Reality and Unreality

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CONTENTS

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'.[1]

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.

[1] 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.)[2] 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.[3] 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.

[2] *Cf.* Salmon, *Reference*, pp. 116–133, on this and other cross-world relations.

[3] 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'.[4] 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 singulary 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.[5]

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,

[4] *Ibid.*, p. 15; and *Methods of Logic* (New York: Holt, Rinehart and Winston, Inc., 1972), p. 234.

[5] 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'[6] 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.[7] A (typical) universal generalization $\ulcorner(\forall\alpha)\phi_\alpha\urcorner$ is true under an assignment of values to variables s, with respect to a given time t, if and only if every

[6] *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.

[7] 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 ϕ_α is true under the assignment s', with respect to t, where s' is the assignment that assigns i to α 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 α. 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.'[8] 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

[8] 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 premise 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). Anslem'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'.[9] 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*.[10] 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

[9] These are not the only doctrines that go by these 'ism''s; nor are these the only 'ism''s that these doctrines go by.

[10] 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 ϕ⌝ may be defined as ⌜The possible world w that is realized is such that there might have existed an individual that, in w, is ϕ⌝.

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 $=_{def.}$ 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 Arguement (taken as a purported proof of God's existence) involves some error, there can be no doubt. This was conclusively established during Anslem'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.[11] 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

[11] '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 exidivinity in talking about an *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.'[12] 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

[12] 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.[13] 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*.[14]

[13] It is often argued (most notably by Alvin Plantinga) that belief in God is no less rationally justified that 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.

[14] 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 theses (*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 aternative 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 $\ulcorner(\exists\alpha)\phi_\alpha\urcorner$ may be contextually defined by $\ulcorner\sim(\forall_\alpha)\sim\phi_\alpha\urcorner$.) 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.[15]

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.[16]

[15] For an argument that the identity predicate is not vague, see Salmon, *Reference*, pp. 243–245; and the appendix to Salmon, 'Modal Paradox.'

[16] 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 $=_{def.}$ 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'.[17] 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.[18] 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.)

[17] See Saul Kripke, *Naming and Necessity* (Harvard University Press, 1980), pp. 24, 156–158.

[18] *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:

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

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'etre*, 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 an 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).[19] 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?

[19] 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 ϕ is ψ⌝ 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 ϕ in w, and x is ψ 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 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.[20] 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 ϕ, it is logically or trivially or manifestly true that the ϕ is a ϕ. (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 ϕ is restricted to consistent formulas that may apply to possible

[20] 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 ϕ_x be '$F(x)$ & p'. Now let ϕ_x be '$G(x)$ & $\sim p$'. Logic gives us only that *if there is exactly one* ϕ, then the ϕ is a ϕ.[21] Even in the strange land of possibilist quantification, logic—through its Law of Noncontradiction—rejects the claim that, for every (consistent) formula ϕ, the possible individual that is a ϕ is a ϕ. Possibilist quantifier logic gives us only that, *if* exactly one possible individual is a ϕ, then the possible individual that is a ϕ is a ϕ. 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 be 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

[21] 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' theory, any English sentence containing the phase '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 illegitimcy.

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).[22] 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

[22] 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.[23] 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 pf 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.[24] 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

[23] This objection was apparently first raised by Gaunilo. See Plantinga, *Ontological Argument*, at p. 11.

[24] '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, . . . , 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)[25]

[25] 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.[26]

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*^{w} (or an *actual world*) if it is actually realized. A possible individual is said to be *actual*^{i} (or an *actual individual*) if it actually exists, i.e., if it exists in the actual^{w} world. An individual is said to be an actual^{p} ϕ if it is actually ϕ (i.e., if the proposition that it is ϕ is actually the case), and so on. (Exactly analogously, a world is *possible*^{w} if it is possibly realized; an individual is *necessary*^{i} if it necessarily exists, etc.) Since the indexical theory of 'actually', as propounded by Lewis, admits a secondary, nonindexical 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$^{i}_{1}$'.

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 straightfowardly 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.[27] 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'.

[26] 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'.

[27] 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).[28] 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'.[29] 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.[30] In the general case,

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

[29] 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 Persecptives 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.

[30] 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$_1$ 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$^{p}_{1}$ 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$^{p}_{1}$ 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$^{p}_{1}$ 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$^{p}_{1}$' 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.[31] 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$_1$, a Republican will be elected US president in 2100 AD,

[31] 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.[32] 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

[32] 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$_1$' 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:[33]

A1 A formula of the form $\ulcorner \text{Actually}_1\ \phi \urcorner$ (where ϕ 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 ϕ 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$_1$' (in their primary senses) are easily derived from this clause governing 'actually$_1$' together with the definitions of the cognates in terms of 'actually$_1$' and some elementary modal semantics. For example, we thus obtain:

A^w_1 The predicate 'actual$^w_1$' (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$^i_1$' (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 is 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$^w_1$' 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$^w_1$' with respect to any world, and every world other than the actual world is properly called 'nonactual$^w_1$' even with respect to itself. On the

[33] *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?[34]

A closely related objection raised by Robert Adams is this: One may easily glean from the indexical theory's semantic rules A_1, A^i_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$_1$ 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$_1$ the case. For the fact that a certain proposition is actually$_1$ 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$^{w}_1$', *per se*, is not to attribute to it any metaphysically significant distinction. The fact that a given possible world is actual$^{w}_1$ 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.'[35]

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

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

[34] 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.

