM

The Reason for Creating the World

Aquinas says that

...the distinction and multitude of things is from the intention (*ex intentione*) of the first cause, who is God. For he brought things into being in order that his goodness might be communicated (*propter suam bonitatem communicandam*) to creatures, and be represented by them. And because his goodness could not be adequately represented by one creature alone, he produced many and diverse creatures... (*ST Ia Q47 A1 resp.*)¹

Therefore, God's creating something-or-other is intentional: to communicate his goodness to creatures and adequately represent it by them. Nevertheless, what God thus intends by creating the world is not the same as his reason for creating it.² To understand that reason, it is essential to understand first why, for Aquinas, the communication and representation of the divine goodness must be God's intention in creating.

¹Unless otherwise indicated, translations of the *ST* are those of Pegis, ed., 1948a. On the present point, cf. *SCG* II.45.9.

²Aquinas did not define 'the world' by anything meaning quite the same as *WD* (see above, II.2). Even so, I cannot see any difficulty relevant to my overall thesis that would arise from adopting Aquinas' account of creation as my own.

Consider a key use Aquinas makes of the venerable Neoplatonic principle *bonum est diffusivum sui et esse*--"the good is diffusive of itself and being." On that use, any action performed by any agent entails the agent's communicating its goodness:

The communication of being and goodness proceeds from goodness. This is clear both from the very nature of good and from its concept (*ratio*). For by nature, the good of anything whatever is its act and perfection. Now something acts insofar as it is in act, and by acting, it diffuses its being and goodness into other things...For this reason it is said that "the good is diffusive of itself and being." This diffusion belongs to God (*Deo competit*), for...He is the cause of being for other things (*SCG I.37.5*).³

Now if communicating its goodness to other things is what any agent does just by acting, then, it seems, God's acting at all entails his creating something-or-other. At any rate, Aquinas clearly implies that God communicates his divine goodness by diffusing into other things, and he seems to imply that some such diffusion is entailed by his doing anything at all.

Moreover, just by producing something, God represents his goodness: "...everything seeks after its own perfection, and the perfection and form of an effect consist in a

³Unless otherwise indicated, translations from the *SCG* are my own.

certain likeness to the agent, since every agent makes it like..." (*ST Ia Q6 A1 resp.*). Creatures necessarily "participate" or partake in their first efficient cause by being, and tending to be, like it; creatures thus necessarily represent that cause. By the same token, that cause is their final cause. As Aquinas continues in the same passage:

...hence the agent itself is desirable and has the nature of good. For the very thing which is desirable in it is the participation of its likeness. Therefore, since God is the first producing cause of all things, it is manifest that the aspect of good...belong[s] to Him...

Indeed Aquinas answers the question "whether God is the final cause of all things" affirmatively by arguing that

...every creature intends to acquire its own perfection, which is the likeness of the divine perfection and goodness. Therefore the divine goodness is the end of all things (*ST Ia Q44 A4 resp.*)

Creatures are ordered to God's goodness by tending to be like it, and that is what God's final causality consists in. Just by being the efficient and final cause of other beings, then, God represents his goodness.

If so, then God's representing his goodness by creating is necessarily equivalent to his communicating his goodness by creating. That's because, for Aquinas, an agent's producing something entails the communication of its good-

ness, and every agent produces its like, which as such represents it. Therefore, assuming that he creates, that creation is intentional, and that he knows what he is about, God necessarily intends by creating both the communication and the representation of his goodness.

For all that has been said so far, we could conclude that, on Aquinas' account, God's intention in creating the world is simply to do "adequately" what his doing anything at all entails. If so, and assuming that God is necessarily active in some-or-other sense, then what other reason could God have for creating the world? Indeed, since Lovejoy's famous lectures (1936), something like this view has not only been respectable as exegesis of Aquinas but has also been upheld as a truth in its own right. For we have heard that God can't represent his goodness adequately except by creating "many and diverse things;" representing his goodness is necessarily equivalent to communicating or diffusion his goodness; and communicating its goodness *ad extra* is what any agent does just by acting. Or so it would seem.

Certainly, if Aquinas is right, both the communication and the adequate representation of his goodness is what God is about in creating the world. (For simplicity's sake, let us simply say henceforth that what God is thus about is the

diffusion of his goodness.) And we sometimes cite what somebody intends in doing something as their reason *for* doing it or the reason *why* they do it. Moreover, the diffusion of one's own goodness seems fit to be called such a reason, as well as what God intends by creating. So one might think that, for Aquinas, the diffusion of God's goodness is God's reason for creating the world. But Aquinas never says this, at least not explicitly. What he does say is that the end or reason for which God creates is the divine goodness--period.

