

PART I  
ONTOLOGY



# 1

## Existence (1987)

I shall discuss here the topics of existence and nonexistence, of what it is for an individual to be actual and what it is for an individual not to be actual. What I shall have to say about these matters offers little toward our primordial need to discover the Meaning of Existence, but I hope to say some things that will satisfy the more modest ambition of those of us who wish to know the meaning of 'existence'. I shall also say some things that bear on issues in the grandest traditions of Philosophy.

### I

The questions I shall address here can be approached through the following thought-exercise: For every one of us, prior to our conception, the odds against the very gametes from which we in fact developed coming together to develop into a particular human individual are astronomical. There are countless billions of potential pairings of a human sperm cell with a human ovum that are never realized. Everyone of us is among the elite group of Elect whose gametes did manage, against all odds, to unite in the normal manner and develop into a human individual. Let  $S$  be a particular male sperm cell of my father's and let  $E$  be a particular ovum of my mother's such that neither gamete ever unites with any other to develop into a human zygote. Let us name the (possible) individual who would have developed from the union of  $S$  and  $E$ , if  $S$  had fertilized  $E$  in the normal manner, 'Noman'.<sup>1</sup>

Portions of the present chapter were presented at a symposium on problems of Existence and Identity at the University of North Carolina at Greensboro (April 1986); to the University of Padua, Italy; the University of Belgrade, Yugoslavia; the Analytic Section of the Philosophical Society of Serbia, Yugoslavia; the University of California, Santa Barbara; and the 1987 Alberta Philosophy Conference. It has benefitted from the discussions that followed, from comments by W. R. Carter, and from fruitful discussions with Robert Adams, Anthony Brueckner, William Forgie, David Kaplan, Ali Kazmi, and Timothy Williamson.

<sup>1</sup> I assume here that there is only one possible individual who would have resulted from the union of  $S$  and  $E$ , if  $S$  had fertilized  $E$  in the normal manner. (This assumption can be expressed through the judicious use of standard modal operators without the aid of a quantifier that purports to quantify over merely possible individuals, as follows: There might have existed an individual  $x$  such that  $x$  and actually necessarily only  $x$  actually would have developed from the union of  $S$  and  $E$  if  $S$  had fertilized  $E$  in the normal manner. This alternative formulation is somewhat cumbersome, though, and more difficult to grasp than the original formulation.) The intuition that this assumption is true is very widely shared. I am here relying on the assumption merely as a device to introduce the question that is the main topic of this essay. For further discussion of this and related

Noman does not exist in the actual world, but there are many possible worlds in which he (it?) does exist. This is just to say that Noman does not actually exist but he might have existed. Noman is, like all of us, a *possible individual*; it is true of him, and it is likewise true of each of us, that we might have existed. But something more can be said about us that cannot be said about Noman. There is a seemingly important difference between Noman and us. We are actual, Noman is not. Noman is *merely* possible. What does this difference between Noman and us consist in? What is it about us in virtue of which we, but not Noman, may be said to be ‘actual’? What is it for something to have the ontological status of being actual, and is there any special metaphysical significance attached to something solely by virtue of its being actual? Is there such a thing as the *property* of existence, or the *property* of actuality—a property that Noman lacks, and that something has solely by virtue of the fact that it exists or is actual? Whatever actuality is, we seem to matter in a way that Noman does not seem to matter at all. (Noman does not matter even to *me*, and we are *brothers!* Well, at least we are brothers across possible worlds.)<sup>2</sup> Does this represent an objective fact about us *vis-à-vis* Noman and his kind, or is it ultimately a form of prejudice and discrimination on our part? Are we objectively better than, or objectively better off than, Noman by virtue of the fact that we have actuality, or solely by virtue of the fact that we exist, whereas he does not? Is it objectively better to have this ontological status called ‘actuality’ than to lack it? If so, what is it about actuality that makes us count for so much more than Noman? Is actuality something we might have lacked? Specifically, in those possible worlds in which we do not exist, are we not actual? Conversely, in those possible worlds in which Noman exists, is he actual? In a possible world in which Noman exists and I do not, which one of us inhabits the actual world? Does Noman have any properties? Does he lack every property? Do we have any properties in those possible worlds in which we do not exist?

In a sense, the question ‘What is it for something to be actual?’ has one simple, correct answer: For something to be actual is for it actually to be—that is, for it actually to exist. But this answer only trades one ontological question for two new ones. What is it for something to *be*, or to *exist*, and what is it for something *actually* to be the case? If we can answer these two questions satisfactorily, we will thereby have an answer to the question of what it is to be actual.

Let us begin with the question of existence. Consider first a slightly different question: What exists? Quine pointed out that this time-honored ontological question has its correct answer in a single word: Everything.<sup>3</sup> Does this observation help us with our slightly more difficult question of what existence is? It seems so. If the answer to the question of what exists is the universal quantifier ‘everything’, then for something to exist is for it to be one of everything. But does this constitute any

sufficiency principles of cross-world identity see my *Reference and Essence* (Princeton University Press, 1981), pp. 196–252, especially p. 209f; and ‘Modal Paradox: Parts and Counterparts, Points and Counterpoints,’ in P. French, T. Uehling, and H. Wettstein, eds., *Midwest Studies in Philosophy XI: Studies in Essentialism* (Minneapolis: University of Minnesota Press, 1986), pp. 75–120.

<sup>2</sup> Cf. Salmon, *Reference*, pp. 116–133, on this and other cross-world relations.

<sup>3</sup> In the first paragraph of ‘On What There Is,’ in Quine’s *From a Logical Point of View* (New York: Harper and Row, 1961), pp. 1–19.

sort of progress with respect to our question of what existence is? What does it mean to say that something is 'one of everything'?

Modifying Berkeley's famous slogan, Quine gave substance to the idea that what exists is what is covered by the universal quantifier with his equally famous slogan 'To be is to be a value of a variable'.<sup>4</sup> Taken as a response to the question 'What is existence?', Quine's slogan seems at least extensionally correct. Every existing individual is indeed the value of some variable or other, under some cooperative assignment of values to variables, and it would seem that everything that is assigned to a variable as its value is 'one of everything,' i.e., it exists. But it cannot be seriously maintained that *being*, in the sense of 'existence', simply *is* the state or condition of *being the value of a variable, under some assignment of values to variables*. When Hamlet (pretending the play were nonfictitious) agonized over the question of whether to be or not to be, he was preoccupied with weightier matters than the question of whether or not to be the value of a variable. If there were no variables, would there be nothing? The dinosaurs had existence, but they didn't have variables. Perhaps there were no variables at the time of the dinosaurs for them to be the values of. To be sure, the geometric shapes and patterns that form the lower case italic 'x', 'y', and 'z' existed even then, but were they *variables*, and were functions from them to objects *assignments of values to variables*? If it is supposed that they were, on the grounds that in some future language they are, then it probably should also be said that anything that might conceivably be used as a variable in a possible language is a variable (on the grounds that any such object is a variable in some possible language), and any singular function from such objects is an assignment of values to variables. If Quine's slogan is understood to mean that for something to exist is for it to be in the range of a function whose domain is a set of objects that might someday serve as variables, one might as well skip the variables and their value-assignments altogether and say that to be is to be an element of a set. But then why not simply say that to be is to be the element of a singleton, or unit set? As explications of existence, these somehow fall flat. But I believe we have strayed from Quine's intended meaning.<sup>5</sup>

Taken literally, it is doubtful that Quine's slogan is even extensionally correct. The dinosaurs may be the values of some of today's variables, under some assignments,

<sup>4</sup> *Ibid.*, p. 15; and *Methods of Logic* (New York: Holt, Rinehart and Winston, Inc., 1972), p. 234.

<sup>5</sup> Quine's maxim does not directly concern the question of what things actually exist; it concerns the ontological commitments of this or that theory or piece of discourse (and by extension, the ontological commitments of this or that theorist or speaker), irrespective of whether the sorts of things to which the theory or discourse is ontologically committed actually exist. Quine's thesis is that a theory or piece of discourse is committed to the existence of things of a given *sort* (and, as a special case, to the existence of a given possible thing) if and only if some things of that sort (or that possible thing) must be counted among the values of variables in a suitable reformulation of the theory or the discourse if the reformulated theory or discourse is to be true. The ontological commitments of a theory or piece of discourse will thus include anything whose existence is explicitly affirmed, but I take it that the point of the thesis is that the ontological commitments of a theory or piece of discourse may outrun the explicit existence avowals. (Otherwise, it would be much simpler to say instead that a theory or piece of discourse, is ontologically committed to all things, and to only those things, that are explicitly said to exist in a suitable reformulation of the theory or discourse.) A number of difficulties and problems for Quine's thesis could be raised, though only few will be mentioned here.

but none exist. (The dinosaurs once existed, of course, but sadly none exist today.) Assignment of past dinosaurs to some present variables is required to give the correct semantics for a suitable formalization of such sentences as ‘There was a dinosaur that this is a fossil of’<sup>6</sup> or the preceding sentence. If Hamlet (pretending the play were nonfictitious) had decided not to be, he would not have ceased to be the value of a variable. Quine’s slogan might be understood instead as the claim that to be (or to exist) at a time  $t$  in a possible world  $w$  is to be the value of a variable under some assignment of values to variables *with respect to  $t$  and  $w$* . At least this is extensionally correct. But it puts the cart before the horse. The notion of a function being an assignment of values to variables *with respect to a time  $t$  and a possible world  $w$*  is defined in terms of the notion of existence: an assignment of values to variables is an assignment with respect to  $t$  and  $w$  if and only if everything it assigns exists at  $t$  in  $w$ .

My claim that past individuals are the present values of variables even though these past individuals no longer exist may conflict with the doctrine that to be is to be a value of a variable, but it does not conflict with the alternative doctrine (extracted from Quine’s observation that the universal quantifier correctly answers the question ‘What exists?’) that to be is to be ‘one of everything’ (whatever that means). The universal and existential quantifiers must not be confused with the variables they bind.<sup>7</sup> A (typical) universal generalization  $[(\forall\alpha)\phi_\alpha]$  is true under an assignment of values to variables  $s$ , with respect to a given time  $t$ , if and only if every

<sup>6</sup> Cf. David Kaplan, ‘Bob and Carol and Ted and Alice,’ in K. J. J. Hintikka, J. M. E. Moravcsik, and P. Suppes, eds., *Approaches to Natural Language* (Dordrecht: D. Reidel, 1983), pp. 490–518, appendix x, at pp. 503–505 and especially p. 516, note 15.

Quine’s thesis mentioned above in note 5 appears to have the false consequence that if this sentence concerning a particular fossil is true, then things that have been dinosaurs exist today. (Immortal dinosaur souls?)

It has been suggested to me that Quine’s actual proposed criterion of ontological commitment avoids this difficulty since the criterion is restricted to one’s commitments concerning *existence at some time or other*, rather than to one’s (stronger) commitments concerning existence *simpliciter*, i.e., commitments concerning what sorts of things are in the condition or state that something comes into when it begins to exist and falls out of when it ceases to exist. Although I have been unable to find an explicit and clear formulation of this restriction among Quine’s writings on his proposed criterion for ontological commitment, this tenseless construal seems truer to the spirit of his explicit (and not altogether independent) views concerning canonical notation, verb tenses, and the regimentation of ordinary language. See for example ‘Mr Strawson on Logical Theory,’ in Quine’s *The Ways of Paradox* (New York: Random House, 1966), pp. 135–155, at pp. 143–146. (Thanks to Peter van Inwagen for providing this reference.) If this restricted criterion accords better with Quine’s actual intent, his thesis would be less deceptively (albeit less neatly) encapsulated as follows: ‘To-be-or-to-have-been-or-going-to-be is to be the value of a variable.’

Unfortunately, aside from ugliness of formulation, this leaves us with no criterion for one’s commitments concerning existence or being *per se*, as opposed to one’s commitments concerning existence-at-some-time-or-other. What is desired is a tense-sensitive criterion that commits one who utters the past tensed sentence ‘There used to be (things that at some time or other are) sea serpents’ at a time  $t$  to the existence *prior to  $t$*  of (things that at some time or other are) sea serpents, and one who utters the present tensed ‘There are (things that at some time or other are) sea serpents’ at  $t$  to the existence *at  $t$*  of (things that at some time or other are) sea serpents. Under the suggested interpretation, Quine’s criterion is insensitive to these differences in tense, assigning to utterers (at  $t$ ) of either tensed sentence the very same (timeless) ontological commitment (at  $t$ ) to (things that at some time or other are) sea serpents.

<sup>7</sup> Quine appears to fall into just this confusion, for example p. 13 (where he speaks of ‘the things over which the bound variable “something” ranges’), and elsewhere.

(past, present, or future) individual  $i$  that exists at  $t$  is such that  $\phi_\alpha$  is true under the assignment  $s'$ , with respect to  $t$ , where  $s'$  is the assignment that assigns  $i$  to  $\alpha$  and is otherwise exactly the same as  $s$ . The assignment  $s$  may already assign individuals that do not exist at  $t$  to certain variables; hence, the assignments  $s'$  may also assign individuals that do not exist at  $t$  to some variables, but not to  $\alpha$ . The universal quantifier restricts its attention (typically) to assignments that assign existing individuals to the variable it binds. Existence *per se* matters nothing to the variables themselves or their value-assignments. Not only are past individuals the present values of variables, but future individuals are as well. Some possible assignments of values to variables even assign Noman as value to some variables. In fact, some modal constructions require such assignments, e.g., 'The gametes  $S$  and  $E$  might have been united in the normal manner to develop into an individual.'<sup>8</sup> It is the quantifier, and not the variable it binds, that insists on nothing but the existent. And it insists on nothing but the existent only as values for its adjacent variable, not as values for other variables in its less immediate vicinity.

It is a mistake in any case to attempt to explicate a metaphysical notion by means of essentially semantic notions. (Again, I believe this is not Quine's intent. See note 5.) One could say that to be is to be an element of the union of the extension of an English quantifier. Why not? One might as well say that to be a person is to be an element of the extension in English of 'person', to know a given proposition is to stand in the relation expressed by 'knows' in English to that proposition, and so on. For one thing, we are wrong: the attributes of existence, being a person, and knowing are not essentially semantic in nature. For another, we are still left wondering how the extension of a quantifier in English is secured. What feature must individuals possess if a class of them is to be an element of the extension of the English quantifier 'there is'? It need not be a mistake, however, to use (rather than to mention) an English quantifier in attempting to explicate existence. We need to find an adequate way to understand the slogan 'To be is to be one of everything'. Some progress is made toward answering the question 'What is existence?' if our concept of existence can be defined in terms of our concept of *everything*.