[35] Adams, 'Theories of Actuality', at pp. 194–195 of Loux, *Possible and Actual*.

nonindexical sense of 'actually' and its cognates.[36] The secondary-sense analogues to the three semantic rules given above are the following:

A_2 A formula of the form $\ulcorner \text{Actually}_2\ \phi \urcorner$ (where ϕ 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 ϕ 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$^w{}_2$' (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$^i{}_2$' (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$_2$' 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 $\ulcorner \text{Actually}_2\ \phi \urcorner$, as given by A_2, are exactly those of the immediate subformula ϕ 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.[37] 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$^w{}_2$ 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.

[36] *Cf.* Lewis, 'Postscripts to "Anselm and Actuality",' Postscript B, in Lewis, 'Anselm,' at p. 22.
[37] *Cf.* Hazen, 'Truths about Actuality', and Lewis, 'Anselm'.

Likewise, actuality$^{i}_{2}$ 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$^{w}_{2}$' and 'actual$^{i}_{2}$' as would be correct for 'realized' and 'exists', respectively.

The secondary sense of 'actual^{w}' 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$^{w}_{2}$ 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$^{w}_{1}$ world.[38]

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*.[39] 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.[40] 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

[38] Here is a simple quiz question: On the indexical theory, is the expression 'the actual world' a (modally) rigid designator?

[39] 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.

[40] 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.'[41] 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.'[42] 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.'[43] 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$_1$' and its cognates. On the indexical theory, to say that something is actually$_1$ 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

[41] 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.

[42] *On the Plurality of Worlds* (Oxford: Basil Blackwell, 1986), at pp. 93–94.

[43] 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$^{i}_{1}$' 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$^{i}_{2}$' may be said to be context-relative in a way that actuality$^{i}_{1}$ 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$^{w}_{1}$ 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$^{w}_{1}$, nevertheless it is trivially special and metaphysically distinguished by virtue of being actual$^{w}_{2}$, 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$_2$. 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$^{w}{}_{2}$ 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$^{w}{}_{2}$ 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$^{w}{}_{1}$ 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 in 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$_1$ exist and that actually$_1$ 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.[44] 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

[44] '*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.[45] 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.[46] 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.[47] Instead we have

[45] *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.

[46] 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.

[47] 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: ⌜Everything is ϕ. α exists. Therefore, α is ϕ⌝ and ⌜α is ϕ. α exists. Therefore, something is ϕ⌝. In addition to these we have the following possibilist variations: ⌜Every possible individual is ϕ. α is a possible individual. Therefore α is ϕ⌝ and ⌜α is ϕ. α is a possible individual. Therefore, some possible individual is ϕ⌝. If the singular term α 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$_1$ is ϕ.
> α might have existed.
> Therefore, α is ϕ.

and

> α is ϕ.
> α might have existed.
> Therefore, there might have been something that actually$_1$ is ϕ.[48]

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'.[49] No merely possible man is actually$_1$ fat or actually$_1$ in Quine's doorway, let alone both, and no merely possible individual is actually$_1$ round or actually$_1$ 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'.)

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

[49] 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$^{p}{}_{2}$ 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$^{i}{}_{1}$ individual, it does refer to a possible individual. It is thus only a weakly nonreferring term. That is, although 'Noman' does not actually$_1$ refer to anything, there might have been someone x such that 'Noman' actually$_1$ refers to x.[50] 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.[51]

[50] 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 quantifers to range over all past or all future individuals.

[51] 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) is which Noman himself occurs as a constituent.[52] 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.[53] 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$_1$ expresses, but there might have existed a proposition that the sentence actually$_1$ 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$_1$ 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$_1$ 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^p zygote, if S (instead of the sperm cell from which I actually$_1$ developed) had fertilized ENS 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 *incompossible* individuals. Nevertheless, Nothan and I stand in certain cross-world relations to one another. (In fact, we are incompossible 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$_1$ am, or else it is true that Nothan would not

[52] See Salmon, *Frege's Puzzle*, for a defense of singular propositions as the contents of sentences containing proper names.

[53] 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$_1$ am. Suppose I utter the sentence

Nothan would have been taller than I actually$_1$ am,

thereby asserting *of* Nothan and myself, *de re*, that he would have been taller than I actually$_1$ 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$_1$ am or the singular proposition that he would not have been taller than I actually$_1$ am.[54] 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 incompossible 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$_1$ am, and it being the case that Nothan would not have been taller than I actually$_1$ 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 nonreferring 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$_1$ 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 incompossible. An impossible object cannot exist, but it can and does have the properties it has.[55]

[54] 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$_1$ have. The second proposition may be regarded as the negation of the first. See note 2 above.

[55] 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$^{i}_{2}$ 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$_2$ 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$^{i}_{2}$ individual is better off than a nonactual$^{i}_{2}$ one probably depends on which properties the actual$^{i}_{2}$ 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$_1$ 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 impossibilist 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$_1$ am? What is it that is true (asserted, denied)?