In one sense, this seems quite puzzling. When we say that somebody *x* has got a reason for performing an action *A*, we ordinarily mean that there is some good she wants to achieve by performing *A*. One might thus say that *x* is after something that she expects performing *A* to secure. But as is well known, Aquinas doesn't think that God could be *after* anything by creating: there neither is nor could be any good that he seeks to acquire or secure thereby. For though it "belongs" to "imperfect" agents, "to intend, by acting, the acquisition of something," this "does not belong to the "First Agent, who seeks only to communicate His perfection, which is his goodness" (*ST Ia Q44 A4 resp.*). Infinite and absolutely perfect, God has nothing to gain by creating any-

thing. Neither can God as it were increase the amount of goodness-in-general by creating the world. Therefore, even though the diffusion of his goodness is what God intends by creating the world, it would at best involve a misleading analogy to say that what God thus intends is his reason for creating the world.

And yet, Aquinas rejects "the error of certain people who say that all things (*omnia*) depend on the simple divine will, without any reason,"⁴ since "every agent acts for an end" (*ST Ia Q44 A4 resp; cf. SCG III.2.17-18*). When an intelligent agent acts as such (*acts per intellectum*), it acts "under the conception of the good (*sub ratione boni*) that is the object of the will" (*SCG III.3.6*). By creating, God acts as an intelligent agent; for if he acts, he must act "by intellect and will" (*ST Ia Q19 A1 resp; cf. A4 resp.*). In this way, the end or good for which an agent acts may be called the reason (or at least a reason) for the agent's so acting. Hence, there must be a good or end that constitutes a reason, perhaps the reason, for God's willing other things (*ratio volendi alia; SCG I.86.2*).

⁴*SCG II.24.7*. From the context of this passage, it is clear that "all things" means "what God has created."

That the divine goodness must be the reason for which God wills that there be other things follows if "[the divine will] wills nothing...except by reason of its goodness" (*nisi ratione suae bonitatis; ST Ia Q19 A2 ad3*). That God wills only by reason of his goodness is said in turn to "follow" (*sequitur*) from the fact that God's "own goodness suffices the divine will." It is plausible but insufficient to read this argument as a truncated version of another argument that God is *liberal*: "since the goodness of God is perfect and can exist without other things, inasmuch as no perfection can accrue to him from them, it follows that for him to will things other than himself is not absolutely necessary" (*ST Ia Q19 A3 resp.; cf. SCG I.81.2*); yet God does will other things; hence "God alone is the most perfectly liberal giver, because he acts not for his own profit (*utilitatem*), but only out of his own goodness" (*propter suam bonitatem; ST Ia Q44 A4 ad1*). As evidence of his liberality, God's creating the world is explicable by his goodness.

But this can't be the sense in which God's goodness is the *reason for which*, or *reason why*, he creates the world. That God is perfectly liberal is only an inference--albeit a

valid one-- from the fact that God has nothing to gain by creating and yet diffuses his goodness by doing so. And so we are still left with the question: why create?

Nothing can be a cause of God's willing to create (*ST* Ia Q19 A5; *SCG* I.87). God's goodness can, it seems, be called such a cause (*SCG* I.87.2; cf. *ST* Ia Q19 A1 ad3); but since God's goodness is both his "act and perfection" (*SCG* I.37.6) and his "act of will" (*SCG* I.87.2),⁵ to cite God's goodness as a cause of his act of will is not to CAS-explain that act. So, one should not assign a cause to God's act of will in whatever sense one can say that reasons are causes. Rather, "the will of God is reasonable insofar as he wills one thing to be because of another" (*ST* Ia Q19 A5 ad1). More specifically, for every creature, there is at least one other creature such that God wills that "one of them is the cause of the other's being ordered to the divine goodness" (*SCG* I.87.3). In characteristically lapidary style, Aquinas concludes that God "wills this to be as means to that; but he does not will this because of that" (*ST* Ia Q19 A5 resp.). Thus God's goodness is the *ratio* of creation: his goodness

⁵This is a consequence of Aquinas' doctrine of divine simplicity, which is beyond our scope. My aim here is merely to indicate how Aquinas thought we could say that there is a reason for creating.

is that to which each creature is ordered by causal relations to other creatures. *What God creates is thus intelligible--as well-ordered.*

But this can't be the complete answer to the question why God creates the world. If it were, the answer would come to: "Because the world is well set up." But God *in se*, who wills his own perfect, infinite goodness "by the necessity of natural order" (*DV Q23 A4 resp.*) and can't augment it by creating, is set up better than anything else can be. So even leaving aside the question whether God has reason enough to create, such an answer by itself wouldn't tell us how God has any reason to create. It supplies a *ratio* of creation, but no *rationale* for creation.