## II

Philosophers who address the questions of what it is for an individual to exist, or what it is for an individual to be actual, often do so with reference to the fallacy they

<sup>8</sup> Quine's thesis mentioned above in note 5, if I understand it correctly, has the false consequence that if this sentence concerning  $S$  and  $E$  is true, then some individual who might have developed from the union of these gametes actually exists (at some time or other). Cf. note 6. These apparent consequences of Quine's thesis may demonstrate that his criterion of ontological commitment actually applies not to this or that theory, as Quine intends, but to the semantic metatheory for a suitable language in which this or that theory is formulated. Even thus construed, however, the criterion gives at most only a *sufficient* condition for ontological commitment of the metatheory *as augmented with the affirmation of the truth of the object theory*; no necessary condition is given. In fact, I believe that this condition is not even a sufficient condition. When I assign Noman to some variable as its value I commit myself to Noman's suitability as a value for variables, not to his actual existence.

have uncovered in the classical Ontological Argument for God's existence. Indeed, the Ontological Argument is useful as a vehicle by which this and other issues in ontology and the philosophy of logic may be introduced and sharpened. In what is perhaps its simplest form, the Ontological Argument is the following:

- (1a) The divine individual is divine.
- (1b) Any individual that is divine exists.

Therefore,

- (1c) The divine individual exists.

Let us call this 'Version 1'. The term 'divine' serves here as a schematic term, which is to be interpreted relative to a context in which an argument of a particular Ontological Arguer is in question. If our concern is with Descartes's argument from his fifth *Meditation*, 'divine individual' is to be interpreted to mean *individual that has every perfection* (with 'perfection' interpreted in Descartes's sense). If our concern is with Anselm's instance of the argument schema (or at least the best known of Anselm's instances, as given in Chapter II of his *Proslogion*), 'divine individual' is to be interpreted to mean *individual whose magnitude of greatness exceeds any other possible magnitude of greatness* (with 'possible' interpreted in Anselm's sense of 'conceivable' and 'great' interpreted in his sense of 'great'). For present purposes, we may assume that, in each case, the relevant concept of divinity is such that it is provable, or otherwise manifest *a priori*, that there cannot be two or more divine individuals. The Ontological Arguer assumes premise (1a) as a logical or manifest truth, and contends that premise (1b) is likewise an analytic or conceptual or demonstrable truth.

Since the first premise is sometimes regarded by the Ontological Arguer as a logical truth, the argument may be formulated with the first premise left tacit, not included as an explicit premise of the argument and not supported by further, additional argument. Anselm provided an explicit argument in support of the premise, although his argument clearly indicates that he regarded the truth of the premise as manifest, a truth that even the atheist 'fool' is convinced of. When the premise is made explicit however, it should immediately strike the reader that there is a problem with it. The atheist and the agnostic doubt (by disbelieving and by suspending judgement, respectively) that there exists any divine individual in the first place. Why should they be expected to acquiesce in the assertion that the divine individual is divine?

The intended import of Version 1 is apt to be lost on the reader unless he or she understands a critical feature of the argument: it purports to involve quantification over more things than are dreamt of in Quine's philosophy of what exists. A more explicit and more sophisticated version of the Ontological Argument is the following:

- (2a) The divine possible individual is a divine possible individual.
- (2b) Any possible individual that is divine exists.

Therefore,

- (2c) The divine possible individual exists.

Let us call this 'Version 2'. The difference between the two versions is that Version 2 explicitly involves, or at least explicitly attempts to involve, so-called *possibilist* quantification rather than so-called *actualist* quantification. That is, version 2 explicitly purports to employ quantification over all that might have existed, including what does not exist, rather than merely over all that does exist. The reader should take special note of the import of the premise of Version 2. The conclusion of the argument is supposed to be not merely that the divine possible individual *might have* been an existent divine individual, but that it *actually does* exist and *actually is* divine. Hence premise (2a) must be read in such a way that it asserts that the possible individual that *actually is* divine *actually is* divine, and premise (2b) must be read in such a way that it asserts that any possible individual that *actually is* divine *actually exists*. Both premises are intended to be taken in such a way as not to presuppose the real existence of any divine individual. So understood, whatever else may be problematic with the argument's first premise, it is not clear that it simply begs the question against the atheist or the agnostic. In fact, one of the philosophical issues raised by the Ontological Argument is precisely whether one can predicate a property (in this case, divinity) of a possible individual without presupposing the real existence of the possible individual. The argument cannot be summarily dismissed on the grounds of an uncontroversial prohibition against predicating properties of possible individuals whose existence is not to be presupposed. Indeed, there are some properties that can be predicated of possible individuals (such as Noman) without presupposing the existence of these individuals—for example the property of not existing, and its entailments.

Of course, in attributing Version 2 to a particular historical figure, such as Anselm or Descartes, some charity may be required in interpreting the modal locutions involved; the term 'possible' in the phrase 'possible individual' need not be interpreted to mean the modal logician's *metaphysical possibility* (although, it probably should be so interpreted for a contemporary Ontological Arguer). Anselm's instance of Version 2 is obtained by interpreting the phrase 'possible individual' in Anselm's sense of 'thing that exists *in intellectu*' (and by interpreting 'divine individual' to mean *individual whose magnitude of greatness exceeds any other conceivable magnitude of greatness*). We may assume here that the concept of divinity is such that it is provable or somehow manifest *a priori* that no two possible individuals are actually divine. We will return to the question of whether the atheist or the agnostic need deny that there is one possible individual who is actually divine.

Once possibilist quantification is admitted, we may pose Quine's ontological question in a new light: What possible individuals exist? Quine's simple and correct answer to the question 'What exists?', if resubmitted, apparently becomes simply incorrect—provided it is interpreted (contrary to Quine's intent) as the possibilist rather than the actualist universal quantifier. Not every possible thing exists. Or so it would seem. In any case, it is not necessary that everything actually exists; there might have been individuals that do not actually exist. Noman, for instance.

Is the English word 'everything' the actualist universal quantifier, or is it the possibilist universal quantifier? Is our ordinary, everyday concept of *everything* the concept of everything that exists, or is it the concept of everything that might have existed, including what does not actually exist? Is it somehow (ambiguously) both? Or is it none of the above? The doctrine that the standard quantifiers of natural language (the

English words ‘everything’, ‘something’, etc.) are possibilist quantifiers is sometimes called ‘possibilism’, and the doctrine that they are actualist quantifiers is sometimes called ‘actualism’.<sup>9</sup> In observing that the standard English universal quantifier is the correct answer to the question ‘What exists?’, Quine proclaims his endorsement of actualism, and assumes his readers agree. I believe that actualism is indeed the predominant view among philosophers of logic and philosophers of language. My own view is that the quantifiers of English are *typically* actualist (and *presentist*, i.e., ranging with respect to a time *t* over only those things that exist at *t*)—that among potential restrictions on our use of quantification, restriction to existing things is, so to speak, the ‘default value’—but that the domain of quantification may be, and very often is, adjusted either upward or downward in various ways, at the drop of a hat. (Consider our readiness to quantify over no longer existing objects in discourse about the past, and for instance in ‘This is a fossil of some dinosaur’.) Still, I believe that our ordinary, everyday concept of *everything* (*simpliciter*) is the concept of everything that exists—no more and no less—and I shall assume this construal throughout most of this essay. In particular, then, I assume that it is legitimate to rely on the concept of actualist universal quantification in attempting to explicate what existence is, for we are merely relying on our ordinary concept of *everything*. (Indeed, unless we may rely on our prior grasp of actualist quantification, I doubt that a philosophically satisfactory definition or analysis of existence can be given. See note 16.) I shall not assume, however, that there is anything illegitimate about possibilist quantifiers *per se* or about the concept of *every possible individual*. Kit Fine has shown that the possibilist universal and existential quantifiers are fully definable using the standard modal operators in tandem with actualist quantifiers over both individuals and ‘propositions’ *qua* sets of possible worlds, or alternatively, using standard modal operators in tandem with actualist quantification over both individuals and possible worlds together with a predicate for a possible world’s being *realized*.<sup>10</sup> In fact, the import of a possibilist quantificational assertion can often be easily expressed using only first-order machinery through the judicious use of modal operators (including an operator for something’s actually being the case) in tandem with actualist quantifiers only over individuals (excluding possible worlds). Occurrences of possibilist quantifiers in this essay are indicated throughout by modal adornment, in the manner of ‘every possible individual’, and so on. (Do not read ‘there is a possible individual that is such-and-such’ as meaning that there *exists* an individual that is both possible and such-and-such. Instead it means that there *might have existed* an individual that *actually is* such-and-such, etc.) Unadorned occurrences of English quantificational locutions are to be read actualistically (except in certain passages in Section VI below, where the phrase ‘every object’ takes on a distinctly Meinongian air).

The actualist universal quantifier ‘everything’ remains a correct answer to the question ‘What possible individuals exist?’, but it is not a very useful response. It

<sup>9</sup> These are not the only doctrines that go by these ‘ism’s; nor are these the only ‘ism’s that these doctrines go by.

<sup>10</sup> See Kit Fine, ‘Prior on the Construction of Possible Worlds and Instants,’ postscript to A. N. Prior and K. Fine, *Worlds, Times and Selves* (Amherst: University of Massachusetts Press, 1977), pp. 116–161. For example, the locution ‘Some possible individual is  $\phi$ ’ may be defined as ‘The possible world *w* that is realized is such that there might have existed an individual that, in *w*, is  $\phi$ ’.

does not tell us, for example, whether Noman is one of the possible individuals that exists—except by telling us that he exists if and only if he is one of everything. It is not yet clear what it means to say that a possible individual is ‘one of everything.’ Descartes’s *cogito ergo sum* may be taken as specifying one possible individual that enjoys the ontological status of real existence (viz., oneself). The Ontological Argument purports to specify another, as do existence proofs in mathematics. Unlike Quine’s actualist–universal–quantifier response, however, these responses offer only particular instances, not an exhaustive specification. The question ‘What possible individuals exist?’ may be posed as a request for a *philosophical analysis* of the concept of existence, in the sense of an illuminating specification of a necessary and sufficient condition *C* such that, necessarily, a possible individual exists if and only if it satisfies *C*. This request is inextricably tied to our question of what existence is. What is it for a possible individual to be ‘one of everything?’

The explicit use of possibilist quantification in Version 2 of the Ontological Argument may shift the critic’s focus from the first premise of the argument to the second. Once possibilist quantification is admitted, it might be objected that premise (2b) is not a conceptual truth, on the grounds that it is logically possible for there to be a merely possible individual that is divine but does not exist. If premise (2a) is to be taken as manifest even to the atheist, and if premise (2b) is to be taken as strong enough to ensure validity for Version 2, then surely something needs to be said by the Ontological Arguer to assure the reader that premise (2b) is indeed a conceptual truth. In fact, historically, Ontological Arguers have offered support for their premise (2b) by means of another *a priori* argument. Sometimes this supporting argument is very brief and mentioned only in passing (‘Existence is a perfection’). Sometimes it is the very heart of the Ontological Arguer’s more general argument. Anselm’s support for his premise (2b) came in the form of the notorious argument that, necessarily, the magnitude of greatness of any possible individual that exists exceeds its actual magnitude of greatness if it does not actually exist; hence, any possible individual whose actual magnitude of greatness exceeds any other possible magnitude of greatness, since it could exist, must exist—otherwise, its actual magnitude of greatness would not exceed its own possible magnitude of greatness. (Got it?) That should satisfy the fool who doubts that premise (2b) is conceptually or demonstrably true.

It would be in the spirit of the Ontological Argument, however, to reply to the objection that premise (2b) is not a conceptual truth by pointing out that, if the objector’s concept of divinity does not already include the concept of existence as a necessary or entailed condition (so that the objector does not read premise (2b) as a conceptual or logically demonstrable truth), we may form the new concept of *exidivinity*, defined in terms of the objector’s concept of divinity thus:

*exidivine* =<sub>def.</sub> divine and existent.

Now we replace the word ‘divine’ by ‘exidivine’ throughout Version 2, to obtain Version 3:

- (3a) The exidivine possible individual is an exidivine possible individual.
- (3b) Any possible individual that is exidivine exists.

Therefore,

(3c) The exidivine possible individual exists.

Using this simple strategy, the Ontological Arguer can remove any need to support the second premise by further *a priori* argument. Even the fool is convinced of the truth of (3b); the new second premise is beyond all reasonable doubt.

Well, premise (3b) is beyond all reasonable doubt provided we can be persuaded that the concept of exidivinity is a genuine and legitimate concept. Ay, there's the rub. In fact, in attempting to trivialize the argument's second premise in this way, the Ontological Arguer shifts the critical focus from the second premise back again to the first. Version 3 apparently attempts to treat existence in such a way that real existence may be proved of a possible individual simply by conceiving of it as existent.

The Ontological Argument may be useful as a device for introducing and discussing various philosophical issues, but taken polemically as a contribution to the debate over God's existence it is surely worthless. It is appropriate that Anselm should label his opponent 'the fool', since it is difficult to imagine a genuine atheist or agnostic who is not also a fool being converted to theism on the strength of this piece of sophistry. That the Ontological Argument (taken as a purported proof of God's existence) involves some error, there can be no doubt. This was conclusively established during Anselm's lifetime in a *reductio ad absurdum* by his formidable critic Gaunilo, who first observed that if the Ontological Argument succeeds in demonstrating its conclusion, then one can also prove the existence of a fantasy island by an exactly analogous argument.<sup>11</sup> Unfortunately, this *reductio* does not pinpoint the error in the Ontological Argument. The credit for having located the fallacy in the argument is often attributed to Kant, who purported to debunk the argument with his observation that existence is not a predicate that can be legitimately included in the definition or concept of something. Kant's refutation is widely regarded as conclusive, or at least sound, as regards the versions of the Ontological Argument discussed here. One exceedingly plausible idea that lends support to this refutation is that one cannot create new entities simply by defining them into existence. If existence were regarded as an admissible defining property or concept, exactly on a par with such mundane concepts as being green-eyed or being an island, then it would be possible to initiate merely possible individuals such as Noman into the elite club of Existence, simply by defining them as existing. Your next stop: the Twilight Zone.

Kant's observation that existence is not an admissible defining predicate was echoed by both of the two greatest figures of contemporary analytic philosophy, Gottlob Frege and Bertrand Russell—basking in the glow of their powerful, new quantification theory, with its precise and mathematically respectable notion of existential quantification. In the final footnote to '*Function und Begriff*' (1891) Frege wrote: 'The ontological proof of God's existence suffers from the fallacy of treating

<sup>11</sup> 'On Behalf of the Fool,' in A. Plantinga ed., *The Ontological Argument* (Garden City; Doubleday & Company, Inc., 1965), pp. 6–13, at p. 11–12.

existence as a first-level concept.’ This is essentially the same idea he advanced seven years earlier in his *Grundlagen der Arithmetik*, where he wrote: ‘Because existence is a property of concepts the ontological argument for the existence of God breaks down’ (section 53). Russell was even more emphatic in his lectures on logical atomism:

When you take any propositional function and assert of it . . . that it is sometimes true, that gives you the fundamental meaning of ‘existence’. You may express it by saying that there is at least one value of  $x$  for which the propositional function is true. . . . Existence is essentially a property of a propositional function. It means that the propositional function is true in at least one instance. (‘The Philosophy of Logical Atomism,’ in Russell’s *Logic and Knowledge*, ed., R. C. Marsh, at p. 232.)

. . . As regards the actual things there are in the world, there is nothing at all you can say about them that in any way corresponds to this notion of existence. It is a sheer mistake to say that there is anything analogous to existence that you can say about them. . . . There is no sort of point in a predicate which could not conceivably be false. I mean, it is perfectly clear that, if there were such a thing as this existence of individuals that we talk of, it would be absolutely impossible for it not to apply, and that is the characteristic of a mistake. (*ibid.*, 241.)