2

Nonexistence (1998)

I

Among the most perennial of philosophical problems are those arising from sentences involving nonreferring names. Chief among these problems is that of true singular negative existentials. Consider, for example,

(0) Sherlock Holmes does not exist,

interpreted not as an assertion within the fiction (as might be made mendaciously by Professor Moriarity in one of the *Sherlock Holmes* stories), but as an assertion about reality outside the fiction. So interpreted, the sentence is evidently true. But how can any sentence with a nonreferring term in subject position be true? It seems as if (0) designates someone (by its subject term) in order to say (by its predicate) that he does not exist. But it entails that there is no such thing to be designated. G. E. Moore put the problem as follows:

> [I]t seems as if purely imaginary things, even though they be absolutely contradictory like a round square, must still have some kind of *being*—must still be in a sense—simply because we can think and talk about them. . . . And now in saying that there is no such thing as a round square, I seem to imply that there *is* such a thing. It seems as if there must be such a thing, merely in order that it may have the property of not-being. It seems, therefore, that to say of anything whatever that we can mention that it absolutely is *not*, were to contradict ourselves: as if everything we can mention must be, must have some kind of being. (*Some Main Problems of Philosophy*, London: George Allen & Unwin, 1953, at p. 289)

In 'On Denoting,' Russell trumpeted his Theory of Descriptions not only for its explanation (which I believe Russell saw as the theory's principal virtue) of how we gain cognitive access to the world beyond our immediate acquaintance, but also for its ability to handle a variety of puzzles that arise on his theory that the semantic

The present chapter is a result of the Santa Barbarians Discussion Group's ruminations on fictional objects, during Fall 1996, organized by C. Anthony Anderson. I am grateful to the participants, especially Anderson, for our extremely useful confusions. I also thank Alan Berger, Kevin Falvey, Steven Humphrey, David Kaplan, and Scott Soames for discussion or comments. Portions of the paper were presented at the universities of California, Irvine; California, Los Angeles; Southern California; and Yale. I am grateful to those audiences for their comments. The essay is dedicated to Noman, without whom it would not have been possible.

content of a singular term is solely its referent (denotation, designatum).[1] The puzzles are primarily: Frege's Puzzle about $\ulcorner \alpha = \beta \urcorner$; the more general problem of substitution failure in certain contexts, especially those ascribing propositional attitude; the question of content and truth value for sentences involving nonreferring terms; and as a special case, true negative existentials. In previous writings I have discussed the first two problems from the perspective of *Millianism*, which I endorse, according to which the semantic contents of certain simple singular terms, including at least ordinary proper names and demonstratives, are simply their referents, so that a sentence containing a nonvacuous proper name expresses a *singular proposition*, in which the name's bearer occurs directly as a constituent.[2] It has been objected that the second two problems are sufficient by themselves to refute Millianism even if the first two problems are not. Here I shall discuss the problems of nonreferring names from a Millian perspective, and also from the less committal perspective of the *theory of direct reference*, according to which the semantic content of a name or demonstrative is not given by any definite description. I have also discussed the concept of existence in previous work.[3] I shall draw on these previous discussions.

Russell has us consider the English sentence

(1) The present king of France is bald,

which, given that France is no longer a monarchy, Russell deems 'plainly false' (p. 165). As he points out, if (1) is indeed false, then it would seem that its negation,

(2) The present king of France is not bald,

[1] *Mind*, 14 (1905), pp. 479–493. Page references are to the reprinting in Robert M. Harnish, ed., *Basic Topics in the Philosophy of Language* (Prentice-Hall, 1994), pp. 161–173.

[2] Principally in the following: *Frege's Puzzle* (Atascadero, Ca.: Ridgeview, 1986, 1991); 'Reflexivity,' *Notre Dame Journal of Formal Logic*, 27, 3 (June 1986), pp. 401–429; 'How to Become a Millian Heir,' *Noûs*, 23, 2 (April 1989), pp. 211–220; 'Illogical Belief,' in J. Tomberlin, ed., *Philosophical Perspectives, 3: Philosophy of Mind and Action Theory* (Atascadero, Ca.: Ridgeview, 1989), pp. 243–285; 'A Millian Heir Rejects the Wages of *Sinn*,' in C. A. Anderson and J. Owens, eds., *Propositional Attitudes: The Role of Content in Logic, Language, and Mind* (Stanford, Ca.: Center for the Study of Language and Information, Stanford University, 1990), pp. 215–247; 'How *Not* to Become a Millian Heir,' *Philosophical Studies*, 62, 2 (May 1991), pp. 165–177; 'Reflections on Reflexivity,' *Linguistics and Philosophy*, 15, 1 (February 1992), pp. 53–63; 'Relative and Absolute Apriority,' *Philosophical Studies*, 69 (1993), pp. 83–100; and 'Being of Two Minds: Belief with Doubt,' *Noûs*, 29, 1 (January 1995), pp. 1–20.

To correct a common misconception: Millianism does not entail that a proper name has no features or aspects that might be deemed, in a certain sense, intensional or connotive. Unquestionably, some names evoke descriptive concepts in the mind of a user. Some may even have particular concepts conventionally attached. Though the names 'Hesperus' and 'Phosphorus' have the same semantic content (the planet Venus), the former connotes *evening*, the latter *morning*. Barbarelli was called 'Giorgionne' because of his size, though the two names for the Venetian artist are semantically equivalent. There is no reason why there cannot be an operator that operates on this kind of connotation. Kripke mentions the particular construction 'Superman was disguised as Clark Kent'. The second argument position in '___ is disguised as ___' (or 'dressed as', 'appears as', etc.) is semantically sensitive to the physical appearance associated with the name occurring in that position. It does not follow that this connotive aspect of a name belongs to semantics, let alone that it affects the propositions semantically expressed by sentences containing the name.