Fortunately, however, a fuller answer may be extracted from Aquinas' account. For there-being-other-things-ordered-to-God's-goodness entails the communication or diffusion of God's goodness, and the latter is just what Aquinas says God intends by creating. Consider:

...if natural things, in so far as they are perfect, communicate their good to others, much more does it pertain to the divine will to communicate by likeness its own good to others as much as is possible. Thus... [God] wills both Himself to be, and other things to be; but Himself as the end, and other things as ordained to that end, inasmuch as it befits (*condecet*) the divine goodness that other things should be partakers therein (*ST Ia Q19 A2 resp.*).

As we have heard before, God communicates his goodness to other things by producing them and ordering them to it; things so produced and ordered somehow "partake" in God's goodness by being "ordained" to it. Now that communication is God's intention, and to execute his intention in creating is for God to act reasonably, since creation, as ordered to God's goodness, is well-ordered. Here, however, we also hear that that communication especially "befits" God. Since that communication is the same as the self-diffusion of God's goodness, it follows that to diffuse itself also "befits" the divine goodness. Therefore, there-being-other-things-ordered-to-God's-goodness befits the divine goodness. And it is in that sense, I think, that the divine goodness is creation's rationale.

To see why, consider an analogy. A good work of art will naturally reflect the artist in various ways; in Aquinas' sense, it will be ordered to his goodness and diffuse it. The work thus befits the artist's goodness--i.e., his characteristic "act and perfection." That can be one of the artist's *reasons for* creating a work. When it is, it forms part of the work's rationale. Of course, it is both more common and commonly right to say that the *work itself* is the reason for creating it; but if we ask *in what respect*

the work counts as such a reason, its befitting the artist in its composition is sometimes a good answer. Now if Aquinas is right, we may infer that the world itself is a reason for creating it. But the world counts as such a reason because, in diffusing God's goodness by its order, it befits that goodness. If so, then his goodness is God's reason for creating the world; it is creation's rationale.⁶ Therefore, though Aquinas didn't say so explicitly, I conclude from his account that there is a dual sense in which God's goodness is the reason for creating the world: the world's existence *befits* his goodness in diffusing it, and diffuses it in *being ordered* to it. That is the reason for the world's existence.

At this point, some would doubtless want to echo Lovejoy's complaint (1947a, 425ff.) that Aquinas--and many neo-Thomists--face a dilemma. On the one hand, if creation neither adds anything to God's goodness nor otherwise serves as a means to his perfection, then God can acquire no good by creating; if so, then there is no reason *for God* to

⁶Ross 1983, 135 says, and professes to agree with Aquinas, that God's reason for creating is simply "what he makes." But Aquinas never says this explicitly, and it only invites the question *why* what God makes counts as a reason for his making it. What I am claiming Aquinas *does* say would answer that question.

create *rather than* not. On the other hand, if there is a reason for God to create, then God secures some good by creating that he does not enjoy just by existing; if so, then God does have a reason to create *rather than* not, namely, that in some sense he is better, or better off, for it. Hence, even though it doesn't follow from this alone that something is added to the divine goodness by creation, it is natural to conclude that creation's being ordained to the divine goodness consists not just in its being finally caused by God, but in its being a *means* to the end of God's goodness.⁷ Thus, God's goodness requires creation in order to be the infinite goodness it necessarily is. In short: either God has no reason to create *rather than* not, or God's goodness necessitates that he create some world or other.

But conceiving this choice as a dilemma derives from an unfounded prejudice. It is true, as Lovejoy insisted, that the sort of interpretation I am giving doesn't have Aquinas explaining why God created *rather than* not. But if God has a reason to create, it doesn't follow that there is a reason why he created the world *rather than* not. For one thing,

⁷That is why Lovejoy favored the translation of *ordinata ad finem* and *ea quae ad finem* as 'means to an end' rather than as 'directed to an end'.

there is no general principle of explanation according to which a reason-why-x must also be, in some non-trivial sense, a reason-why-x-rather-than-anything-incompatible-with-x. E.g., my reason for buying grapefruit juice for breakfast this week needn't also be a reason to buy grapefruit juice rather than orange juice. All things considered, either would serve just as well. Analogously, the fittingness of God's diffusion of his goodness *ad extra* is a reason for him to create, but it is no reason for him to create rather than not. For the fittingness of that diffusion makes neither for more good-in-general nor a better God in particular. "God saw all that he had made, and it was very good;" but since its existence is purely contingent and derivative, what God has made is good only in its diffusing that of its source by being ordered to that source--i.e., only inasmuch as the divine goodness is its *raison d'etre*. There is no such thing as a quantity of goodness that purely contingent good things could in any way add to, or a virtue of goodness that their production would enhance. There is simply infinite goodness, whose existence is self-sufficient. That goodness can intelligibly diffuse itself *ad extra*, but need not.