. . . there is a vast amount of philosophy that rests upon the notion that existence is, so to speak, a property that you can attribute to things, and that the things that exist have the property of existence and the things that do not exist do not. That is rubbish . . . (*ibid.*, p. 252. See also Russell’s *A Critical Exposition of the Philosophy of Leibniz*, London: George Allen and Unwin Ltd, 1971, at pp. 174–175; and his *Introduction to Mathematical Philosophy*, London: George Allen and Unwin Ltd, 1953, at pp. 203–204.)

The problem with the Ontological Argument—according to Kant, Frege, and Russell—is that by invoking the alleged concept of *exidivine possible individual*, it illegitimately treats existence as an admissible concept or property of individuals, on a par with such mundane concepts or properties as being green-eyed or being an island, thereby violating its proper status (as a second-level property or concept of first-level concepts or of propositional functions, or as a pre-requisite for having any properties at all, or as something of the sort). Alas, the founders of mathematical logic would apparently cast out Descartes’s lovely little *cogito ergo sum* alongside his Ontological Argument. The quest for an answer to the question ‘What possible individuals exist?’ begins to look more and more quixotic.

### III

Schopenhauer gave expression to a very common reaction to the Ontological Argument when he called it ‘a charming joke.’<sup>12</sup> The argument’s propounders, however, do not offer the argument as a curious philosophical parlor trick or riddle; they advance it in all seriousness as a deductive proof of a thesis that most of us had been trained to believe since childhood, with very little in the way of rational

<sup>12</sup> In *The Fourfold Root of the Principle of Sufficient Reason*, in Plantinga, 1965, pp. 65–67.

justification. The thesis it purports to prove is extremely implausible—at least for (i.e., with respect to the epistemic situation of) those who are able to break free of their childhood religious training and for those who never had any—and for that reason alone the thesis needs something like evidence or argument for its epistemic justification. If there is any area in which philosophers are to be held to a higher standard than nonphilosophers, it is in providing justification for their otherwise implausible religious beliefs.<sup>13</sup> Whereas the Ontological Argument (taken polemically as a purported proof of God’s existence) has always struck me as philosophy at its least dignified, I have never seen any merit whatsoever to the Kantian sort of reply recounted in the preceding section. Furthermore Descartes’s *cogito* has always struck me as an excellent example of philosophy at its shining best. Let us distinguish three separate Kantian theses about existence:

- (i) The English verb ‘exist’ (and its cognates) represents, from the point of view of logic, not a first-order predicate of English, but a logical quantifier;
- (ii) There is no property or concept of existence for individuals;

and

- (iii) It is illegitimate to invoke the term ‘exist’ or the alleged property or concept of existence in forming the concept of something or in specifying one of the necessary conditions in the definition of something—so that one cannot legitimately define something as *the existent such-and-such*, or as *a such-and-such that exists*.<sup>14</sup>

<sup>13</sup> It is often argued (most notably by Alvin Plantinga) that belief in God is no less rationally justified than many other unproved and contestable philosophical beliefs that are widely shared and usually regarded as knowledge, such as the belief in other minds or the belief that there is an external, material world. See for example A. Plantinga, *The Nature of Necessity* (Oxford: Oxford University Press, 1974), at p. 221. The issue of the rationality of belief in God cannot be discussed adequately here, of course, but it should be noted that historically, the function and role of the Ontological Argument in philosophy is integrally related to the view that the hypothesis of God’s existence requires substantial justification, in the form of something like proof, if it is to be rationally adopted. The observation that many external existence beliefs usually regarded as knowledge are based on very little in the way of decisive evidence seems both correct and epistemologically significant. However, there is an epistemologically important point of disanalogy between belief in God and belief in other minds or in the external world: The hypotheses of other minds and of the external world are extremely plausible (even with respect to the epistemic situation of someone who has not been philosophically indoctrinated since childhood concerning other minds or the external world), whereas the hypothesis of God’s existence is fundamentally implausible (at least for those who are able to break free of their childhood religious indoctrination or who never had any), or at most, not significantly more plausible than the hypothesis of the real existence of the mythological Olympian gods of old, or than other superstitious or occult hypotheses. Indeed, it is difficult to imagine a non-philosopher who did not believe in other minds or in the external world, yet there are masses of nonphilosophers who do not believe in God. It is not the contestability or unprovability of the hypothesis of God’s existence as much as its intrinsic implausibility that renders the hypothesis in need of evidence or proof for its justification.

<sup>14</sup> In calling a thesis ‘Kantian’, I do not mean that it was in fact held or endorsed by Kant, only that it is in the spirit of theses often attributed to Kant.

There is, of course, the fourth Kantian thesis that the alleged property or concept of existence is not a predicate of German, or any other natural language, but it is difficult to see how this truism could be thought to offer any food for thought to the likes of Anselm and Descartes.

Insofar as Kant, Frege, or Russell, or their followers, have held any or all of these (i), (ii), and (iii), it is virtually provable that they are completely mistaken.

It is widely recognized that thesis (i) is false. Any number of commentators have noted that the term ‘exists’ is fully and completely definable in formal logic as a first-order predicate of individuals, using standard, actualist, Frege-Russellian existential quantification. Its definition (which also employs the logical notions of identity and abstraction but nothing more) is the following:

$$(\lambda x)(\exists y)[x = y].$$

Less formally, the English word ‘exists’ may be regarded as being defined by the phrase ‘is identical with something’, or more simply, ‘is something’. This yields an alternative way to give substance to the idea that to be is to be one of everything: To be one of everything is to be something. The phrase ‘is something’, in the sense of ‘is identical with something’, is paradigmatic of the sort of expression that, from the point of view of logic, would ordinarily be regarded as a first-order predicate of individuals. (Of course, it would not be regarded as a *simple* first-order predicate; it is a compound expression.) It satisfies every reasonable logical, grammatical, or semantic test or criterion for first-order predicatehood. In any case, the expression displayed above is unquestionably a logical first-order predicate. The fact that it (correctly) applies to every existing individual whatsoever, and does so by the rules of semantics alone, does nothing to threaten its status as a full-fledged predicate of individuals. On the contrary, the fact that the principles of classical semantics assign a class of individuals as an extension to this expression confirms that it is indeed a first-order predicate, and one of pure logic at that. Furthermore, the fact that its extension in any model is just the domain of individuals in that model confirms that it is the very predicate we want. If any individual in the domain of any model were left out of the predicate’s extension, then whatever property or concept the predicate would be an expression for, it would not be an expression for the existence of individuals.

Although it has been less often noted, it should be equally obvious that there is a concept of existence for individuals, and that there is a special property—the property of existing—that an individual has only by virtue of the fact that it exists. Each of the notions involved in the definition of the predicate ‘exists’ is precise and mathematically respectable; each of the expressions making up the definiens has a definite sense or content. In fact, each of the three notions involved—existential quantification, identity, and abstraction—is precise in a way that many everyday notions are not. Existential quantification is fully definable in terms of the logical notions of *not* and *everything*, as follows:

$$(\lambda F)[\sim(\forall x)\sim Fx].$$

(More accurately, the occurrence of the existential quantifier in any existential generalization  $\lceil(\exists\alpha)\phi_\alpha\rceil$  may be contextually defined by  $\lceil\sim(\forall_\alpha)\sim\phi_\alpha\rceil$ .) Identity is just the binary equivalence relation that each individual stands in to itself and to no other individual. Abstraction is just the formal operation by which a compound first-order predicate is formed from an open sentence of formal logic. The English expressions ‘something’ and ‘is identical with’ are paradigmatic of the sort of

expression that is ordinarily regarded as expressing an attribute (property or relation) or concept as its sense or content. If any expressions express concepts or attributes as their sense or content, these do. Their senses or contents are easily specified. The sense or content of the second-order predicate (quantifier) ‘something’ is the property of classes of individuals of not being empty, the property of having at least one element. More accurately, the sense or content of ‘something’, with respect to a given time  $t$ , is the temporally indexed property or concept of not being empty at  $t$ . The sense or content of the phrase ‘is identical with’, with respect to a given time  $t$ , is the temporally indexed binary relation of being one and the very same thing at  $t$ , or the corresponding concept.<sup>15</sup>

If a set of expressions that express concepts or attributes as their sense or content are appropriately combined to form a new expression, the compound expression thus formed has a sense or content that is determined in a certain way by the senses or contents of the combined component expressions. Hence the phrase ‘is identical with something’, and the displayed expression, express a definite property or concept as their (shared) sense or content. This is the property or concept of *being identical with something* (or more simply, the property or concept of *being something*). It is this property or concept that is the sense or content of the predicate ‘exists’. And it is this property or concept that we call ‘existence’. We have here our answer to the question of what it is for something to be, or to exist. *To be is to be identical with something*.

I do not mean, of course, that the predicate ‘exists’ expresses the property or concept of being identical with some *particular* thing, such as Socrates or Russell. Such properties as these are nowadays called ‘haecceities’ or ‘thisnesses’ (Robert Adams), and are expressed by such phrases as ‘is identical with Socrates’ and ‘is identical with Russell’. The property or concept of existence expressed by the predicate ‘exists’ involves existential quantification. It is the property or concept of being identical with *something or other*, the feature that an individual has only in virtue of the fact that not everything is distinct from it. More accurately, the sense or content of the term ‘exists’, with respect to a given time  $t$ , is the property of concept of being something at  $t$ , the property that an individual has only in virtue of that fact that, at  $t$ , not everything is distinct from it.

It stands to reason that the first-order concept of existence for individuals should involve the Frege-Russellian higher-level logical notion of *something or other*. To be is to be identical with something. Not to be is to be distinct from everything. More succinctly, to be is to be something, not to be is to be nothing. To be and not to be: these are the answers.<sup>16</sup>

<sup>15</sup> For an argument that the identity predicate is not vague, see Salmon, *Reference*, pp. 243–245; and the appendix to Salmon, ‘Modal Paradox.’

<sup>16</sup> I have said that the quantifiers ‘everything’ and ‘something’ of standard English do not have a fixed domain, and may be restricted in various ways according to the context of use, but that the default value is restriction to existing things. This suggests a treatment of the English quantifiers on the model of the indexical phrases ‘everything of *that* sort’ and ‘something of *that* sort’, to be supplemented or completed by a contextual indication or ‘demonstration’ of the sort in question, where no explicit demonstration constitutes by default a contextual indication of the sort *existing thing*. On this picture, the ‘definition’ provided by the slogan ‘To be is to be identical with something’ makes the ‘is’ of being an indexical predicate of individuals, shorthand for ‘is identical

As far as I can see, there is nothing at all to be said for either thesis (i) or thesis (ii). In any case, despite their impressive credentials, neither Kant nor Frege nor Russell has any persuasive argument to offer for either of these theses.

Thesis (iii) is no better off. There is not a single plausible reason why the predicate 'exists', or the property or concept of existence, should be precluded from the definition of something or from the formation of some inclusive concept, such as the concept of an existent fantasy island or that of an existent lion. Why should *any* concept be precluded from the formation of more complex ones? The concept of an existent fantasy island is the concept of a fantasy island that is not distinct from everything, and the concept of an existent lion is that of a lion that is not distinct from everything. The concept of an existent lion is every bit as legitimate, *qua* concept, as the concept of a green-eyed lion. Similarly, we may define the term 'exiunicorn' as follows:

*exiunicorn* =<sub>def.</sub> unicorn that exists.

Let us call the procedure of forming such concepts or definitions as these 'existential definition'. What can possibly be wrong with existential definition? If there is anything illegitimate in our definition of an exiunicorn, it comes from 'unicorn', not from 'exists'.<sup>17</sup> Philosophers often form or invoke complex concepts that include existence as a necessary condition. We have the concept, for example, of a *temporary existent*, i.e., an individual that exists but does not always exist. We also have the concept of a *contingent existent*, i.e., an individual that exists but does not have necessary existence. These concepts are perfectly legitimate, and indeed, extremely useful for certain purposes.

Saul Kripke's powerful 'schmidentity' form of argument can be applied here.<sup>18</sup> Suppose my claims that existence is the property or concept of being identical with something and that the English word 'exists' is a first-order predicate for this concept are mistaken. Then take instead the expression ' $(\lambda x)(\exists y)[x = y]$ '. As I have already said, this is unquestionably a logical first-order predicate. By the principles of semantics alone, this predicate (correctly) applies, with respect to any time *t* and possible *w*, to everything that exists at *t* in *w*, and to nothing else. Following Kripke, we may abbreviate this predicate by the word 'schmexists', and we may call the property or concept that is the sense or content of this predicate 'schmexistence'. There is absolutely no reason in the world why we cannot use this predicate in

with something of that sort'. Indeed, the 'is' of being in English does seem to display the same sort of context-sensitivity as the quantifiers 'everything' and 'something'. It is only when the demonstrative element takes its default value that the slogan becomes a 'definition' of the 'is' of *existence*. The result is a special sort of ostensive definition, rather than a nominal definition, one employing a peculiar sort of ostension-by-default. Given this picture of the inter-relations among the quantifiers, the 'is' of being, and the 'is' of existence, it is doubtful that a philosophically satisfactory nominal definition of the 'is' of existence can be given. (I have not said how far this picture should be maintained.)

<sup>17</sup> See Saul Kripke, *Naming and Necessity* (Harvard University Press, 1980), pp. 24, 156–158.

<sup>18</sup> *Ibid.*, p. 108; and 'Speaker's Reference and Semantic Reference,' in P. French, T. Uehling, and H. Wettstein, eds., *Contemporary Perspectives in the Philosophy of Language* (Minneapolis: University of Minnesota Press, 1979), pp. 6–27, at p. 16.

defining new expressions, or why we cannot invoke the concept of *schmexistence* in forming more complex concepts, as often as we like. The following expression, for example, is perfectly well-formed and meaningful:

$$(\lambda z)[(\lambda x)(\exists y)[x = y](z) \& \sim \square(\lambda x)(\exists y)[x = y](z)].$$

This is a predicate for the concept of contingent existence. Exactly analogously, we may say that something is *schmexidivine* if it is divine and identical with something. We are perfectly free to use either of these defined notions in our reasoning. Who is to stop us?

If the best that Kant and the founders of mathematical logic can do to block the Ontological Argument is to prohibit existential definition, their response to the argument constitutes nothing more than an especially arrogant form of religious persecution. Let the Kantians scream ‘Blue murder!’ as often they please, existential definitions are perfectly legitimate.