[3] 'Existence,' in J. Tomberlin, ed., *Philosophical Perspectives, 1: Metaphysics* (Atascadero, Ca.: Ridgeview, 1987), pp. 49–108.

ought to be true. But (2) is as wrong as (1), and for the very same reason. By contrast, the singular existential

(3) The present king of France exists

is indeed false, and its negation,

(4) The present king of France does not exist

is true. In Russell's Theory of Descriptions, (1) is analyzed as:

$(1')\ (\exists x)[(y)(\textit{Present-king-of-France}(y) \equiv x = y) \wedge \textit{Bald}(x)]$,

in English as 'Something is both uniquely a present king of France and bald' (where to say that something is *uniquely* such-and-such is to say that it, and nothing else, is such-and-such). As with (1), Russell says that (1′) is 'certainly false' (p. 170). In the English sentence (2), the existential quantifier of (1′) together with its accompanying material joust with negation for dominant position. Sentence (2) may mean either of two things:

$(2')\ (\exists x)[(y)(\textit{Present-king-of-France}(y) \equiv x = y) \wedge \sim \textit{Bald}(x)]$

$(2'')\ \sim(\exists x)[(y)(\textit{Present-king-of-France}(y) \equiv x = y) \wedge \textit{Bald}(x)]$.

The former is the wide-scope (or *primary occurrence*) reading of (2), on which it expresses that some unique present king of France is not bald. This is false for the same reason as (1′). The latter is the narrow-scope (*secondary occurrence*) reading of (2), on which it expresses that no unique present king of France is bald. This genuinely contradicts (1′) and is therefore true. In *Principia Mathematica*, instead of analyzing (3) by replacing '$\textit{Bald}(x)$' in (1′) with '$(\exists y)(x = y)$', Russell and Whitehead analyze it more simply as

$(3')\ (\exists x)(y)(\textit{Present-king-of-France}(y) \equiv x = y)$,

i.e. 'Something is uniquely a present king of France.' This is equivalent to its analysis in the style of (1′), since '$(\exists y)(x = y)$' is a theorem of *Principia Mathematica*. Although Russell did not distinguish two readings for (4), he might as well have. The narrow-scope reading is equivalent to the reading given,

$(4')\ \sim(\exists x)(y)(\textit{Present-king-of-France}(y) \equiv x = y)$,

while the wide-scope reading is straightforwardly inconsistent, and hence, presumably, cannot be what would normally be intended by (4). Russell extended his solution to sentences involving nonreferring proper names through his thesis that ordinary names abbreviate definite descriptions. The name 'Sherlock Holmes', for example, might abbreviate something like: *the brilliant but eccentric late 19th century British detective who, inter alia, performed such-and-such exploits*. Abbreviating this description instead as 'the Holmesesque detective', (0) is then subject to an analysis parallel to that for (4′), as:

$(0')\ \sim(\exists x)(y)(\textit{Holmesesque-detective}(y) \equiv x = y)$.

Neither (0′) nor (4′) designates anyone in order to say of him that he does not exist.

Frege had defended a very different theory in '*Über Sinn und Bedeutung*' (1892) concerning sentences like (1) and (2).[4] On that theory—later championed in a somewhat different form by Strawson[5]—although the truth of (1) requires that there be a unique present king of France, (1) is not rendered false by the nonexistence of such a monarch. Instead, (1) *presupposes* that there is a unique present king France, in the sense that (1) and (2) each separately entail (3′). Since this entailed proposition is false, neither (1) nor (2) is true. Though meaningful, (1) is neither true nor false.[6] Frege regarded this as a consequence of the Principle of Compositionality for Reference, according to which the referent of a compound expression—and as a special case, the truth value of a sentence—is determined entirely by the referents of the component expressions and their mode of composition. On Frege's view, if a component lacks a referent, so does the whole.

In 'Mr Strawson on Referring,' published some fifty-four years after 'On Denoting,' Russell responds to the objection that (1) is neither true nor false.[7] Where he had earlier claimed that (1) is 'plainly' false, he now says that the issue of whether (1) is false 'is a mere question of verbal convenience' (p. 243). Though this seems to indicate a change of heart, I believe it may not actually do so. He goes on to say, 'I find it more convenient to define the word "false" so that every significant sentence is either true or false. This is a purely verbal question; and although I have no wish to claim the support of common usage, I do not think that he [Strawson] can claim it either.' Frege can indeed accommodate Russell's verdict that (1) is 'plainly false,' simply by understanding 'false' as coextensive with 'untrue'. One way for Frege to do this is to invoke a distinction between two types of negation, so-called *choice* and *exclusion* negation.[8] The difference between the two is given by their three-valued truth tables (where 'U' stands for 'undefined,' i.e., without truth value):

p	$\sim_C p$	$\sim_E p$
T	F	F
F	T	T
U	U	T

Frege's Principle of Compositionality for Reference requires that exclusion negation be seen as an *ungerade* (oblique) operator. Where '$\sim$C' is concerned with the customary referent of its operand sentence (i.e., its truth value), '$\sim$E' is concerned instead with the indirect referent of its operand, which is its customary sense. Exclusion negation is definable using choice negation. Let p be the proposition expressed by sentence φ. Then $\ulcorner \sim_E \varphi \urcorner$ means that p is not$_C$ true—or in Fregean

[4] Page references are to the reprinting in Harnish, pp. 142–160.