The Free Creation of the World

If, as both Aquinas and I argue, God creates the world intentionally but not necessarily, then God creates it strictly "of his own accord" (*propria sponte*; SCG I.88.2), by free choice (*liberum arbitrium*). Therefore, God doesn't have to create this world *rather than any other*.

Now according to Lovejoy, Aquinas also commits himself to the negation of that conclusion. If that interpretation were correct, then Aquinas' account of creation would be so fundamentally inconsistent that adopting it for my purpose would be pointless. So, I shall first show that that interpretation is incorrect.⁸ Next, I shall attack a more recent interpretation on which Aquinas thinks, inconsistently, that God must create some world or other. Adopting Aquinas' actual view will enable me to specify more precisely the sense in which the world's existence should occasion permanent wonder.

⁸Forty years ago, most of the textual and philosophical matters pertinent to my thesis were hotly debated between Prof. Lovejoy (1947a, 1947b, 1948a, 1948b) on the one hand, and Profs. Veatch (1947a, 1947b) and Pegis (1948b, 1948c, 1948d) on the other. Although I have learned from Veatch and Pegis, much of their treatment was in my view as unnecessary as it was tortuous. Rather than recapitulate the debate, therefore, I shall focus on analyzing the texts to which Veatch and Pegis would have done well to devote the most attention.

According to Lovejoy (1936, 73ff.), Aquinas holds the "principle of plenitude," which here entails that God "necessarily" creates, and creates "all things that he understands as possible." In other words, Aquinas is committed to a version of monomodalism, despite many passages that are incompatible with any version of that doctrine. The two main texts Lovejoy cites to support this interpretation are *SCG* I.75 and *SCG* II.45; but before considering them, note how grossly he misreads an important passage that militates against his view.

Aquinas therein implies that God has not created all that he understands as possible:

...the universe could not be better than it is, because of the supremely befitting order which God has assigned to things, wherein the good of the universe consists. If any one of these things were [separately] better, the proportion which constitutes the order of the whole would be vitiated...Nevertheless, God could make other things than he has, or could add others to the things he has made; and this other universe would be better (*ST* Q25 A6 resp. & ad6).

Lovejoy asserts that the third sentence of this argument is "the formal negation of the first" (79). To say this is, of course, a mistake in logical syntax; but it is also wrong as textual interpretation. Aquinas says, in effect, that given the *constituents* of the universe, its *composition* is optimal, though there could have been other or more things

that would have made for a better universe--one that, in God's wisdom, would have been optimally composed in its own way (Kretzmann 1983, 640-41.). There's nothing odd about this: from the fact that God makes the world as good as he can make it, it doesn't follow that he makes as many good things as it is possible for him to make. So God doesn't create all that he understands as possible.

Indeed, Aquinas elsewhere implies that no possible world *could* contain all that God so understands.⁹ Whatever one may think of his actual arguments--a matter that needn't detain us--the conclusion seems unassailable. For not everything that is severally possible for God to create is collectively *compossible*--even if, *per impossible*, a collective actualization were to consist in all the several possibilities' being actualized in a particular order. Whatever the order, it seems that another would have been logically possible, because whatever God creates, there is always something else he might have created instead. So, why think that Aquinas is committed to the principle of plenitude?

⁹This implies, of course, that God can't create any "best possible world" and that therefore, no such world is really possible. See *In I Sent.* D44 Q1 A2 and Kretzmann's explanation of it; cf. *DV Q23 A4* and *DP Q1 A2 resp.* Finally, see Veatch 1947a, 401ff.

Lovejoy quotes:

Everyone desires the perfection of that which for its own sake he wills and loves: for the things we love for their own sakes, we wish...to be multiplied as much as possible. But God wills and loves his essence for its own sake. Now that essence is not augmentable or multipliable in itself but can be multiplied only in its likeness, which is shared by many. God therefore wills things to be multiplied, inasmuch as he wills and loves his own perfection. (SCG I.75.3)

...Moreover, God in willing himself wills all the things which are in himself; but all things in a certain manner pre-exist in God by their types (*rationes*). Therefore in willing himself God wills other things (SCG I.75.5; Lovejoy's translation).

Now for Aquinas, any being other than God multiplies the divine essence in its likeness, and nothing can be unless God wills it. So if, as the quotation seems to imply, God has willed as many things-that-multiply-his-essence-in-its-likeness as possible, then God has willed all the things that are really possible. Given that God is omniscient, this result is equivalent to God's willing all that he *understands* as really possible. Therefore, Lovejoy thinks, Aquinas is committed to the principle of plenitude: God must create something-or-other, and must create this world in particular. If this followed, Aquinas' account of creation would be inconsistent.