It may be plausibly argued that there is no point in performing an existential definition. It is true, for example, that the concept of an existent lion is in some sense not very different from the concept of a lion, and as Kant pointed out, a hundred existent dollars is not worth one penny more than a hundred dollars. (I find it impossible to agree with him, however, that a hundred existent dollars is not worth one penny more than a hundred merely possible dollars. If all my dollar bills were merely possible, I would gladly trade them for just one existent dollar bill.) How does this show anything illegitimate about the concept of an existent lion or about that of an existent dollar? At most, it only shows that such concepts are superfluous, that they lack a *raison d’être*, not that they are somehow illegitimately formed. I doubt that it even shows this much: Consider any class that has me as an element—{Nathan Salmon}, for example (the unit class that has me as its only element). When I am dead and gone, this class will no longer exist. It will not be an existent class. It is far from clear, however, that it will not be a class of any kind. I believe that it will still be a class after I am gone, and that I will still be an element of it (although, of course, since I will no longer exist, there will not be anything that is an element of it and it will not have any elements). Irrespective of one’s philosophical disposition toward the (admittedly somewhat bizarre) question of whether an existent class can become a nonexistent one, the very fact that we can raise a substantive (albeit bizarre) question of whether a given such-and-such remains a such-and-such in certain circumstances in which it does not exist indicates that there is perfect legitimacy to the concept of an existent such-and-such, *qua* concept. My view that, at some time in the future, singleton me will still be a class but no longer an existent class, whether correct or incorrect, involves just such a concept, as does the view of anyone who denies that singleton me will ever be a nonexistent class.

Furthermore, if the Ontological Arguers were correct, there would be yet another, and no less significant, purpose that may be served by forming complex concepts that include the concept of existence. The charge that existential definition is pointless, in a sense, begs the question against Anselm, Descartes, *et al.*

## IV

Version 3 of the Ontological Argument is unscathed by Kant's alleged refutation. Moreover, although its second premise is not beyond all possible doubt, it is beyond all reasonable doubt.

Well, its second premise is beyond all reasonable doubt provided we can make sense of the possibilist phrase 'any possible individual'. The use of possibilist quantification offends the sensibilities of some actualists, and may obfuscate the evaluation of the argument as valid or invalid. It would be desirable to eliminate somehow the possibilist quantification of Version 3.

That is something we can do (at least to the extent demanded for present purposes), through the judicious use of modal operators and standard actualist quantification over individuals (and by assuming Russell's Theory of Descriptions in order to explicate the description 'the exidivine possible individual' by means of quantification and identity).<sup>19</sup> In removing possibilist quantification from the argument, one must be sensitive to possible misinterpretations of the premise and conclusion. Recall the import of the premise of Version 2. The same is true of Version 3, replacing 'divine' by 'exidivine': conclusion (3c) is supposed to be not merely that the exidivine possible individual *might have* been an existent divine individual, but that it *actually does* exist and *actually is* divine. Hence premise (3a) must be read in such a way that it asserts that the possible individual that *actually* is exidivine *actually* is exidivine, and premise (2b) must be read in such a way that it asserts that any possible individual that *actually* is exidivine *actually* exists. An actualist rendering of Version 3, then, is the following:

- (4a) There might have been an individual  $x$  such that:  $x$ , and actually necessarily only  $x$ , is actually exidivine.
- (4b) Necessarily, every individual  $x$  is such that, actually, if  $x$  is exidivine then  $x$  exists.

Therefore,

- (4c) There might have been an individual  $x$  such that: (i)  $x$ , and actually necessarily only  $x$ , is actually exidivine; and (ii)  $x$  actually exists.

Let us call this 'Version 4'. It is what Version 1 becomes when it is submitted to regimentation in accordance with contemporary standards of rigor, with an aim to satisfying, certain reasonable formal desiderata. Version 4 is a valid modal argument, one that involves actualist quantification. And its second premise is now beyond all reasonable doubt.

Yet Gaunilo demonstrated that the argument must involve some error. If existential definition is not the source of the error, what is?

<sup>19</sup> See note 10. Fine's results combined with Russell's Theory of Descriptions enable one to secure the effect of referring by definite description to possible but nonexistent individuals. The locution 'The possible individual that is  $\phi$  is  $\psi$ ' may be defined as 'The possible world  $w$  that is realized is such that there might have been an individual  $x$  such that,  $x$  and in  $w$  necessarily only  $x$  is  $\phi$  in  $w$ , and  $x$  is  $\psi$  in  $w$ '.

Here again, the correct answer has been noted by a number of commentators. As Kant himself pointed out (and others before him), the only conceptual truths that follow *directly* from concepts or definitions are hypothetical conclusions of the form 'If anything satisfies the concept or definition, then it has such-and-such properties' and 'Anything having such-and-such properties satisfies the concept or definition.' It is a conceptual *a priori* truth, for example, that if there is a green-eyed lion, then it is a lion and has green eyes, and that any lion that has green eyes is a green-eyed lion. Exactly analogously, it is a conceptual *a priori* truth that if there is an existent lion, then it is a lion and exists, and that any lion that exists is an existent lion. It is true by definition, if you will, that all and only exilions are lions that exist.<sup>20</sup> Analogously again, it is a conceptual *a priori* truth that all exiunicorns are unicorns and exist, and only unicorns that exist are exiunicorns.

The important point is that in this respect nothing changes when we move from actualist to possibilist quantifier logic. Even in possibilist quantifier logic, the conclusions that follow directly from definitions are always hypothetical in form. It is a conceptual *a priori* truth, for example, that if a possible individual is a green-eyed lion, then it is a possible individual that is a lion and has green eyes, and any possible individual that is a lion and has green eyes is a possible individual that is a green-eyed lion. It is similarly a conceptual *a priori* truth that if there is an exidivine possible individual then it is a divine possible individual and exists, and if there is exactly one divine possible individual that exists then it is the exidivine possible individual. It is true by definition that a possible individual is the exidivine possible individual if and only if it, and (among possible individuals) only it, is both divine and existent. It certainly is not a conceptual *a priori* truth, or true by definition, that some possible individual is an existent lion, that some possible individual is an exiunicorn, or that some possible individual is exidivine. For all that can be known merely by reflection on the concept of a such-and-such (or on that of an existent such-and-such), there may not be anything that fits the concept, not even a possible thing. Even if it can be known *a priori* that there is a possible thing that *might* fit the concept, there may not be any possible thing that *actually* fits the concept. There is not even a kernel of truth to the idea that if existence were treated as an admissible defining property or concept, then it would be possible to create entities by defining them into existence. The most we obtain directly from the existential definition of an existent such-and-such is that, *if* a possible individual is an existent such-and-such, then it exists and is a such-and-such.

The problem with the Ontological Argument (as it has been formulated here) is not that it involves existential definition, but that its expounders commit Meinong's fallacy of assuming that, for any formula  $\phi$ , it is logically or trivially or manifestly true that the  $\phi$  is a  $\phi$ . (To put the matter less anachronistically, Meinong commits Anselm's fallacy.) Far from being a logical schema, this assumption is actually contradictory. In fact, the assumption is contradictory even if the range of the formula-variable  $\phi$  is restricted to consistent formulas that may apply to possible

<sup>20</sup> Actualists claim that it is also a logical *a priori* truth that anything that is a lion is a lion that exists. If actualism is correct, it is a conceptual truth that all and only lions are exilions.

individuals. To see this, let  $\phi_x$  be ' $F(x) \ \& \ p$ '. Now let  $\phi_x$  be ' $G(x) \ \& \ \sim p$ '. Logic gives us only that *if there is exactly one  $\phi$* , then the  $\phi$  is a  $\phi$ .<sup>21</sup> Even in the strange land of possibilist quantification, logic—through its Law of Noncontradiction—rejects the claim that, for every (consistent) formula  $\phi$ , the possible individual that is a  $\phi$  is a  $\phi$ . Possibilist quantifier logic gives us only that, *if exactly one possible individual is a  $\phi$* , then the possible individual that is a  $\phi$  is a  $\phi$ . Premise (2a) is no truth of logic. It is no piece of trivia either. Likewise for premise (3a). This much is obvious from its translation into actualist discourse via (4a).

The considerations raised in the preceding two paragraphs are both necessary and sufficient to expose the fallacy in ontological arguments in the style of Versions 1 through 4, whether for the existence of lions, fantasy islands, unicorns, or divine individuals. No doubt more is required to debunk more sophisticated versions, although I believe not much more. Certainly, one need not take the drastic measure of retreating to theses about existence that are demonstrably false (or nearly so).

In fact, Kant, Frege, and Russell all recognized explicitly in their writings that definitional truths are always hypothetical in form. Why, then, did each think it necessary to insist also on one or all of theses (i)–(iii)? I do not know. It is possible that they reasoned along the following lines: Conceptual or definitional truths concerning the such-and-such always have the hypothetical form 'If the such-and-such exists, then it is thus and so'. If it were legitimate to include the very concept of existence itself in the definition of the such-and-such, then we could satisfy the antecedent of this hypothetical by the very definition, thereby securing the consequent categorically, without the existential proviso, via *modus ponens*. And the consequent in this case includes existence as one of the conditions it ascribes. We would have obtained an analytic existential; we would have defined something into existence. But we cannot create new entities simply by defining them into existence. It is illegitimate, therefore, to include existence itself (or anything that entails existence, such as the concept of *necessary existence* or that of *exidivinity*) in forming a complex concept or in defining a term (thesis (iii)). If there were a concept or property of existence for individuals, or if there were a first-order predicate of

<sup>21</sup> In 'On Denoting' Russell notoriously raises a number of objections to Frege's theory of *Sinn* and *Bedeutung* that are apparently based on one or more confusions or misunderstandings. One particular objection in 'On Denoting' is quite powerful, but is briefly stated amid the other, mistaken criticisms, and consequently has been unduly neglected. In connection with his example of 'the present King of France' Russell writes: 'Or again consider such a proposition as the following: 'If  $u$  is a class which has only one member, then that one member is a member of  $u$ ', or, as we might state it, 'If  $u$  is a unit class, *the*  $u$  is a  $u$ .' This proposition ought to be *always* true . . .' On Frege's theory, any English sentence containing the phrase 'the present King of France' (and free of oblique devices) is neither true nor false. Russell correctly points out that whereas Meinong's theory errs in one way by counting the sentence 'The present King of France is a present King of France' as logically true when in reality it is not even true, Frege's theory errs in another but equally objectionable way by discounting the weaker, conditional sentence 'If there is exactly one present King of France, then the present King of France is a present King of France', which is logically true, as not even true. By contrast with Frege, the 'secondary occurrence' or 'narrow scope' reading of the latter sentence is indeed a trivial theorem of *Principia Mathematica*. (This is not to say, though, that Russell's account of definite descriptions as contextually defined 'incomplete symbols' that are more analogous to second-order predicates than to singular terms is superior to an account of definite descriptions as complete, genuine singular terms.)

individuals that correctly applied to all and only existing individuals, then it would be perfectly legitimate to include this concept or property in forming more complex concepts, and it would be perfectly legitimate to use this predicate in defining other terms. Consequently, there is no concept or property of existence for individuals (thesis *ii*), and the word 'exists' is not a first-order predicate (thesis *i*). In fact, it is clear on independent grounds that existence is a second-level concept rather than a first-level concept. This further confirms thesis *iii*.

The reasoning here is fallacious. The mistake occurs when it is argued that by building existence into the concept of the such-and-such, one would make it true by definition that the such-and-such exists. This is just Meinong's fallacy again. Whereas the Version 3 Arguer committed this fallacy is asserting premise (3a) as a logical or manifest truth, Kant and his followers may have committed the very same fallacy in attempting to locate the source of the illegitimacy.

One may defend the Kantian refutation of the Ontological Argument by claiming that what Kant and his followers have in mind is that it is illegitimate to include existence in the definition of something *in such a way that* it follows just from the definition that the thing categorically exists. If existence is to be legitimately included in the very definition of the such-and-such, it must be included in such a way that only hypothetical conclusions follow from the definition. If this is what they have in mind, then at least they do not commit the very same fallacy as their opponents. They are, however, guilty of *something*, even if only gross understatement. It is not that it is merely somehow illegitimate to include existence in the definition of something in such a way that its existence follows from the very definition. Though it is perfectly possible to include existence in the definition of something, it is quite literally *impossible* to do so in such a way that existence follows from the definition. If 'ought not' implies 'can', then it is false that one ought not to include existence in the definition of something in this way.

The fact that the first premise of the Ontological Argument is not a truth of logic and not manifestly true does not entail that it is not true at all. But do atheists and agnostics have any reason to suppose it true? Indeed, does the Ontological Arguer have any reason to suppose it true? Why should anyone believe that there is a divine possible individual?

One might infer that there is a divine possible individual from the observation that it is perfectly possible for there to be a divine individual. This is essentially Anselm's argument for his premise (2a).<sup>22</sup> It is fallacious, but it is understandable why so many writers have been convinced by it. In order to steer clear of the fallacy, one must distinguish sharply between the assertion that it is possible for there to be something that is such-and-such, and the separate assertion that it is possible that there is something that *actually is* such-and-such. In possibilist discourse, we must distinguish the assertion that there is a possible individual that *might have* existed having a certain property from the stronger assertion that there is a possible individual that *actually has* the property. That these are different assertions is confirmed by considering the (yet to be analyzed) property of existing without actually

<sup>22</sup> In Plantinga, *Ontological Argument*, at p. 4.

existing: There might have been something that does not actually exist (there is a possible individual that might have had the property of existing without actually existing), but there could not be something that actually exists but does not actually exist (there is no possible individual that actually has the property of existing without actually existing). Let us suppose for the moment that it is somehow manifest or knowable *a priori* that it is possible that there is divine individual. In possibilist quantifier logic, it follows that there is a possible individual that *might have been* both divine and existent. It does not follow that there is a possible individual that actually is both divine and existent. The fact that there might have been an individual that would have been divine does not entail that there might have been an individual that *actually is* divine. The latter is what is needed to legitimize premise (2a).

I am not making the common objection that the Ontological Arguer begs the question since one must establish or assume that the divine possible individual exists before it can be concluded that the divine possible individual is divine.<sup>23</sup> That may be true, but as far as the present objection goes, it need not be. It is open to the Ontological Arguer to attempt some neutral, non-question-begging way of establishing that there is a possible individual that is actually divine, without assuming that one actually exists. What I am pointing out is that, even if the atheist and agnostic have been persuaded on *a priori* grounds that there might have been a divine individual, the Ontological Arguer still owes them some *further* argument to convince them that there might have been an individual that actually is divine (before it can be concluded via premise (2b) that there actually exists a divine individual). Merely establishing that there is a possible individual that might have been divine doesn't cut it.

For the purposes of the Ontological Arguer, the additional argument must proceed from premise whose truth is *a priori*, or otherwise manifest. The additional argument must not depend in any way on the assumption that a divine possible individual actually exists, since this is what is supposed to be ultimately proved. Furthermore, the additional argument must be sound; it must be an argument that cannot be extended to fantasy islands and the like. Surely no such argument exists. There does not even possibly exist any possible such argument.

## V

In a penetrating critique of the Ontological Argument, David Lewis suggested one reason on behalf of the Ontological Arguer for supposing that some possible, individual not only might have been but actually is divine.<sup>24</sup> We were supposing, for the sake of argument (although it has not yet been established), that it is manifest that in some possible worlds there exists something that is divine. Hence, in some possible worlds the property of divinity is exemplified. Now, the actual world is generally thought to be a special possible world in that, unlike any other possible world, it alone is actual. If the special property of divinity is exemplified in any

<sup>23</sup> This objection was apparently first raised by Gaunilo. See Plantinga, *Ontological Argument*, at p. 11.