[5] In 'On Referring,' *Mind*, 59 (1950), pp. 320–344.

[6] Frege also speaks of a sentence like (1) as presupposing that the expression 'the present king of France' refers to something (pp. 151–152).

[7] In Russell's *My Philosophical Development* (London: Allen and Unwin, 1959), pp. 238–245.

[8] These are called 'internal' and 'external' negation, respectively, in D. A. Bochvar, 'On a Three-Valued Calculus and its Application in the Analysis of the Paradoxes of the Extended Functional Calculus,' *Mathematicheskii Sbornik*, 46 (1938), pp. 287–308.

terminology, that the thought p does not$_C$ determine the True. Hence, 'The present king of France is not$_E$ bald' may be regarded as shorthand for 'It is not$_C$ true that the present king of France is bald'. One might say this if one wishes to assert, cautiously, that either there presently is no unique king of France, or else there is such and he is not bald—i.e. that (2″).

One may understand the term 'false' so that to call a sentence 'false' is to say that its negation is true, where the relevant notion of the negation of a sentence is syntactic (rather than defined in terms of truth tables). The two notions of negation, choice and exclusion, thereby yield two notions of falsehood. Let us say that a sentence is *F-false*$_1$ (false in the Fregean primary sense) if its choice negation is true, and that it is *F-false*$_2$ (false in the Fregean secondary sense) if its exclusion negation is true. The latter term is coextensive with 'untrue'. By Frege's lights, (1) is neither true nor *F*-false$_1$, and therefore, plainly *F*-false$_2$.

So far so good. But Russell's response to Strawson suggests that not only could Frege and Strawson have chosen an alternative sense for 'false', and deem (1) 'false' in that sense, but Russell himself could have chosen a sense for 'false' on which (1′) is neither true nor 'false.' Only in that case can it rightfully be said that the question of whether (1) is false is entirely terminological.[9] Is there a legitimate sense of 'false' on which (1) is neither true nor false given its analysis on the Theory of Descriptions?

Whatever 'false' means, it is something contrary to truth. Russell, as well as Frege, could understand falsehood as truth of the (syntactic) negation. Except that on Russell's theory, the negation of (1) is ambiguous. Let us restrict our focus for the time being to sentences none of whose definite descriptions occur within the scope of a nonextensional operator (including sentences with no definite descriptions). Let us call the reading of the negation of such a sentence on which each description is given narrowest possible scope the *outermost negation* of the original sentence, and let us call the reading of the negation on which each description is given widest possible scope the *innermost negation*. (*Cf.* note 8.) Let us say of a sentence of the sort under consideration that it is *R-false*$_1$ if its outermost negation is true, and that it is *R-false*$_2$ if its innermost negation is true. (A multitude of further Russellian notions of falsehood are definable in similar ways.) On the Theory of Descriptions, a sentence none of whose definite descriptions occur in a nonextensional context and all of whose definite descriptions are proper (i.e., such that there is exactly one thing answering to it) is *R*-false$_1$ if and only if it is *R*-false$_2$. Not so for sentences containing improper descriptions. In particular, (1) is *R*-false$_1$ by Russell's lights—and indeed, plainly so in the present absence of a king of France. But (1) is neither true nor *R*-false$_2$.

Russell's reply to Strawson has a good deal of merit. It is by no means obvious, however, that the issue of whether (1) is false is entirely verbal. Whereas both Russell and Frege may deem (1) 'false' in one sense and not 'false' in another, it appears that

[9] Echoing Russell, Michael Dummett argues, in 'Presupposition,' *Journal of Symbolic Logic*, 25 (1960), pp. 336–339, that Strawson has not shown that (1) is not false in an antecedently understood sense of the term, but has instead introduced a natural sense of 'false' different from that employed by Russell and on which the term, so understood, does not apply to (1). See also his *Frege: Philosophy of Language* (Cambridge, Mass.: Harvard University Press, 1973, 1981), chapter 12, especially pp. 419–429.

the particular senses Russell employs are not the same as Frege's. The distinction between innermost and outermost negation is not the same as the distinction between choice and exclusion negation. The Fregean treats (2) as involving a lexical ambiguity; Russell sees (2) instead as involving a scope ambiguity. The terms '*R*-false$_1$' and '*R*-false$_2$' presuppose the Theory of Descriptions, while '*F*-false$_1$' and '*F*-false$_2$' presuppose the opposing view (assumed by John Stuart Mill as well as Frege) that definite descriptions are singular terms. Insofar as the term 'false', in its standard sense, is identical in extension, and at least close in meaning, to one of these theoretically loaded terms (or to some appropriate variation), it cannot be close in meaning to any of the remaining three. To decide whether (1) is false in the standard sense, it would seem that one must first make a determination between Russell's theory and the Frege/Strawson view—or (perhaps most likely) in favor of some alternative account.