It would indeed follow if the first sentence of the passage meant: 'Necessarily, if x wills the perfection of some y that x wills and loves for y's own sake, then x wills

that there *actually be produced* as many *y's* as possible'. But understood this way, the sentence is so patently false that we should doubt that a thinker of Aquinas' stature believed what it means. If I will my perfection for its own sake, it doesn't follow that I want there to be as many people, or as many people like me, as possible. One may ask: doesn't it follow for God in particular if not for everyone in general? Not according to Aquinas, who not only *implies* that it doesn't (in what I've quoted above from *ST Ia Q25*), but expressly denies it a few chapters after the passage we are now considering (in *SCG I.81*). In fact, Lovejoy's quotation omits part of the first sentence, which when fully translated reads: "Everyone desires the perfection of that which for its own sake he wills and loves: for the things we love for their own sakes, we wish to be most perfect, and always to become better and to be multiplied as much as possible" (emphasis added). Aquinas obviously did not believe that the divine essence can become better. What, then, are we to make of the sentence in question?

All it means, I think, is that wanting to multiply something as much as possible--in whatever sense that is appropriate--is a *sure sign* that one desires its perfection for its own sake. No necessity to create is about to be

argued for here; the sentence merely introduces an analogy meant to show how reasonable it is to think that God wills other things in willing himself. The other things God wills *necessarily* are specified in the second paragraph of Lovejoy's quotation: things as they pre-exist in him--in Neoplatonic terms, the "divine ideas." In necessarily knowing his essence, God necessarily knows all the ways in which it can be imitated (SCG I.54); the divine essence as known necessarily includes all the divine ideas; hence, so does the divine essence as willed and loved. In necessarily willing his own goodness, God necessarily wills other things, without its following that he necessarily wills to create those things, i.e., to invest them with actual existence *ad extra*. Whatever one may think of the notion of divine ideas (or of Aquinas' understanding of it), its role in SCG I.75 is clear.

Of course, Aquinas did claim that God necessarily wills by one act of will whatever he wills. But to think that that claim entails that God necessarily creates is to misread its logical form. Aquinas' claim should be represented as:

(1) Necessarily, for any *F* not identical with God, if God wills that there be an *F*, then God wills himself and there-being-an-*F* in one act of will--

an instance of what the scholastics called the "necessity of the consequence." But Lovejoy reads Aquinas as claiming

(2) For any *F* not identical with God, God necessarily wills himself and there-being-an-*F* in one act of will--

an instance of the "necessity of the consequent." Now (2) certainly does imply that God necessarily creates some *F*. But (1) does not; and by reading Aquinas' claim as (2) rather than (1), Lovejoy merely attributes his own confusion to Aquinas.

So the first major passage Lovejoy quotes is no evidence that Aquinas is committed to a principle of plenitude he tries to evade in the larger body of his work. And the other passage Lovejoy quotes--a large chunk of *SCG* II.45--suits his purposes even less. Since his treatment of it may be rejected for roughly the same reasons for which I have rejected his treatment of *ST* Ia Q25, I leave the matter to the interested reader.

But when Aquinas says elsewhere that "the divine will communicates its own good by likeness to other things as *much as possible*" (*ST* Ia Q19 A2 *resp.*, emphasis added), his aim is to argue that God creates other things. And we do find a closely related, more detailed argument to that effect at *SCG* I.75.6:

To the extent to which something has the perfection of a power, its causality is extended to more things and over a wider range...But the causality of an end consists in the fact that other things are desired because of it. Therefore the more perfect and willed an end is, the more the will of the one willing the end is extended to more things by reason of that end. But the divine essence is most perfect in the essential nature (*ratione*) of goodness and of end. Therefore *it will diffuse its causality as much as possible to many things, so that many things will be willed because of it--and especially by God, who wills [the divine essence] perfectly in respect of all of its power.*¹⁰

Kretzmann (1983, 636) offers the latter passage as evidence that, in conjunction with two other claims, Aquinas is committed to saying that God must create *something-or-other*, though not this world in particular. If Aquinas were so committed, his account of creation would indeed be inconsistent.

The two other claims Kretzmann cites are clear and familiar: "in willing himself God also wills other things" (the burden of *SCG* I.75) and "God wills himself and other things in one act of will" (the burden of *SCG* I.76.). The former, as Aquinas wants us to accept it, means that God wills himself as end and other things as ordered to it; the latter, that this willing, though it has more than one ob-

¹⁰The translation is that of Kretzmann 1983, 636; I have added the emphasis.

ject, is no more than one act. But why, given Aquinas' strong denials that God necessarily creates anything at all,¹¹ should we think that the three passages in question entail that God must create?