<sup>24</sup> 'Anselm and Actuality,' *Noûs*, 4 (1970), pp. 175–188.

possible world, it seems only fitting that it should be exemplified in the most special of the worlds, the actual world. Lewis writes:

This reason seems *prima facie* to have some force: whatever actuality may be, it is something we deem tremendously important, and there *is* only one world that has

Therefore it may well seem plausible that the actual world, being special by its unique actuality, might also be special by being a [world in which divinity is exemplified]. This does not pretend to be a proof of [premise (2a)], but [I] do not demand proof; [I] wish to know if the ontological arguer has any reason at all to accept [(2a)], even a reason that does no more than appeal to his sense of fitness. (p. 184)

Lewis's suggestion is a Trojan horse. For he goes on to argue that actuality is not a special property at all. According to Lewis, the word 'actual' is, in its primary sense, an indexical term analogous to 'here' or 'now': its reference varies with the context in which it is uttered—treating possible worlds along with times and locations as relevant features of contexts of utterances.

The *fixed* meaning we give to 'actual' is such that, at any world  $w, \dots$ , in *our* language . . . 'the actual world' *denotes* or *names*  $w$ ; the predicate 'is actual' *designates* or *is true of*  $w$  and whatever exists in  $w$ ; the operator 'actually' *is true of* propositions true at  $w$ , and so on for cognate terms of other categories . . .

A complication: we can distinguish primary and secondary senses of 'actual' by asking what world 'actual' refers to at a world  $w$  in a context in which some other world  $v$  is under consideration. In the primary sense, it still refers to  $w$ , as in 'If Max ate less, he would be thinner than he actually is'. In the secondary sense it shifts its reference to the world  $v$  under consideration, as in 'If Max ate less, he would actually enjoy himself more'. (p. 185)

Lewis extracts from his theory that 'actual' is indexical the consequence that actuality is not a special property of the actual world, and that all possible worlds are equally significant, or equally insignificant, from an enlarged and objective modal point of view:

If I am right, the ontological arguer who says that [the actual] world is special because [it] alone is the actual world is as foolish as a man who boasts that he has the special fortune to be alive at a unique moment in history: the present. The actual world is not special in itself, but only in the special relation it bears to the ontological arguer. Other worlds bear the same relation to [their] ontological arguers. We should conclude, therefore, that [Version 2 of the Ontological Argument] is a valid argument from a premise [(2a)] we have no non-circular reason to accept . . . [Premise (2a)] derives its credibility entirely from the illusion that because [the actual] world alone is actual, therefore [the actual] world is radically different from all other worlds—special in a way that makes it a fitting place of [divinity]. But once we recognize the indexical nature of actuality, the illusion is broken and the credibility of [(2a)] evaporates. It is true of *any* world, at that world but not elsewhere, that that world alone is actual. (pp. 187–188)<sup>25</sup>

<sup>25</sup> Lewis is actually concerned with an alternative formulation of Anselm's Ontological Argument, and more specifically with the weaker premise that some possible individual is actually divine, in the particular Anselmesque sense of 'divine'. His arguments, though, extend straightforwardly to premise (2a), whether 'divine' is understood in the Anselmesque sense or in some other sense (such as the Cartesian), as well as to premise (3a).

We have arrived at last at the question of what it is for a possible individual to be actual. If I am right that *to be is to be identical with something*, then to be actual is actually to be identical with something. Lewis has provided us with an answer to the question of what it is for something actually to be the case.

Unfortunately, there is much in Lewis's analysis of actuality that commentators have taken exception to. Yet there is much in the account that has the ring of truth. It is important to sort these matters out if we are to be clear about what it is for a possible world or a possible individual to be 'actual,' properly so-called.

One immediate difficulty with Lewis's theory of actuality is that his statement of the theory presupposes his highly controversial view that the (standard) inhabitants of possible worlds are world-bound individuals, i.e., that each possible individual exists in one and only one possible world. This view, in turn, is connected with Lewis's idiosyncratic view that possible worlds are physical systems. Nowadays, philosophers more commonly regard possible worlds as abstract entities of a certain sort, such as maximal consistent sets of propositions that might have been jointly true (Robert Adams), maximal situations that might have obtained (Saul Kripke), maximal histories the cosmos might have had (Kripke), total states the cosmos might have been in (Kripke, Robert Stalnaker), maximal states of affairs that might have obtained (Alvin Plantinga), or maximal scenarios that might have been realized (myself). As with most of Lewis's commentators, I regard Lewis's presuppositions concerning the nature of modality as inessential to the main idea of his theory that the term 'actual' is indexical, and I propose to consider instead a version of the indexical theory that makes the considerably more plausible assumption that possible worlds are maximal abstract entities of one sort or another. (If Lewis's presuppositions concerning the nature of modality are essential in some sense to the *whole* of his indexical theory, then my concern here is with a proper part of that theory, especially with those aspects of the theory that have the ring of truth, supplemented with an abstract-entity conception of possible worlds.) On the abstract-entity conception of possible worlds, possible individuals need not be world-bound—although, for all that is demanded by the conception itself, it may turn out that an extreme version of the doctrine of essentialism is true, making every possible individual world-bound in some sense. (Logically, it could turn out that the actual world is the only possible world—extreme metaphysical determinism—so that the only possible individuals are both actual and world-bound.)

On the abstract-entity conception of possible worlds, in every possible world there will exist alternative possible worlds (unless extreme metaphysical determinism is true), but in any single possible world *w*, every world other than *w* itself is *merely* possible. If worlds are maximal compossible sets of propositions, then according to any single possible world, it is the only world whose elements are all *true*, and every other world is a set of propositions that are *not* all true. If worlds are maximal states the cosmos might have been in, then according to any single possible world, it is the only world that the cosmos is *in*, and every other world is a maximal state the cosmos is *not* in, and so on. We may abbreviate this by saying that in any single world *w*, one and only one possible world is *realized*, and that is *w* itself. The exact meaning of 'realized' depends on which abstract-entity conception of possible worlds one

adopts. If worlds are maximal propositions, then ‘realized’ simply means ‘a true maximal proposition’. If worlds are maximal states of affairs, then ‘realized’ simply means ‘a maximal state of affairs that obtains’, and so on. Whatever particular abstract-entity conception is decided upon, it will be an analytic or conceptual truth that one and only one possible world is realized. One thing that should emerge from any proper account of indexicality is that the term ‘realized’ just introduced is *not* indexical, even if the term ‘actual’ is indexical.<sup>26</sup>

The notions of a world being actual and of a proposition being actual (i.e., of something actually being the case) are interdefinable. For the purposes of this investigation, it will be convenient to take the propositional operator ‘actually’ to be the fundamental term and various uses of the term ‘actual’ to be derivative. We may mark these various cognates of ‘actually’ by way of superscripts indicating the type of entity to which the term is applicable. A possible world is said to be *actual*<sup>w</sup> (or an *actual world*) if it is actually realized. A possible individual is said to be *actual*<sup>i</sup> (or an *actual individual*) if it actually exists, i.e., if it exists in the actual<sup>w</sup> world. An individual is said to be an actual<sup>p</sup>  $\phi$  if it is actually  $\phi$  (i.e., if the proposition that it is  $\phi$  is actually the case), and so on. (Exactly analogously, a world is *possible*<sup>w</sup> if it is possibly realized; an individual is *necessary*<sup>i</sup> if it necessarily exists, etc.) Since the indexical theory of ‘actually’, as propounded by Lewis, admits a secondary, non-indexical sense of ‘actually’ and its cognates, for complete precision a subscript of ‘1’ or ‘2’ should be added to indicate the primary or secondary sense, e.g., ‘actual<sup>i</sup><sub>1</sub>’.

Whereas a number of objections have been raised against the theory that ‘actually’ (in its primary sense) and its cognates are indexical, every objection that I am aware of is based straightforwardly on one or more confusions. In some cases, the confusion belongs to some of the adherents and defenders of the indexical theory as well as to the theory’s critics.

Perhaps the simplest confusion is the idea that, if one treats possible worlds along with times and locations as features of contexts of utterance, then any nonrigid definite description will emerge as an indexical expression, since the referent (in actual English) of any such description with respect to a world in which it is uttered varies with the world.<sup>27</sup> This confusion between indexicality and nonrigidity stems from a common misdescription, and a concomitant misunderstanding, of the semantic term ‘indexical’. An *indexical* expression is usually defined as an expression whose referent (denotation) or extension with respect to a context varies with the context, so that there are possible contexts  $c$  and  $c'$  such that the referent or extension of the expression with respect to  $c$  is not the same as its referent with respect to  $c'$ . (Lewis misdefines indexicality in exactly this way in the passage quoted in the preceding section, thereby helping to foster the confusion I am discussing, although he is not guilty of this confusion.) The definition is too general; it fails to discriminate between genuinely indexical expressions, such as ‘the present US president’, and certain nonindexical expressions, such as ‘the US president’.

<sup>26</sup> Contrary to Peter van Inwagen’s interpretation of the indexical theory of ‘actuality’ in ‘Indexicality and Actuality,’ *The Philosophical Review*, 89, 3 (July 1980), 403–426, at p. 409 (and apparently contrary to Lewis, 1970, at the final footnote). It should also be remembered that Lewis admits a secondary, nonindexical sense of ‘actual’.

<sup>27</sup> van Inwagen, ‘Indexicality,’ pp. 413–416.

A more accurate definition is this: An expression is *indexical* if its referent or extension with respect to a context of utterance *and* with respect to other semantic parameters of evaluation, such as a time and a possible world, varies with the context (holding the other parameters fixed).<sup>28</sup> An expression is nonindexical if its extension with respect to a context and with respect to a set of additional semantic parameters does not vary with the context. On the other hand, a singular term is (intensionally) *rigid*, with respect to a given context, if its referent with respect to the given context and with respect to other semantic parameters does not vary with the additional parameters. A singular term is (intensionally) nonrigid if its referent with respect to a context and with respect to a set of parameters varies with the set of semantic parameters.

It is common to distinguish between the *extension* and the *intension* of an expression. The *intension* of an expression, with respect to a given context of utterance, is the function that assigns to any time and possible world (and perhaps some further semantic parameters other than a context of utterance) the extension that the expression takes on with respect to the given context and with respect to those parameters. An alternative definition of the term 'indexical', then, is the following: An indexical expression is one whose *intension* with respect to a given context varies with the context, so that there will be possible contexts  $c$  and  $c'$  such that the intension of the expression with respect to  $c$  is not the same as its intension with respect to  $c'$ .<sup>29</sup> A singular term is (intensionally) *rigid*, with respect to a given context, if its intension with respect to that context is a constant function.

For example, the referent of 'the US president', with respect to my present context and with respect to the year 1978, is Jimmy Carter, since he was president in 1978. Carter remains the referent if one changes the context while retaining the year 1978 as the second parameter, although the referent changes as one changes the second parameter. The referent of 'the present US president', with respect to the same two parameters, is Ronald Reagan, since he is president at the time of the context. The referent varies if one changes the context, even if the time parameter is held constant at the year 1978. With respect to any actual context, the former expression is (temporally) nonrigid; yet it is also nonindexical, since it retains the same intension with respect to every context of utterance. The latter expression, being a true indexical, takes on different intensions with respect to different contexts, but with respect to any actual context it is (temporally) rigid.

The referent of a singular term with respect to a context  $c$  *simpliciter* (that is, with respect to  $c$  but not with respect to any other parameters) may be defined as the referent of the term with respect to  $c$  and with respect to various features of  $c$  (such as the time of  $c$ ) to act as the needed extra parameters.<sup>30</sup> In the general case,

<sup>28</sup> See my 'Tense and Singular Propositions,' in J. Almog, J. Perry, and H. Wettstein, eds., *Themes From Kaplan* (forthcoming, 1987).

<sup>29</sup> The notion of the *character* of an expression introduced in David Kaplan, 'On the Logic of Demonstratives,' *Journal of Philosophical Logic*, 8 (1978), pp. 81–98 (also in P. French, T. Uehling, and H. Wettstein, eds., *Contemporary Perspectives in the Philosophy of Language*, Minneapolis: University of Minnesota Press, 1979, pp. 401–412, at p. 409) is defined (roughly) as the function that assigns to any context  $c$  the intension that the expression takes on with respect to  $c$ . In this terminology, an indexical expression is one whose character is not a constant function.

<sup>30</sup> See Kaplan, especially at p. 408 of French, Uehling, and Wettstein, 1979.

if one speaks of the referent of a term (or the truth-value of a sentence, etc.) with respect to a certain diminished or incomplete set of further parameters, it is understood that the diminished or incomplete set is to be augmented or completed by drawing additional parameters from the given context. Since the referent of 'the US president' with respect to a context and a time varies with the time, so does its referent with respect to a context *simpliciter* (since varying the context in this case involves varying the time parameter). The expression is nonindexical nevertheless. A singular term whose referent with respect to a context *simpliciter* varies with the context is either indexical or (intensionally) nonrigid. It may even be both (e.g., 'the political leader of this country'), but it can be one without the other.

The theory that 'actually' (in its primary sense) and its cognates are indexical claims that there is a similar difference between the expressions 'the US president in 1985' (nonindexical) and 'the person who actually<sub>1</sub> is US president in 1985' (indexical), by treating possible worlds along with times and locations as features of contexts of utterance. As such, the theory instructs us to index (i.e., relativize) the extensions of expressions both to a context, which is to include a possible world as one of its various features, and to an additional possible world, which is to be treated as an independent parameter of semantic evaluation.

It may seem that once possible worlds are included as features of contexts, there is no purpose to be served by doubly indexing extensions to both contexts and possible worlds, treating each as independent semantic parameters. We should be able to make do with the possible worlds of the contexts. We may say, for example, that a sentence of the form 'It is possible that S' is true with respect to a context *c* if and only if *S* itself is true with respect to some context that is just like *c* in every respect other than in its possible world and whose possible world is accessible to that of *c*. This singly indexed account seems to yield the correct results until we consider sentences that embed one modal operator within the scope of another. Consider the following sentence:

- (5) It is possible that the actual<sub>1</sub> US president be a woman.

According to the singly relativized account, this sentence is true with respect to a context of utterance *c* if and only if there is some world *w'* accessible to the world of *c* such that the US president in *w'* is a woman in *w'*. But this is the wrong truth-condition for the sentence. In fact, it is correct truth-condition for the wrong sentence, to wit, the nonindexical sentence.