The nature of the divergence between Russell and Frege emerges more fully at a deeper level of analysis on which the four notions of falsehood are theoretically neutralized, to the extent that this is possible. The notions of *R*-falsehood$_1$ and *R*-falsehood$_2$ can be made more or less neutral by taking the former to be truth of the *de dicto* reading of the negation, the latter to be truth of the *de re* reading—where (2) read *de dicto* expresses that it is not true that the present king of France is bald, and read *de re* that the present king of France is such that not bald is *he*. One need not embrace the Theory of Descriptions to recognize the *de-re/de-dicto* distinction (problematic though this general distinction is on Fregean theory). *R*-falsehood$_1$ thus corresponds, closely enough, to *F*-falsehood$_2$—essentially the notion of untruth. All parties agree that (1) is plainly 'false' in this sense. The relationship between *R*-falsehood$_2$ and *F*-falsehood$_1$ is not nearly this close. The Fregean agrees that (1) is not *R*-false$_2$, since it is plainly not true that the present king of France is nonbald. But this is different from the Fregean denial that (1) is *F*-false$_1$. *F*-falsehood$_1$ is falsehood in the sense of the 'F' invoked in three-valued truth tables. This notion, though Fregean, is not anti-Russellian. There could be untrue sentences in which all singular terms refer but which lack *F*-falsehood$_1$ for reasons unrelated to singular-term reference—for example, because of a partially defined predicate, or a category mistake, or a failed presupposition that is not existential in nature. It is perfectly consistent to acknowledge that such sentences are neither true nor *F*-false$_1$ (i.e., that they are U) while embracing the Theory of Descriptions. A decision would have to be made concerning whether the negation symbol '~' is a sign for choice or exclusion negation, but whichever decision was made (it is customary to use it for choice negation), a second negation sign could be introduced for the other notion. Even if the Russellian were to embrace the Principle of Bivalence—according to which every well-formed declarative sentence is either true or false (Russell says that he finds it convenient to use the term 'false' in such a way as to honor this principle)—this need not represent a rejection of *F*-falsehood$_1$. It may constitute a thesis that every well-formed sentence is either true or *F*-false$_1$—even category-mistake sentences and the rest, or that such 'sentences' are not well-formed, etc.

F-falsehood$_1$ should be understood not merely as truth of the choice negation, but as truth of the choice negation *construed as the authentic contradictory of the original*

sentence—in effect, as truth of the outermost choice negation. Readings or analyses of the choice negation that do not contradict the original sentence, or do not contradict an analysis of it, are irrelevant. If a category-mistake sentence is neither true nor *F*-false$_1$, then the outermost choice negation of it, and of any analyses of it, are likewise neither true nor *F*-false$_1$. The question is whether the untrue (1) is *F*-false$_1$. On Russell's theory, (1) is *F*-false$_1$ if and only if (2″) is true. The untruth of (2′) is not pertinent. To rebut the objection that (1) is neither true nor *F*-false$_1$ it is not sufficient for Russell to agree that (1) is neither true nor *R*-false$_2$. He must argue further that (1) is indeed *F*-false$_1$, and that in denying this Frege and Strawson have probably confused *F*-falsehood$_1$ with *R*-falsehood$_2$.[10]

II

Whereas Frege's Principle of Compositionality for Reference requires that sentences like (1) and (2) lack truth value, his theory of sense and reference explains how such sentences nevertheless semantically express propositions. On the other hand, the same Principle of Compositionality creates a problem for Frege in connection with sentences like (3) and (4). It is natural to take these to be analyzable as:

(3″) $(\exists x)[(\iota y)\textit{Present-king-of-France}(y) = x]$
(4″) $\sim(\exists x)[(\iota y)\textit{Present-king-of-France}(y) = x]$,

respectively. The intended truth conditions for (3″) and (4″) are given by (3′) and (4′). But since the definite description lacks a referent, (3″) and (4″) must instead for Frege be neither true nor false—assuming the standard interpretation for existential quantification, identity, and negation (as Frege gave them in connection with his own notation) on which each is fully extensional.

[10] An analogous situation obtains in connection with verbs like 'know', 'realize', 'notice', etc. Is the untrue sentence 'Jones knows that the Earth is flat' false, or is it neither true nor false? The analogue of the Russellian view would be that this sentence is analyzable into a conjunction ⌜The Earth is flat and φ⌝, for some sentence φ concerning Jones's epistemic situation (e.g., 'Jones is epistemically justified, in a manner not defeated by Gettier-type phenomena, in believing that the Earth is flat'). This is the standard view in contemporary epistemology. The negation 'Jones does not know that the Earth is flat' may then be subject to an innermost/outermost scope ambiguity. The analogue of the Fregean view would be that the original sentence instead presupposes that the Earth is flat. This alternative to the Russellian view has been discussed by linguists. See Ed Keenan, 'Two Kinds of Presupposition in Natural Language' in Charles Fillmore and D. Terence Langendoen, eds., *Studies in Linguistic Semantics* (1971), Paul and Carol Kiparski, 'Fact,' and Charles Fillmore, 'Types of Lexical Information,' both in D. D. Steinberg and L. A. Jakobovits, eds., *Semantics* (Cambridge University Press, 1971), and Deirdre Wilson, *Presuppositions and Non-Truth-Conditional Semantics* (Academic Press, 1975). On this view, the negation of the original sentence may be subject to a choice/exclusion lexical ambiguity. Either view may thus regard the negation as true in one sense and untrue in another, making the original sentence false in one sense, unfalse in another. The two views nevertheless differ over the question of whether the original sentence instantiates *F*-falsehood$_1$. (The similarity between the issues concerning reference and factives can be made more than merely analogous, by taking ⌜α knows that φ⌝ as shorthand for ⌜α knows the fact that φ⌝, with ⌜the fact that φ⌝ a definite description that is proper if and only if φ is true.)