Kretzmann reminds us of Aquinas' repeated invocation of the Neoplatonic principle we have heard about already--"the good is diffusive of itself and being" (call it 'GDF' for short).¹² I have already quoted one passage where Aquinas invokes GDF (see the previous section, *SCG* I.37.5) to describe an *essential* note of goodness; the first, long passage from *SCG* I.75.6 might be construed as containing an application of that principle. Now as Kretzmann acknowledges, Aquinas didn't take GDF as entailing that an agent, to the extent it is good, *efficiently* causes (produces) something-or-other (call this version 'GDF_e'). Thus, if Aquinas be interpreted as consistent, he adopted GDF only as entailing that, whatever things an agent produces, it exerts its *final* causality over them *as much as possible* (call this version

¹¹To cite just a few examples: *ST* Ia Q19 A3 *resp.*; *SCG* I.81.2; *SCG* II.28.10.

¹²For historical reasons, Kretzmann gives this principle the more specific name 'Dionysian'. But since Kretzmann's account of the pre-Thomistic background of the principle is irrelevant to the present issue, I shall not confuse matters by using his nomenclature.

'GDF_f').¹³ Thus, the more perfect it is, the more effectively the agent makes as many good things of their kind as possible, given the kinds of things he does make.

Now it is a wise rule of thumb, when dealing with a thinker of Aquinas' stature, to interpret him as consistent if at all possible. But Kretzmann ignores this rule. He claims that GDF_f doesn't leave room for God to refrain from creating something-or-other, and that, recognizing as much, Aquinas implicitly embraces GDF_e in SCG I.75.6 (the long passage quoted two paragraphs back). To show why, Kretzmann supposes *arguendo* that only GDF_f is true, and that God creates nothing at all. In such a state of affairs,

God's will has no object other than its principal object, goodness itself, or the divine essence; and so the final causation inherent in God's goodness must draw only God's will, and only in the direction of God himself. The diffusiveness of goodness conceived as final causation cannot be extended to the drawing of anything other than God himself toward it unless there are other things...But in those circumstances, why should God's will cause anything to begin to exist?...Granting that God's will is the efficient cause of the existence of something besides God, we are left with the need for an explanation of God's willing it (Kretzmann 1983, 635-36).

¹³The wording of (1) and (2) is mine; the basis for it is DV Q21 A1 ad4, which Kretzmann (635) says "may be Aquinas' only explicit discussion" of GDF.

The explanation, according to Kretzmann, can only be found in Aquinas' embracing GDF_e . Essentially self-diffusive, God's goodness entails that God create something-or-other ordered to it. It is this explanation that Kretzmann says Aquinas "comes close to presenting" in *SCG* I.75.6, despite his "explicit rejection" of it elsewhere.

But the explanation we can derive from Aquinas' corpus is the one I have already presented: the world *befits* God's goodness in diffusing it, and diffuses it *in being ordered to it*, i.e., in being finally caused by it. For the reasons I have given, this is explanation enough; so Aquinas doesn't need GDF_e to explain why God creates the world. Rather, for him, the essential self-diffusiveness of his goodness entails only that *if* God creates, he diffuses his goodness as much as possible, and *in that way* has good reason to create. To be sure, that explanation shows neither that God is determined to create rather than not, nor why God creates this world rather than some other. But it is nonetheless a CAS-explanation. So Kretzmann's critique is misguided.

In light of this, the correct interpretation of *SCG* I.75.6 is that, *assuming he creates*, God so diffuses his *final causality* that "many things" share it. In creating many things rather than only one or a few, God causes things

to cause other things' existing and resembling him. As we saw at the beginning of the previous section, that is what God must do to diffuse his goodness adequately. God therefore diffuses his goodness by diffusing his final causality in an optimally composed world--which serves to explain how he can communicate his goodness as much as possible in creating (cf. *ST* Ia Q47 A1 *resp.*).

The argument that Aquinas believes GDF_e rather gains force from *SCG* I.37.5 and its background: "Something acts insofar as it is in act, and by acting, it diffuses its goodness into other things." Must not God, who is goodness itself (*SCG* I.38) and "pure act," (*SCG* I.16.5), therefore create?