- (6) It is possible that the US president be a woman, or more idiomatically,

The US president might have been a woman,

on one of its readings (the Russellian secondary occurrence or small scope reading). Sentences (5) and (6) differ in their truth-conditions; if both sentences are uttered in a world in which the person occupying the presidency is essentially a man, sentence (5) is false whereas sentence (6) is true. Sentence (5) is true with respect to a context of utterance *c* (roughly) if and only if there is some world *w'* accessible to the world

of the context  $c$  such that the US president *in the world of the context of utterance  $c$* —rather than in  $w'$ —is a woman *in  $w'$* , rather than in the world of  $c$ . The modal operator ‘it is possible that’ directs us to evaluate its operand sentence ‘The actual <sup>$p_1$</sup>  US president is a woman’ with respect to worlds  $w'$  accessible to that of the context of utterance  $c$ . This sentence is true with respect to the same context  $c$  and a world  $w'$  accessible to that of  $c$  if and only if the description ‘the actual <sup>$p_1$</sup>  US president’ refers with respect to  $c$  and  $w'$  to something to which the predicate ‘is a woman’ applies with respect to  $c$  and  $w'$ . In computing the referent of the description with respect to  $c$  and  $w'$ , the indexical operator ‘actual <sup>$p_1$</sup> ’ directs us to seek an object to which its operand phrase ‘US president’ applies with respect to the very world of the context of utterance  $c$  itself, forgetting about the world  $w'$ . Thus in evaluating sentence (5) with respect to a world of utterance  $w$  (the world of its context of utterance  $c$ ), we are concerned simultaneously with the extension of ‘US president’ with respect to  $w$  and the extension of ‘is a woman’ with respect to some world  $w'$  accessible to  $w$ . The truth-value of the whole depends entirely and solely on whether the unique object to which the phrase ‘US president’ applies with respect to  $w$  is something to which the predicate ‘is a woman’ applies with respect to an accessible world  $w'$ . It is for this reason that a systematic theory of the extensions of the expressions of a language containing indexical modal operators requires double indexing, i.e., in general the notion of the extension of an expression (e.g., the truth-value of a sentence) is relativized to both a context and a world, treated as independent semantic parameters. The notion of the extension of an expression with respect to a context  $c$  *simpliciter* is then definable as the extension of the expression with respect to the context  $c$  and the world of  $c$ .

A common objection to the indexical theory of ‘actually’ is that it requires a commitment to utterances or their producers being world-bound (existing in only one world), and thereby to Lewis’s unpopular metaphysical view that individuals are world-bound.<sup>31</sup> The reasoning goes as follows: When we say of an expression that it is *indexical*, what we are saying is that different utterances of the expression may take on different semantic values (referent, truth-value, intension, etc.), so that it is not the expression *type* but its utterance (inscription, token) that is the proper object of these semantic values. An utterance of the indexical ‘now’ refers to the time of the utterance, an utterance of ‘here’ to the place of the utterance, an utterance of ‘I’ to the producer of the utterance, and so on. To say, then, that ‘actual’ (in its primary sense) is indexical is to say that an utterance of it designates the possible world in which the utterance takes place, or the possible world in which the producer of the utterance exists, or something like that. But whereas it is perfectly legitimate to talk about the time or place of an utterance (in a given world), it is illegitimate to talk about the *possible world* of an utterance or its producer, since one and the very same utterance is produced by one and the very same speaker in indefinitely many different worlds. If I utter the sentence

(7) Actually<sub>1</sub>, a Republican will be elected US president in 2100 AD,

<sup>31</sup> See for example Adams, ‘Theories of Actuality,’ at pp. 195–199 of Loux, *Possible and Actual*; and van Inwagen, ‘Indexicality,’ at pp. 416–417.

I would have made the same utterance regardless of which party controls the presidency a hundred and fourteen years from now. The same utterance by me occurs in different possible worlds, true in some and false in others. No world may be singled out as *the* world of my utterance—unless (contrary to what has been said) utterances or their producers are world-bound. Yet the utterance is either true or false, and not both.

This piece of reasoning goes wrong when it is argued that to say that an expression is indexical is to say that its utterance is the proper object of semantic values. The proper object of semantic values is the expression (type) itself; but the semantic values are had only relative to a *context*, and may vary accordingly. To say that ‘actual’ (in its primary sense) is indexical is not to say that an utterance of it designates the world of the utterance; rather, it is to say that, with respect to any context, it designates the world of the context. This requires seeing the contexts of utterances, rather than the utterances themselves, as world-bound. The notion of context that is relevant here is such that, for any particular actual utterance of any expression by anyone, if any facts had been different in any way, even if only facts entirely independent of and isolated from the utterance itself, then the context of the utterance would *ipso facto* be a different context—even if the utterance is made by the very same speaker in the very same way to the very same audience at the very same time in the very same place. To put it another way, whereas a single utterance occurs in indefinitely many different possible worlds, any particular possible context of an utterance occurs in one and only one possible world, so that in every possible world in which the same utterance occurs, it occurs in a new and different context—even if the speaker, his or her manner of uttering, the time of the utterance, the location of the speaker, the audience being addressed, and all other such features and aspects of the utterance remain exactly the same. A single utterance occurs in many different contexts, each of which occurs in a different possible world. This is what it means to include a possible world as one of the features of a context.

Whereas utterances are not world-bound entities, it is nevertheless perfectly reasonable to treat their contexts as world-bound entities. Indeed, not doing so would be unreasonable. Suppose, for example, that it will come to pass that a Democrat is elected president in the year 2100, and consider a world *W* that is exactly like the actual world in every detail up to 1 January 2099, but in which a Republican is elected president in 2100. Suppose I here and now utter sentence (7). In the actual world, I thereby assert a proposition that is necessarily false. In *W*, on the other hand, I thereby assert a proposition that is necessarily true.<sup>32</sup> I utter the very same sequence of words of English with the very same English meanings in the two worlds, yet I assert different propositions, one proposition being necessarily false and the other being necessarily true. If we refuse to treat contexts as world-bound we are forced to say—quite mysteriously—that I utter the very same sentence with the very same meaning in the very same context in the two worlds, yet assert different things! The information content of sentence (7) would emerge as a semantic

<sup>32</sup> See Kaplan, ‘Logic of Demonstratives,’ and Allen Hazen, ‘One of the Truths About Actuality,’ *Analysis*, 39, 1 (January 1979), pp. 1–3.

function not only of the meaning of the sentence and the context of utterance, but also of the apparently irrelevant question of which political party wins the US presidency in the year 2100. Treating contexts as world-bound, we may say instead that the adverb ‘actually<sub>1</sub>’ is indexical, and that the same utterance takes place in different contexts, resulting in different propositions asserted. We thereby assimilate this phenomenon to the sort of context-sensitivity that is familiar in cases of such sentences as ‘A Republican is presently US president’.

The central thesis of the indexical theory of ‘actually’ and its cognates may thus be stated by saying that the extensional semantics governing ‘actually’ in its primary sense is given by the following recursion rule:<sup>33</sup>

- A1 A formula of the form ‘[Actually<sub>1</sub>  $\phi$ ]’ (where  $\phi$  is any formula) is true with respect to a context  $c$ , a possible world  $w$ , and other semantic parameters (such as a time  $t$ , and an assignment of values to variables  $s$ ) if and only if  $\phi$  is itself true with respect to the context  $c$ , the possible world of  $c$  rather than the world  $w$ , and the other semantic parameters.

The extensional semantic rules governing the cognates of ‘actually<sub>1</sub>’ (in their primary senses) are easily derived from this clause governing ‘actually<sub>1</sub>’ together with the definitions of the cognates in terms of ‘actually<sub>1</sub>’ and some elementary modal semantics. For example, we thus obtain:

- $A^w_1$  The predicate ‘actual<sup>w</sup><sub>1</sub>’ (correctly) applies with respect to a context  $c$ , a possible world  $w$ , and other semantic parameters, to the world of  $c$ , rather than to the world  $w$ , and to nothing else.

and

- $A^i_1$  The predicate ‘actual<sup>i</sup><sub>1</sub>’ (correctly) applies with respect to a context  $c$ , a possible world  $w$ , and other semantic parameters (such as a time  $t$ ), to a possible individual  $i$  if and only if  $i$  exists in the world of  $c$  (at  $t$ ).

Another common objection to this theory of ‘actually’ and its cognates is that it clashes with our understanding of what it means to say that a world (or individual, or proposition) is ‘possible.’ For to say that worlds other than the actual world are possible is just to say that the world that happens to be actual might not have been actual and that some other world might have been actual instead. But if ‘actual<sup>w</sup><sub>1</sub>’ is indexical, such a claim is ruled out as semantically incoherent. On the indexical theory, in any actual context of utterance, only the actual world may be properly called ‘actual<sup>w</sup><sub>1</sub>’ with respect to any world, and every world other than the actual world is properly called ‘nonactual<sup>w</sup><sub>1</sub>’ even with respect to itself. On the

<sup>33</sup> Cf. Kaplan, ‘Logic of Demonstratives,’ recursive definition 10 at p. 407 of French, Uehling and Wettstein, *Midwest Studies*.

In speaking of the ‘extensional semantics’ governing an expression, I mean the semantics of the expression at the level of extension (singular term reference, sentence truth-value, predicate application), rather than at some higher level, such as the level of content or proposition expressed. For more on the notion of different ‘levels’ of semantic values, see my *Frege’s Puzzle* (Cambridge, Mass.: MIT Press/Bradford Books, 1986), chapter 2.

indexical theory, then, it is a necessary truth about the actual world that it is the actual world. In what sense are the other worlds *possible* if they could not have been actual?<sup>34</sup>

A closely related objection raised by Robert Adams is this: One may easily glean from the indexical theory's semantic rules  $A_1$ ,  $A'_1$ , and  $A^w_1$  that actuality (the property of being actual), on the indexical theory, is of no special metaphysical significance. Specifically, the fact that something is actually<sub>1</sub> the case, on the indexical theory, does not make it ontologically or metaphysically more substantial or important than if it were possibly the case but not actually<sub>1</sub> the case. For the fact that a certain proposition is actually<sub>1</sub> the case, on the indexical theory, is just the fact that it is the case in a particular possible world (which happens to be the world of the actual context of utterance)—in just the same way that the fact that some (recurring) event is occurring *now* is just the fact that it is occurring at a particular time (which happens to be the time of the context of utterance). From an objective point of view, the fact that a given time is the present time does not make it special in any way: it is just a time like any other time, one that happens to be the time of a particular utterance. The fact that the time in question happens to be the time of a particular utterance, by itself, is of no consequence. Any time is properly called 'the present' at that time and no other. Similarly, on the indexical theory, to call our world 'actual<sup>w</sup><sub>1</sub>', *per se*, is not to attribute to it any metaphysically significant distinction. The fact that a given possible world is actual<sup>w</sup><sub>1</sub> is just the fact that it is this world rather than some other world. This does not constitute any special status; every world is the world it is and not another world. Indeed, this feature of the indexical theory is precisely what gives the point to Lewis's response to his envisaged Ontological Arguer. But it is greatly at odds with our ordinary thinking about actuality and mere possibility (nonactuality), especially as reflected in our ordinary value judgements in connection with actual and nonactual events. We judge it good that a cure for some terrible disease is actually discovered. We do not judge it good (indeed we probably judge it bad) that a cure might have been discovered but is not actually discovered. We condemn someone for actually committing assault. We do not condemn someone merely on the grounds that he or she *might have* committed assault in radically different circumstances. We might even applaud someone for actually resisting provocation to assault (unless it is Clint Eastwood). We feel pity for the victims of actual disasters. We do not feel pity for the would-be victims of disasters that might have occurred but did not actually occur. To quote Adams: 'if we ask, "What is wrong with actualizing evils, since they will occur in some other possible world anyway if they don't occur in this one?"', I doubt that the indexical theory can provide an answer which will be completely satisfying ethically.'<sup>35</sup>

These objections have considerable force. But they can be completely met while accommodating what truth they may contain by invoking Lewis's secondary,

<sup>34</sup> See Adams, 'Theories of Actuality,' at pp. 201–202 of Loux, *Possible and Actual*; Plantinga, *Necessity*, at pp. 48–51; van Inwagen, 1980, at pp. 423–425.

<sup>35</sup> Adams, 'Theories of Actuality', at pp. 194–195 of Loux, *Possible and Actual*.

AQ: Please check the insertion of 'Theories of Actuality' in footnote 35 is Ok.

nonindexical sense of ‘actually’ and its cognates.<sup>36</sup> The secondary-sense analogues to the three semantic rules given above are the following:

- $A_2$  A formula of the form  $\lceil \text{Actually}_2 \phi \rceil$  (where  $\phi$  is any formula) is true with respect to a context  $c$ , a possible world  $w$ , and other semantic parameters (such as a time  $t$ , and an assignment of values to variables  $s$ ) if and only if  $\phi$  is itself true with respect to the context  $c$ , the possible world  $w$  (rather than the world of  $c$ ), and the other semantic parameters.
- $A^w_2$  The predicate ‘actual<sup>w</sup><sub>2</sub>’ (correctly) applies with respect to a context  $c$ , a possible world  $w$ , and other semantic parameters, to the world  $w$  (rather than to the world of  $c$ ) and to nothing else.
- $A^i_2$  The predicate ‘actual<sup>i</sup><sub>2</sub>’ (correctly) applies with respect to a context  $c$ , a possible world  $w$ , and other semantic parameters (such as a time  $t$ ), to a possible individual  $i$  if and only if  $i$  exists in the world  $w$  (at  $t$ ).

It is immediately apparent from these semantic rules governing the secondary sense of ‘actually’ and its cognates that the expressions in question are nonindexical in their secondary senses. By contrast with the semantic rules governing the primary senses, the context  $c$  plays no significant role in the semantic rules governing the secondary senses. More interesting, the propositional operator ‘actually<sub>2</sub>’ itself plays no significant semantic role. It is completely superfluous, in that the truth-conditions (with respect to semantic parameters) of any formula of the form  $\lceil \text{Actually}_2 \phi \rceil$ , as given by  $A_2$ , are exactly those of the immediate subformula  $\phi$  itself. To say that a proposition is actually the case in the secondary sense is just to say that it is true, no more and no less. This fully accords with Lewis’s example of the secondary sense: ‘If Max ate less, he would actually enjoy himself more’. It also helps to explain why the adverb ‘actually’ is often used as a device for emphasis or for indicating contrast between belief or expectation and reality, as in Lewis’s example, rather than as a modal auxiliary. There can be little doubt that the adverb ‘actually’ has these two distinct uses.<sup>37</sup> The context of use—the point of the utterance—will generally favor one reading over the other, although it need not in every case. An exactly analogous ambiguity arises in the temporal mode with the world ‘current’. Consider: ‘In 1950 the current US president was a Democrat’.

Since a possible world is said to be actual if and only if it is actually realized and a possible individual is said to be actual if and only if it actually exists, to say that a possible world is actual in the secondary sense is just to say that it is realized and to say that a possible individual is actual in the secondary sense is just to say that it exists. Thus actuality<sup>w</sup><sub>2</sub> is just the property of being realized. This property was explained above in terms of the abstract-entity conception of possible worlds: If a possible world is a maximal compossible set of propositions, the property of being realized is the property of being a maximal set of true propositions; if a possible world is a maximal state of affairs that might have obtained, the property of being realized is the property of being a maximal state of affairs that obtains, and so on.

<sup>36</sup> Cf. Lewis, ‘Postscripts to “Anselm and Actuality”’, Postscript B, in Lewis, ‘Anselm,’ at p. 22.

<sup>37</sup> Cf. Hazen, ‘Truths about Actuality’, and Lewis, ‘Anselm’.

Likewise, actuality<sup>i</sup><sub>2</sub> is just the property of existence. This property was analyzed in Section III above in terms of the logical notions of abstraction, negation, universal quantification, and identity. These construals of ‘actual’ in the secondary sense are complemented by the semantic rules  $A^w_2$  and  $A^i_2$ , which impute the very same nonindexical extensional semantics to ‘actual<sup>w</sup><sub>2</sub>’ and ‘actual<sup>i</sup><sub>2</sub>’ as would be correct for ‘realized’ and ‘exists’, respectively.