By way of a solution to this difficulty, Frege suggested that (3) and (4) are properly interpreted not by (3″) and (4″), but as covertly quotational. He wrote:

> We must here keep well apart two wholly different cases that are easily confused, because we speak of existence in both cases. In one case the question is whether a proper name designates, names, something; in the other whether a concept takes objects under itself. If we use the words 'there is a -----' we have the latter case. Now a proper name that designates nothing has no logical justification, since in logic we are concerned with truth in the strictest sense of the word; it may on the other hand still be used in fiction and fable. ('A Critical Elucidation of some Points in E. Schroeder's *Algebra der Logik*,' published 1895, translated by Peter Geach in *Translations from the Philosophical Writings of Gottlob Frege*, Oxford: Basil Blackwell, 1970, p. 104)

Elsewhere Frege made similar remarks about singular existentials and their negations: 'People certainly say that Odysseus is not an historical person, and mean by this contradictory expression that the name "Odysseus" designates nothing, has no referent (*Bedeutung*)' (from the section on 'Sense and Reference' of Frege's 1906 diary notes, 'Introduction to Logic,' in H. Hermes, F. Kambartel, and F. Kaulbach, eds., *Posthumous Writings*, translated by P. Long and R. White,[11] University of Chicago Press, 1979, at p. 191). Earlier in his 'Dialogue with Pünjer on Existence' (pre-1884, also in Hermes, *et al.*), Frege observed: 'If "Sachse exists" is supposed to mean "The word 'Sachse' is not an empty sound, but designates something", then it is true that the condition "Sachse exists" must be satisfied [in order for "There are men" to be inferred from "Sachse is a man"]. But this is not a new premise, but the presupposition of all our words—a presupposition that goes without saying' (p. 60).[12]

The suggestion would appear to be that (3) and (4), at least on one reading (on which the latter is true), are correctly formalized as:

(5) $(\exists x)$['the present king of France' refers$_{\text{English}}$ to x]

(6) $\sim(\exists x)$ ['the present king of France' refers$_{\text{English}}$ to x].

Notice that this semantic-ascent theory of singular existence is not disproved by the success of substitution of coreferential terms in existential contexts—as for example, in 'The author of *Naming and Necessity* exists. The author of *Naming and Necessity* is the McCosh Professor of Philosophy at Princeton University; therefore the Princeton McCosh Professor of Philosophy exists'.[13] Although positions within quotation marks are not typically open to substitution of coreferential terms, by the very nature of the particular context ⌜'___' refers$_{\text{English}}$ to x⌝ the position within its quotation marks respects such substitution. Assuming, as Frege did, that each instance of the metalinguistic schema

(F) (x)(['the' + NP refers$_{\text{English}}$ to x] $\equiv$ $(y)[\phi_y \equiv x = y]$),

[11] Except that I here render '*Bedeutung*' as 'referent'.

[12] Frege also suggests here that there may be an alternative reading for 'Sachse exists', on which it is tantamount to 'Sachse = Sachse', which Frege says is self-evident. He might well have said the same about '$(\exists x)$[Sachse $= x$]'.

[13] The term 'semantic ascent' is due to W. V. O. Quine. See his *Word and Object* (Cambridge, Mass.: MIT Press, 1960), §56.

is true where ϕ is a formalization in the notation of first-order logic for the English NP, (5) is true if and only if (3′) is, and (6) is true if and only if (4′) is. Frege can thus attain the same truth conditions for (3) and (4) as does Russell.

Frege's semantic-ascent approach succeeds in capturing information that is indeed conveyed in the uttering of (3) or (4). But, to invoke a distinction I have emphasized in previous work, this concerns what is *pragmatically imparted* in (3) and (4), and not necessarily what is *semantically encoded* or *contained*.[14] Frege does not attain the same semantic content as Russell or even the same modal intension, i.e., the same corresponding function from possible worlds to truth values. Indeed, that the semantic-ascent interpretation of (3) and (4) by (5) and (6), respectively, is incorrect is easily established by a variety of considerations. The semantic-ascent theory of existence is analogous to Frege's account of identity in *Begriffsschrift* (1879). Curiously, Frege evidently failed to see that his objection in '*Über Sinn and Bedeutung*' to the semantic-ascent theory of identity applies with equal force against the semantic-ascent theory of existence. Another objection to semantic-ascent analyses has been raised by Frege's most effective apologist and defender, Alonzo Church.[15] Translating (4) into French, one obtains:

Le roi présent de France n'existe pas.

Translating its proposed analysis into French, one obtains:

'The present king of France' *ne fait référence à rien en anglais*.

These two translations, while both true, clearly mean different things in French. So too, therefore, do what they translate.

A theory of singular existence statements that is equally Fregean in spirit but superior to the semantic-ascent account takes the verb 'exist' as used in singular existentials to be an *ungerade* device, so that both (3) and (4) concern not the phrase 'the present king of France' but its English sense.[16] This is analogous to the semantic-ascent theory of existence, except that one climbs further up to the level of intension. On the intensional-ascent theory of existence, (3) and (4) are analyzed thus:

(7) $(\exists x)\Delta(^{s}(\imath y)\mathit{Present\text{-}king\text{-}of\text{-}France}(y)^{s}, x)$

(8) $\sim(\exists x)\Delta(^{s}(\imath y)\mathit{Present\text{-}king\text{-}of\text{-}France}(y)^{s}, x)$,

where 'Δ' is a dyadic predicate for the relation between a Fregean sense and that which it determines (that of which the sense is a concept) and the superscript 's' is a device for sense-quotation (in the home language, in this case a standard notation for

[14] *Frege's Puzzle*, pp. 58–60 and elsewhere (especially 78–79, 84–85, 100, 114–115, 127–128). The distinction is developed further in other works cited in note 2 above.