No. In a world of causally interrelated beings, it does follow that if a being *x* acts, it diffuses its goodness into some other being *y*. But even supposing that *in general*, when goodness is diffused, it is diffused into an "other," Aquinas hints in an early text that God "communicates" or diffuses himself as much as possible *internally* in there being "more than one distinct person in the unity of the divine essence," i.e., in the Trinity.¹⁴ This holds

¹⁴*In I Sent.* D2 Q1 A4 *sed contra*; cited by Kretzmann 1983, 634.

whether or not God creates. Kretzmann dismisses that text, saying that "in Aquinas' system it is the triune God whose essence is goodness itself. Unless there is some further intrinsic diffusion, beyond the pluralizing of persons, the essential self-diffusiveness of goodness remains intact and calls for extrinsic diffusion" (1983, 634). But if the triune God "acts insofar as he is in act" and is pure act, it doesn't follow that such a God must act *ad extra*. According to the orthodox doctrine to which Aquinas adhered, each of the three divine persons, as subjects of intellect and will, necessarily know and love each other (*ST Ia Q27*). Those relations are arguably an "intrinsic diffusion" that satisfies GDF_f . That is all Aquinas needs.

To be sure, Kretzmann does adduce another passage to try to prove that Aquinas thinks God must create something-or-other: "[God's] goodness has no need of things that are ordered to it *except as a manifestation of it [nisi eius manifestandam]*, which can be appropriately accomplished in various ways. *And so there remains for him a free judgment for willing this one or that one, just as in our own case.*"¹⁵ But this need only be read as: God's goodness

¹⁵*DV Q24 A3 resp*; the emphasis is Kretzmann's, and the interpolation of a phrase from the Latin original is my own.

needs nothing, but if God chooses to manifest his goodness, then he must produce something-or-other ordered to it. To reply now that, on Aquinas' understanding of GDF, the persons of the Trinity must collectively diffuse the divine goodness *ad extra*, not merely severally diffuse it *ad intra*, would just be marching on the spot.

Of course, even if Kretzmann is right, Aquinas can say consistently that this world's existence is not necessitated, in the sense of "necessitated" I have been employing. Aquinas' account fleshes out my argument that the world is properly mysterious, by indicating how it is that *there is sufficient reason for The World's existence, yet no reason why The World exists rather than some other possible world*. But if Aquinas is both consistent and right in saying that God needn't create anything at all, then the world has been produced by an act of perfect liberality. *There is sufficient reason for God to create, but no reason for him to create rather than not*. For what God intends by creating is already perfectly fulfilled just by his own existence. We might say instead that, in Miss Anscombe's words, God creates simply out of "sheer exuberance." The result of such action should and does occasion permanent wonder.

A Contemporary Lesson

Lest such a result seem remote from the concerns of most philosophers today, consider the following passage from T. Nagel's (1986) discussion of *human freedom*:

If autonomy requires that the central element of choice be explained in a way that does not take us outside the point of view of the agent...then intentional explanation must simply come to an end when all available reasons have been given, and nothing else can take over where they leave off. But this seems to mean that an autonomous intentional explanation cannot explain what it is supposed to explain, namely *why I did what I did rather than the alternative that was causally open to me*...It may render the action subjectively intelligible, but it does not explain why this action rather than another equally plausible and comparably intelligible action was done. That seems to be something for which there is no explanation, either intentional or causal (116).

In the context of this quotation, Nagel's aim is to analyze, and show to be inadequate to its purpose, "intentional" explanation of "autonomous" actions--i.e., explanations that consist of (a) citing a reason or reasons that the agent would give if asked why he acts as he does, and (b) depicting the explained action as free, in an incompatibilist sense of "free."¹⁶ And Nagel is right to say that such ex-

¹⁶See his footnote on the same page, which is a clear avowal of a form of incompatibilism.

planation doesn't explain "why this action rather than another..." But if my thesis is sound, he is wrong to assume that that is what such explanation is "supposed to explain," and is therefore wrong to think that such explanation's failure to do so is a defect of it. Let me briefly indicate why.

The God who I have said creates the world has thereby acted not only intentionally--i.e., for a reason--but also autonomously--i.e., freely in an incompatibilist sense. He is not causally determined to create, because he can in no way be causally determined to will anything (unless, by a confusing analogy, we say that his own goodness "causally" determines him to will it). This view, which I have taken over from Aquinas, stems partly from a general account of what it is to be a rational agent, not just from considerations on the divine nature. E.g., as regards all except the "principal object" or last end of its will,

any rational nature...so has its inclination within its power that it does not necessarily incline to anything appetible which is apprehended, but can incline or not incline. And so its inclination is not determined for it by anything other than itself. [This] can come about only if it knows the end and the bearing of the means upon the end. But this belongs to reason alone. (DV Q22 A4 resp.).