The secondary sense of ‘actual<sup>w</sup>’ is evidently the appropriate sense for understanding the truism that some possible world other than the actual world might have been ‘actual’ instead. It is also in the secondary sense rather than in the primary sense that calling a world *possible* is to say that it might have been ‘actual.’ Each possible world is realized in itself and in no other world; hence every world is the actual<sup>w</sup><sub>2</sub> world in itself. But only this world—the way things happen to be—is actually realized in the primary sense, and in every world it is the one and only actual<sup>w</sup><sub>1</sub> world.<sup>38</sup>

By the same token, it must be said that actuality in the secondary sense, by contrast with actuality in the primary sense, is *in some sense* a special status. The feature of a proposition that it is true, and the feature of a state of affairs that it obtains, and the feature of a possible individual that it exists, are unlike the features of being true or obtaining or existing *in a particular world* (actuality in the primary sense) in that the latter are all more-or-less ordinary *extra-world* features having no metaphysically special entailments whereas the former are all special *intra-world* features that afford their possessors in a given world a metaphysically significant status *in that world*.<sup>39</sup> That actuality in the secondary sense is in some sense an objectively special sort of status is not the sort of fact that would ordinarily require a substantiating argument. In the sense in which it is true, it is also perfectly obvious and completely trivial.<sup>40</sup> Among propositions in a given world, those that are true are obviously special in a certain way. Likewise, if you were a state of affairs, would you rather obtain or not obtain? That existence is metaphysically more significant than nonexistence is hardly the sort of fact that could be open to question. Anyone who doubts or seriously questions whether existence is metaphysically more significant

<sup>38</sup> Here is a simple quiz question: On the indexical theory, is the expression ‘the actual world’ a (modally) rigid designator?

<sup>39</sup> An *intra-world* property is one that something has, or lacks, *in* a possible world (e.g., being a native Californian), whereas such relativization to possible worlds is unnecessary or superfluous in connection with *extra-world* properties (e.g., being a native-Californian-in-world-*w*). For more on the distinction between *intra-world* and *extra-world* attributes, see Salmon, *Reference*, section 13.2, pp. 118–120.

<sup>40</sup> Nevertheless, I believe it is denied by Lewis. This is due to the fact that Lewis does not endorse the abstract-entity conception of possible worlds, on which actuality in the secondary sense reduces to such properties as that of being true or that of obtaining. Instead, Lewis adopts a concrete or physicalistic conception of possible worlds as maximal, spatiotemporally self-contained, causally isolated physical systems, on which actuality in the primary sense reduces to something like the ontologically unimportant property of being part of a particular maximal causally and spatiotemporally isolated physical system and not another, and actuality in the secondary sense, if it reduces to anything, reduces to the equally unimportant (in the present context) binary relation between a part of such a physical system and the system of which it is a part. The maximal causally and spatiotemporally isolated physical system of which we are a part is, from an objective point of view, no more special ontologically than any other such physical systems that may exist.

than nonexistence simply does not understand the phrase ‘metaphysically significant’, as it is used in the present context, or else misunderstands the word ‘existence’, or else is taking one or the other of these expressions in some nonstandard sense.

One final point about this theory of ‘actually’ and its cognates must be stressed. It is often claimed, by proponents and critics alike, that on the indexical theory, to say that a possible world (or a possible individual, or a proposition) is actual (in the primary sense) is to say merely that it is (or exists in, or is true in) the world of the context of utterance. Similarly, it is often said that the actuality (in the primary sense) of the actual world (or of an actual individual, or of a proposition that is actually the case) on the indexical theory is a property that is possessed only in relation to a speaker and his or her context. For example, in his original paper Lewis writes: ‘The actual world is not special in itself, but only in the special relation it bears to the ontological arguer. . . . It is true of *any* world, at that world but not elsewhere, that that world alone is actual.’<sup>41</sup> More recently, he says that his indexical theory of ‘actual’ ‘makes actuality a relative matter: every world is *actual at* itself, and thereby all worlds are on a par. . . . The “actual at” relation between worlds is simply identity. . . . Surely it is a contingent matter which world is actual . . . at one world, one world is actual; at another, another.’<sup>42</sup> Similarly, in his critique of Lewis’s theory Adams writes: ‘According to the indexical theory of actuality, the actuality of the actual world consists in its being. . . the world in which *this act of linguistic utterance occurs*. . . . According to the indexical theory, actuality is a property which the actual world possesses, not absolutely, but only in relation to us, its inhabitants.’<sup>43</sup> These claims involve a confusion about the nature of indexicality in general, and may be traceable to a use-mention confusion. The claims are more appropriate for the property of being correctly *called* ‘actual’ in English, than for the property of actuality thereby attributed. Indexicality is a feature of expressions, not of the properties designated by these expressions. For this reason, it is better to speak not of the indexical theory of actuality, but of the indexical theory of ‘actuality’ in English. That actuality in the primary sense is neither context-relative nor contingent on the indexical theory can easily be seen from the semantic rules governing ‘actually<sub>1</sub>’ and its cognates. On the indexical theory, to say that something is actually<sub>1</sub> the case is to say that it is the case in a particular possible world. The particular world in question is, of course, the world of the context of utterance, but that this is so is not part of what is asserted. Exactly analogously, the property of occurring now is not the property of occurring simultaneously with any speech act token, but the property of occurring at a particular time *t*. That time *t* is the very time at which I wrote the preceding sentence, but the property of occurring at *t* is not the same thing as the property of occurring when I wrote the preceding sentence. On any given occasion of utterance of ‘occurring now’, the property designated will be indexed to the very time of the utterance, so that what property is designated will vary from utterance to

<sup>41</sup> Lewis, ‘Anselm,’ at pp. 187–188. Ironically, just one page earlier (at pp. 186–187) Lewis cautions against a common confusion that is very closely related to the sort of confusion exhibited in the quoted passage.

<sup>42</sup> *On the Plurality of Worlds* (Oxford: Basil Blackwell, 1986), at pp. 93–94.

<sup>43</sup> Adams, ‘Theories of Actuality,’ at pp. 193–194 of Loux, 1979.

utterance. Also analogously, the property of being me is not the property of being the speaker or producer of a particular utterance. Rather, it is Nathan Salmon's haecceity, the property of being the very individual NS. The properties designated by such indexical expressions as 'occurring now' and 'being me' are not themselves context-relative in any straightforward sense. Quite the contrary; the property of occurring now is a temporally indexed property, and hence it is not the sort of property that something (a recurring event) has *relative to* some times and not to others. In the same way, the property designated by 'actual'<sub>1</sub>' is an extra-world property; if a possible individual has this property at all, it has this property relative to every world, and if a possible individual lacks the property, it lacks the property relative to every world. In fact, the property designated by the nonindexical 'actual'<sub>2</sub>' may be said to be context-relative in a way that actuality<sub>1</sub> cannot. The former property is just existence, which is an intra-world property that a possible individual has relative to any world in which it exists. The temporal analogue of this is equally true of 'current' in its nonindexical sense. Similarly, the property designated by the nonindexical phrase 'being the speaker' might be called 'context-relative' in that an individual has this property relative to any context in which he or she is the one doing the talking. By contrast, the property designated in the present context by the indexical phrase 'being me' is such that an individual has it relative to a given context if and only if he or she is Nathan Salmon, regardless of how much talking he or she may be doing in the context.

Actuality in the primary sense *per se* is of no special metaphysical significance; actuality in the secondary sense is in some sense metaphysically significant. Lewis's criticism of the Ontological Argument is that, since actuality<sub>1</sub> is no special distinction, it is a mistake to argue that if any possible individual is divine in any possible world, it is only fitting that some possible individual should be divine in the one and only possible world that is special by virtue of its actuality. We have just argued that even if the actual world is nothing special just for being uniquely actual<sub>1</sub>, nevertheless it is trivially special and metaphysically distinguished by virtue of being actual<sub>2</sub>, that is, by virtue of being realized. Lewis's acknowledged secondary sense of 'actual' thus seems to undercut his criticism of his suggested grounds or basis for premise (2a) of Version 2. (But see note 40 above.)

Does this mean that Lewis's suggested basis for (2a) is adequate after all? Surely not. Actuality in the secondary sense is metaphysically special in some sense, but it is not so special that any other property (of a given sort) that is special or important in some sense will *ipso facto* have some instance in actuality<sub>2</sub>. Consider the very property in question: divinity. For Descartes divinity is the property of having all perfections. For Anselm it is the property of having a magnitude of greatness that exceeds any other conceivable magnitude of greatness. Whichever construal one chooses, divinity is no doubt in some way a very special status, one that enjoys very special religious significance. In the same way, the property of being the state of affairs of there being some possible individual that has divinity is itself very special, of considerable religious significance. The property of being a possible state of affairs that obtains is also special, but in a very different way. It is special in a distinctly secular and peculiarly metaphysical way. The fact that the state of affairs of there

being some possible individual that is divine is special in the first way is no ground whatsoever for the hypothesis that it also has a property that is special in the second way, the metaphysically special property of obtaining. At most, it supports only the hypothesis that this state of affairs *deserves* or *ought* to obtain—in the sense that it would be good or ‘fitting’ if it did. What is wrong with Lewis’s suggested basis for (2a) is not that actuality in any reasonable sense is not special; it is that the suggested basis is no basis at all. One might as well argue that, since being the best of all possible worlds is in some sense a very special property, it is only fitting, and therefore true, that the world that is special for its actuality<sup>w</sup><sub>2</sub> should also enjoy this other special property. It would follow from this line of reasoning (assuming that the property of being the best of all possible worlds is necessarily special) that *every* world is, according to itself, the best of all possible worlds. The incurable optimist, and the metaphysically deterministic pessimist, may be content with this argument. The rest of us know that, fitting though it may be, the actual<sup>w</sup><sub>2</sub> world is hardly the best of all possible worlds (even though it is indeed the most realized of all possible worlds), and that therefore, it is literally impossible for the actual<sup>w</sup><sub>1</sub> world to be the best of all possible worlds.

## VI

I suggested in Section II above that nonexistent possible individuals, such as Noman, have properties—for example, the property of nonexistence and its entailments. These entailments include such negative properties as that of not being a philosopher. It does not follow that if you are asked to count up everything that is not a philosopher, Noman is to be included in the count. Nor should the dinosaurs be included in the count. Like the dinosaurs, Noman is not one of everything. Consequently, he is not one of everything that is not a philosopher. Indeed, not being one of everything is the very property of Noman we started with.

By contrast with Meinongians, I am not claiming that there are individuals that do not exist. If the quantifier ‘there is’ is actualist, that Meinongian claim is simply contradictory—and otherwise, it is trivial. What I am claiming is that there *might have* been individuals that do not actually<sub>1</sub> exist and that actually<sub>1</sub> have certain properties. Alvin Plantinga has given the name ‘serious actualism’ to the doctrine that necessarily, every individual is such that it must exist if it is to have any properties at all.<sup>44</sup> In Plantinga’s terminology I am denying serious actualism while maintaining (a version of) actualism. But I am dead serious. My claim is philosophically quite moderate, not nearly as radical as it might seem. Exactly analogously, there have been individuals that do not now exist but that now have certain properties. Some past dinosaurs now have the property of being fossilized, and such immortal artists as Mozart and John Lennon are justly admired by millions today. Not to mention such posthumously acquired properties as arise from posthumous

<sup>44</sup> ‘*De Essentia*,’ in E. Sosa, ed., *Essays on the Philosophy of Roderick M. Chisholm* (Rodopoi, Amsterdam, 1979): pp. 101–121, at p. 109; and ‘On Existentialism,’ *Philosophical Studies*, 44 (1983), pp. 1–20, at p. 11.

awards and the like. If nothing else, there are always such properties as having once existed and having been a musician. This is fundamentally the same phenomenon: An individual from one circumstance has certain properties in another circumstance in which it does not exist, as a result of the properties it has in its own circumstance.

In fact, so-called serious actualism is really quite a radical doctrine.<sup>45</sup> There is no ground for this doctrine that would not provide analogous grounds for denying present properties to such past individuals as John Lennon and dinosaurs. It might be thought that past individuals and past states of affairs are in some way more real than possible individuals that never come into existence and possible states of affairs that never obtain.<sup>46</sup> We are concerned much more with individuals and events from our past than with individuals and events that never come to pass, and this is sometimes taken as evidence of the greater degree of reality we attribute to the past over the possible-but-never. Those who see things this way usually attribute an intermediate degree of reality to future individuals and future states of affairs—more real than never existent individuals and never obtaining states of affairs, but less real than past individuals and past states of affairs. This is all a mistake. Past individuals *were* more real than merely possible individuals *are*, and events that occurred in the past *were* more real (in some sense) when they occurred than events that never occur *are now*. For that matter, future individuals *will be* more real than merely possible individuals *are*, and future events *will be* more real when they occur than events that never occur *are now*. The past reality of an individual or event may give us a present reason for concern in regard to that individual or event. Contrary to what one would expect according to the comparative reality view I am disputing, we are typically concerned more about future realities than about past realities, at least with regard to future realities we know of or anticipate. The bondage of causation to time's arrow gives us a present and pressing reason for concern about future generations and future events. What's done is done. We cannot change the past, but our present actions and inactions to a great extent determine the future. As far as the present is concerned, past individuals and states of affairs, future individuals and states of affairs, and forever merely possible individuals and states of affairs are on a par: they are now equally unreal. The future is nevertheless a topic of special present concern, because it *will be* real, and what we do *now* determines what it *will be*. Furthermore, we are all time-travellers, on a journey in the direction of time's arrow.

Of course, since such merely possible individuals as Noman have properties even though they do not exist, if our quantifiers are actualist, then the classical logical rules of universal instantiation and existential generalization are fallacious.<sup>47</sup> Instead we have

<sup>45</sup> Cf. Kit Fine, 'Plantinga on the Reduction of Possibilist Discourse,' and John Pollock, 'Plantinga on Possible Worlds,' in J. Tomberlin and P. van Inwagen, eds., *Alvin Plantinga* (Dordrecht: D. Reidel, 1985), pp. 121–186, at pp. 164–171 and pp. 126–129, respectively.

<sup>46</sup> See for example Robert Adams, 'Time and Thisness,' in P. French, T. Uehling, and H. Wettstein, eds., *Midwest Studies in Philosophy XI: Studies in Essentialism* (Minneapolis: University of Minnesota Press, 1986), pp. 315–329.

<sup>47</sup> In his 'Replies to my Colleagues,' section II.B, in Tomberlin and van Inwagen, *Alvin Plantinga*, pp. 316–323, Plantinga attempts a response to Pollock's denial of so-called serious actualism. Some of Plantinga's arguments for so-called serious actualism beg the question by critically relying (pp. 319, 322) on classical existential generalization. Also, in defending himself against Pollock's

free logical versions:  $\lceil$ Everything is  $\phi$ .  $\alpha$  exists. Therefore,  $\alpha$  is  $\phi$  $\rceil$  and  $\lceil\alpha$  is  $\phi$ .  $\alpha$  exists. Therefore, something is  $\phi$  $\rceil$ . In addition to these we have the following possibilist variations:  $\lceil$ Every possible individual is  $\phi$ .  $\alpha$  is a possible individual. Therefore  $\alpha$  is  $\phi$  $\rceil$  and  $\lceil\alpha$  is  $\phi$ .  $\alpha$  is a possible individual. Therefore, some possible individual is  $\phi$  $\rceil$ . If the singular term  $\alpha$  is a simple individual constant (proper name) or variable and the possibilist quantifiers are defined in terms of the actualist quantifiers, then these possibilist versions of free logical UI and EG are tantamount to the following:

Necessarily, everything actually<sub>1</sub> is  $\phi$ .  
 $\alpha$  might have existed.  
 Therefore,  $\alpha$  is  $\phi$ .

and

$\alpha$  is  $\phi$ .  
 $\alpha$  might have existed.  
 Therefore, there might have been something that actually<sub>1</sub> is  $\phi$ .<sup>48</sup>

We could have something more. The original free logical versions of UI and EG are required by the presence of true sentences in which singular terms that do not refer to (denote) existing individuals occur (outside of nonextensional contexts, such as those created by quotation marks), whether or not these terms refer to possible individuals that do not exist. If we require that all our terms refer to possible individuals, we may retain the *form* of classical UI and EG using the possibilist quantifiers. If the possibilist quantifiers are defined in terms of the actualist quantifiers, this is tantamount to deleting the modal existential second premise from the possibilist free logical UI and EG rules displayed above. Unfortunately, not all singular terms that do not refer to existing individuals refer to possible individuals that do not exist, as witness Quine's 'the merely possible fat man in that doorway' and Meinong's 'the round square'.<sup>49</sup> No merely possible man is actually<sub>1</sub> fat or actually<sub>1</sub> in Quine's doorway, let alone both, and no merely possible individual is actually<sub>1</sub> round or actually<sub>1</sub> square, let alone both. And of course, there could not be any impossible individuals. These descriptions are thus *strongly* nonreferring, in that they not only do not refer to any existing thing, they do not even refer to any merely possible thing. Yet there seem to be true sentences in which such strongly nonreferring terms occur; for example, the negative existential 'The round square does not exist'. We could follow Frege's strategy and stipulate that all strongly

charge of fallacious modal reasoning Plantinga appears (at p. 319, first complete paragraph) to commit the very fallacy Pollock attributes to him. (Specifically, he appears to infer the falsehood 'Necessarily, everything is necessarily such that if it exemplifies nonexistence then it exists' from the truth 'Necessarily, everything is such that if it exemplifies nonexistence then it exists'.)

<sup>48</sup> Similarly, we also have such temporal versions as  $\lceil$ Every present or past individual is  $\phi$ .  $\alpha$  is a present or past individual. Therefore,  $\alpha$  is  $\phi$  $\rceil$  and  $\lceil\alpha$  is  $\phi$  is a future individual. Therefore, some future individual is  $\phi$  $\rceil$ , etc. (More accurate versions of these rules would include an additional premise requiring the inter-substitutability of  $\alpha$  and the variable of generalization under any assignment of a value to the variable under which it and  $\alpha$  are co-referential.)

<sup>49</sup> Quine, 'On What There Is,' at p. 4; Alexius Meinong, 'The Theory of Objects,' in R. Chisholm, ed., *Realism and the Background of Phenomenology* (New York: Free Press, 1960), pp. 76–117, at p. 82.

nonreferring terms shall hereafter refer to Noman. We could then have our classical UI and EG back, at least in form, by interpreting the quantifiers possibilistically. The negative existential ‘The round square does not exist’ would still be true, as would the modal sentence ‘It is possible for the round square to exist’. Indeed, the latter would be logically true. But as Russell noted in discussing Frege’s strategy, ‘this procedure, though it may not lead to actual<sup>l</sup><sub>2</sub> logical error, is plainly artificial, and does not give an exact analysis of the matter.’ Darn! Russell is right.

Does Noman have any positive properties in addition to such negative properties as not existing and not being a philosopher? Yes. For example, he has the modal property of possibly existing and its entailments. He also has the dispositional property that he would be male if he existed.

Does he have any nonnegative nonmodal properties, then? Yes he does. He has the property of being mentioned and discussed in these very passages. In fact, as was intimated two paragraphs back, he has the more fundamental semantic property of being referred to by the name ‘Noman’. Indeed, Noman is *rigidly designated* by the name ‘Noman’. Again, it does not follow that the name refers to something. Noman is not something, and hence, even though ‘Noman’ refers to him, there is nothing that ‘Noman’ refers to. Still, Noman might have been someone; he might have existed. Although ‘Noman’ does not refer to any actual<sup>i</sup><sub>1</sub> individual, it does refer to a possible individual. It is thus only a weakly nonreferring term. That is, although ‘Noman’ does not actually<sub>1</sub> refer to anything, there might have been someone  $x$  such that ‘Noman’ actually<sub>1</sub> refers to  $x$ .<sup>50</sup> Reference precedes existence. This is not to say that if Noman had existed, the name ‘Noman’ would have referred to him. Indeed, if he had existed, the name would not have been conferred onto him. The name only contingently refers to him. In fact, the name contingently rigidly designates him.

How does a name like ‘Noman’ come to refer to a merely possible individual like Noman? Through fixing its reference by description, in a standard Kripkean stipulation. Of course, the description operator involved must include merely possible individuals in its range, but we have already seen that this presents no problem. (See notes 10, 19 above.) The hard part is finding a property that uniquely identifies a particular merely possible individual. In Noman’s case, that was not difficult: Noman is the only possible individual who would have developed from the union of the particular gametes  $S$  and  $E$  if  $S$  had fertilized  $E$  in the normal manner. Not all merely possible individuals are so easily pinned down.<sup>51</sup>

<sup>50</sup> Contrary to Monte Cook, ‘Names and Possible Objects,’ *Philosophical Quarterly*, 35, 140 (July 1985) pp. 303–310, at p. 309. See Kaplan, ‘Bob and Carol and Ted and Alice,’ at pp. 506 and 517, note 19. I once found these claims baffling. Cf. Salmon, *Reference*, p. 39n. I was confused. Once it is admitted that classical UI and EG are fallacious, and that an additional existential premise is all that is required in each case to correct the fallacy, what once appeared utterly mysterious becomes perfectly clear and straightforward. The claim that ‘Noman’ refers to Noman and yet does not refer to anything, properly understood, is really no more baffling than the claim that ‘Shakespeare’ refers to Shakespeare, who is long dead. When referring to merely possible individuals, it is somewhat more natural (although by no means mandatory) to allow one’s quantifiers to go possibilist, thereby preserving the form of classical UI and EG. Likewise, when referring to past or future individuals, it is natural to allow one’s quantifiers to range over all past or all future individuals.

<sup>51</sup> See Kaplan, ‘Bob and Carol and Ted and Alice,’ appendix xi, at pp. 505–508.

Since 'Noman' refers to Noman even though he does not exist, a sentence containing 'Noman' might express a possible proposition about Noman even though the possible proposition does not exist. Consider the following:

(8) Noman is a native Californian.

This sentence expresses the possible proposition that Noman is a native Californian. It is arguable that this proposition is a Russellian *singular proposition* (David Kaplan) in which Noman himself occurs as a constituent.<sup>52</sup> In any event, by uttering (8) one asserts *of* Noman, *de re*, that he is a native Californian. Many philosophers would agree that in asserting *of* an individual, *de re*, that it has a certain property, one thereby asserts a singular proposition in which the individual in question occurs directly as a constituent.<sup>53</sup> Thus, in uttering (8) one may be regarded as asserting the possible singular proposition about Noman that he is a native Californian. This proposition is false. In fact, it does not even exist. (Recall the restriction on EG.) But it is possible, in two important senses. First, it might have existed. Second, it might have been true. (As a matter of fact, if it had existed, it very likely would have been true.) There is no proposition that sentence (8) actually<sub>1</sub> expresses, but there might have existed a proposition that the sentence actually<sub>1</sub> does express. This is the possible proposition about Noman that he is a native Californian. The fact that this possible proposition might have been true underlies the fact that the modal sentence

Noman might have been a native Californian

actually<sub>1</sub> is true.

In fact, some merely possible propositions are true despite the fact that they do not exist, for example, the possible singular proposition about Noman that he does not exist, and its entailments. Indeed, for any possible individual  $x$ , the possible singular proposition to the effect that  $x$  does not exist is necessarily such that if it is true, it does not exist. Its truth entails its nonexistence.

There is an especially remarkable anomaly that arises from these considerations. Let  $E_{NS}$  be the ovum from which I actually<sub>1</sub> developed. Consider now the possible individual who would have developed from the union of the sperm cell  $S$  from Noman's possible zygote with the ovum  $E_{NS}$  from my actual<sup>*p*</sup> zygote, if  $S$  (instead of the sperm cell from which I actually<sub>1</sub> developed) had fertilized  $E_{NS}$  in the normal manner. Let us name this possible individual 'Nothan'. It would seem that it is literally impossible for both Nothan and me to exist together. If one of us exists, the other cannot also exist. We are *impossible* individuals. Nevertheless, Nothan and I stand in certain cross-world relations to one another. (In fact, we are impossible brothers across possible worlds.) If Nothan had existed instead of me, he would have grown to reach some determinate height. It is either true that Nothan would have been taller than I actually<sub>1</sub> am, or else it is true that Nothan would not

<sup>52</sup> See Salmon, *Frege's Puzzle*, for a defense of singular propositions as the contents of sentences containing proper names.

<sup>53</sup> See Salmon, *Frege's Puzzle*, at p. 4–6, for a defense of the claim that the objects of *de re* propositional attitudes are singular propositions.

have been taller than, I actually<sub>1</sub> am. Suppose I utter the sentence

Nothan would have been taller than I actually<sub>1</sub> am,

thereby asserting *of* Nothan and myself, *de re*, that he would have been taller than I actually<sub>1</sub> am, and suppose Saul Kripke denies what I assert. Here again, it seems very likely that what are true or asserted are certain singular propositions in which Nothan and I occur directly as constituents, to wit, the singular proposition that he would have been taller than I actually<sub>1</sub> am or the singular proposition that he would not have been taller than I actually<sub>1</sub> am.<sup>54</sup> Although one of these singular propositions is true and the other false, and one of them asserted by me and the other by Kripke, if Nothan and I are impossible individuals, neither singular proposition can possibly exist. In any possible world in which one of its individual constituents exists, the other individual constituent does not. Something exactly analogous is true of the complex dispositional states of affairs of it being the case that Nothan would have been taller than I actually<sub>1</sub> am, and it being the case that Nothan would not have been taller than I actually<sub>1</sub> am. One of these states of affairs obtains, yet neither can exist. Or consider instead the *de re* modal proposition concerning Nothan and me that it is impossible for both of us to exist simultaneously. This singular proposition is no more existent than the possible proposition that Noman might have existed, and it is no less true. But if it is true, it *cannot* exist. Its truth entails its *necessary nonexistence*. Thus, there would seem to be a sense in which there are some impossible objects (certain singular propositions or states of affairs) that have certain properties (being the case, obtaining, being asserted or denied, etc.), even though they *cannot* exist, and indeed in some cases, the very property in question entails the impossibility of existence.

Here again, I am not making the Meinongian claim that any description, even if logically contradictory, refers to some possible or impossible object. Quine's description 'the merely possible fat man in that doorway' does not refer to any sort of object, whether existent, merely possible, or impossible. It is a *very* strongly non-referring term. Similarly, Meinong's round square is not only not a possible object, it is not even an impossible object. What makes an impossible object impossible is not that it has contradictory or otherwise incompatible properties. No object—whether existing, past, future, forever merely possible, or forever impossible—has incompatible properties. An impossible object, such as the singular proposition that Nothan would have been taller than I actually<sub>1</sub> am, is a complex constructed out of possible objects. Any such object has a perfectly consistent set of properties; it is impossible only because some of its essential constituents are impossible. An impossible object cannot exist, but it can and does have the properties it has.<sup>55</sup>

<sup>54</sup> The first of these propositions may be spelled out more fully as follows: The height that Nothan would have had if he had existed is greater than the height that I actually<sub>1</sub> have. The second proposition may be regarded as the negation of the first. See note 2 above.

<sup>55</sup> A simpler example of an impossible object that has properties is the pair set {Nothan, Nathan}, i.e., the set that a possible individual is an element of if and only if that possible individual is either Nothan or me. This impossible set has such properties as its membership, not being empty, being finite, and so on, all of which are perfectly compatible with one another. The term '{Nothan, Nathan}' may be regarded as a strongly nonreferring term that is not very strongly nonreferring; it

Present existence is not a pre-requisite for presently have properties. Nor is the disjunction of past and present existence, i.e., the property of either existing or have once existed. Nor even is the disjunction of past, present, and future existence, i.e., the property of existing at some time or other. Even *possible* existence seems not to be a pre-requisite for having properties, since it seems that in some sense, some impossible things have properties! The moral: The metaphysical condition of having properties is quite separable from the ontological condition of existing. Predication precedes existence. Of course, anything that exists has properties, but this is because having properties is metaphysically utterly unavoidable—in a way that even death and taxes are not. Noman is spared the latter, but no object, not even an impossible one, is spared the former. Such is the negative-existential predicament.

If nonexistence, and even necessary nonexistence, do not preclude having properties, what can be metaphysically so special or important about existence? How can actuality<sub>2</sub> be an important property when it is a necessary truth that everything has it, and even the possible individuals that do not have it, and the impossible individuals that could not have it, nevertheless have other properties? What is it about actuality in the secondary sense that makes it metaphysically important?

One reason that actuality<sub>2</sub> is metaphysically important might be that so many other significant properties depend upon it. If a possible state of affairs does not obtain, it cannot explain, or cause, or be the result of any other state of affairs. And unless a particular possible individual exists, it cannot be anywhere or do anything. Although Noman's properties are not restricted to negative properties and modal properties, they are severely restricted. Noman does not have experiences. A merely possible individual does not live and learn; it does not feel pleasure and pain, or know joy and sorrow; it does not laugh or cry; it does not even lie still at rest. (Let alone is any merely possible individual divine, in any significant sense.) The properties of merely possible individuals, and of impossible individuals, are inert; they include only such unimpressive characteristics as being referred to, not being a native Californian, and possibly existing or necessarily not existing. Not an enviable resume. The mere property of existing, once it is acquired, opens up a galaxy of new possibilities. The question of whether an actual<sub>2</sub> individual is better off than a nonactual<sub>2</sub> one probably depends on which properties the actual<sub>2</sub> individual has. Existence *per se* does not make one well off, except insofar as it opens the door to the potential for being well off. Unfortunately, it also opens the door to the potential for being badly off.

does not refer to any existing or merely possible thing, yet it does refer to an impossible thing. Similar remarks may be made in connection with the 'that'-clause 'that Nothan would have been taller than Nathan actually<sub>1</sub> is'.

Here is a not-so-simple quiz problem: Find a way to make discourse involving quantification over impossible objects possibilistically acceptable, by defining, analyzing, or somehow reconstructing the superunrestricted possibilist quantifiers—'every possible and every impossible individual' and 'some possible or some impossible individual'—in terms of the possibilist quantifiers and standard modal operators. (See note 10 above.) If this cannot be done, how are we to understand the claim that it is true (or I assert, or Saul Kripke denies) of Nothan and me that he would have been taller than I actually<sub>1</sub> am? What is it that is true (asserted, denied)?