Thus when rational agents act as such--i.e. when, to use Nagel's term, they act "autonomously"--they can't be uniquely determined to act by anything other than their own non-necessitated choice of reasons. This holds as much for humans as for God: to act as a rational agent is, necessarily, to act freely in an incompatibilist sense of "freely." To act thus is to choose autonomously to act for a reason or reasons that thus explain the action; had one (autonomously) acted otherwise, there would have been a reason or reasons, and thus an explanation, for that.

Of course, I cannot expound here the case for this way of characterizing and explaining free action. But I can now defend it against Nagel's complaint that it doesn't explain "why these reasons rather than the others were the ones that motivated me." True, it doesn't explain that (leaving aside the question whether reasons must motivate in some causal sense in order to count as *explicantia* of actions). But if CAS-explanation needn't be exhaustive explanation, then why think there must be such an explanation, or that intentional explanation is defective for failing to supply it? To suggest, as Nagel does, that this just invites "giving a name to a mystery" (115) and doesn't explain anything, begs the

fundamental question to which I have devoted this thesis.
If the world is what I have said it is, then mystery is exactly what the truth must reveal.

ABBREVIATED TITLES OF WORKS CITED

St. Thomas Aquinas

DV = Quaestiones Disputatae De Veritate

In I. Sent. = Commentarium in Primum Librum Sententiae

Petri Lombardi

SCG = Summa Contra Gentiles

ST = Summa Theologiae

Hume

DNR = Dialogues Concerning Natural Religion

Leibniz

PPL = Philosophical Papers and Letters

PW = Philosophical Writings

NAB = The New American Bible

OED= The Oxford English Dictionary

Schopenhauer

FR = On the Fourfold Root of the Principle of Sufficient Reason

FW = On the Freedom of the Will

ABBREVIATIONS OF JOURNAL TITLES

JP = The Journal of Philosophy

PR = Philosophical Review

PPR = Philosophy and Phenomenological Research

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GLOSSARY OF ACRONYMS AND SPECIAL TERMS

absolutely mysterious = either ENM (q.v.) or EPM (q.v.)

BRC = a being that really changes

CAS-explanation = explanation that is complete-of-the-appropriate-sort

CAS-explicable = explicable in a way that is complete-of-the-appropriate-sort

CN = The thesis of *de re* causal necessitation: For all occurrences x and y , if x is caused by y , then x is uniquely pre-determined by y

contingent₁ = logically contingent

contingent₂ = produced by something else

contingent₃ = begins at some time

contingent₄ = not explicable non-trivially (see 'ENM')

E_n = the principle: For all beings, occurrences, and states of affairs x , if x is CAS-explicable (q.v.), then x is CAS-explicable as exhaustively explicable (q.v.)

E_nD = For all beings, occurrences, and states of affairs x , if x is CAS-explicable (q.v.), then x is CAS-explicable in virtue of being explicable via some being, occurrence or state of affairs y that uniquely determines x .

E_nD_o = Event-Determinism: For all occurrences x , if x is CAS-explicable (q.v.), then x is CAS-explicable in virtue of being explicable via some being, occurrence, or state of affairs y that uniquely determines x

ENM = essentially and negatively mysterious

EPM = essentially and positively mysterious

ERM = essentially but relatively mysterious

exhaustively explicable = non-trivially explicable (q.v.) as uniquely determined

GD = General Determinism: Every being (etc.) x is CAS-explicable (q.v.) in virtue of existing (etc.) always, unproductibly, and unpreventably, or of being logically, causally, or metaphysically necessitated to exist (etc.) by some y that exists (etc.)

GDF = the principle: the good is diffusive of itself and being

GDF_e = the efficient-causality version of GDF (q.v.)

GDF_f = Aquinas' final-causality version of GDF (q.v.)

LRK = limited rational knower

MM = monomodalism (the doctrine that the actual world is the only possible world)

MM-P = Parmenides' version of MM (q.v.)

MM-S = Spinoza's version of MM (q.v.)

NCS = the normative-concept-of-_____ strategy

OP (introduction only) = S.D. Ross' basic ontological principle

OP (Part II only) = any entity ontologically parasitic on a BRC (q.v.)

POE = The principle of omni-explicability: Every being, occurrence, or state of affairs is CAS-explicable (q.v.)

properly mysterious = EPM (q.v.) and CAS-explicable (q.v.) with reference to someone's intention

PSR = The Principle of Sufficient Reason

PSR-L = Leibniz's Principle of Sufficient Reason

PSR-S = Schopenhauer's Principle of Sufficient Reason

UB = unchanging actual being

The World = the world as defined by WD (q.v.)

WD = stipulative definition of the world as: the totality comprising all beings that really change and all that is ontologically parasitic thereon

W_? = Why does the world exist?

W_S = Why is there something rather than nothing?