[15] See Church's 'On Carnap's Analysis of Statements of Assertion and Belief,' *Analysis*, 10, 5 (1950), pp. 97–99. For a defense of the Church-Langford translation argument, see my 'The Very Possibility of Language: A Sermon on the Consequences of Missing Church,' to appear in C. A. Anderson's and M. Zeleney's, eds., *Logic, Meaning and Computation: Essays in Honor of Alonzo Church* (Boston: Kluwer, 1998).

[16] Church cites the particular sentence (4) as an example of a true sentence containing an *ungerade* occurrence of a singular term ('name'), in *Introduction to Mathematical Logic I* (Princeton University Press, 1956), at p. 27*n*. See note 58 below.

first-order logic with 'Δ').[17] Like the semantic-ascent theory, this intensional-ascent account of existence is not disproved by the success of substitution of coreferential terms in existential contexts. On a Fregean philosophy of semantics, sense-quotation marks create an *ungerade* context—one might even say that they create the paradigm *ungerade* context as Frege understood the concept—so that any expression occurring within them refers in that position to its own customary sense, yet the position flanked by them in the particular context $\ulcorner\Delta({}^{s}\_\_\_{}^{s}, x)\urcorner$ remains open to substitution because of the special interplay between sense-quotation and 'Δ'. The intensional-ascent theory is not so easily refuted as the semantic-ascent approach by the Church translation argument.[18] In place of schema (F), we invoke the following:

$(C)\ \ (x)[\Delta({}^{s}(\imath y)\phi^{s}_{y}, x) \equiv (y)(\phi_{y} \equiv x = y)],$

thereby attaining the familiar Russellian truth and falsehood conditions for (3) and (4). Unlike (F), every instance of (C) expresses a necessary truth. The intensional-ascent theory of existence thus also obtains the correct modal intensions for (3) and (4).

III

A singular term is *nonreferring* (with respect to a context *c*, a time *t*, and a possible world *w*), in one sense, if and only if there does not exist anything to which the term refers (with respect to *c, t*, and *w*). On Millianism, a nonreferring proper name is thus devoid of semantic content. A Millian, like myself, and even a less committal direct-reference theorist like Kripke, may not avail him/herself of the Theory of Descriptions to solve the problems of sentences with nonreferring names.[19] If α is a

[17] *Cf.* my 'Reference and Information Content: Names and Descriptions,' in D. Gabbay and F. Guenthner, eds., *Handbook of Philosophical Logic IV: Topics in the Philosophy of Language* (Dordrecht: D. Reidel, 1989), chapter IV.5, pp. 409–461, at 440–441 on Fregean sense-quotation. The idea comes from David Kaplan's 'Quantifying In,' in D. Davidson and J. Hintikka, eds., *Words and Objections: Essays on the Work of W. V. O. Quine* (Dordrecht: D. Reidel, 1969), pp. 178–214; reprinted in L. Linsky, ed., *Reference and Modality* (Oxford University Press, 1971), pp. 112–144, at 120–121. In English, the word 'that' attached to a subordinate clause (as in $\ulcorner$Jones believes that $\phi\urcorner$ or $\ulcorner$It is necessary that $\phi\urcorner$) typically functions in the manner of sense-quotation marks.

[18] On this application of the translation argument, see my 'A Problem in the Frege–Church Theory of Sense and Denotation,' *Noûs*, 27, 2 (June 1993), pp. 158–166, and 'The Very Possibility of Language: A Sermon on the Consequence of Missing Church.'

[19] Kripke does not officially endorse or reject Millianism. Informal discussions lead me to believe he is deeply skeptical. (*Cf.* his repeated insistence in 'A Puzzle about Belief' that Pierre does not have inconsistent beliefs—in A. Margalit, ed., *Meaning and Use*, Dordrecht: D. Reidel, 1979, pp. 239–283; reprinted in N. Salmon and S. Soames, eds., *Propositions and Attitudes*, Oxford University Press, 1988, pp. 102–148.) Nevertheless, Kripke believes that a sentence using a proper name in an ordinary context (not within quotation marks, etc.) expresses a proposition only if the name refers. Similarly, Keith Donnellan, in 'Speaking of Nothing,' *The Philosophical Review*, 83 (January 1974), pp. 3–32 (reprinted in S. Schwartz, ed., *Naming Necessity and Natural Kinds*, Ithaca: Cornell University Press, 1977, pp. 216–244), says, 'when a name is used and there is a failure of reference, then no proposition has been expressed—certainly no true proposition. If a child says, 'Santa Claus will come tonight,' he cannot have spoken the truth, although, for various reasons, I think it better to say that he has not even expressed a proposition. [*footnote:* Given that this is a statement about reality and that proper names have no descriptive content, then how are we to represent the proposition expressed?]' (pp. 20–21).

proper name, referring or not, it is not a definite description, nor by the direct-reference theory's lights does it 'abbreviate' any definite description. Direct-reference theory thus excludes application of the Theory of Descriptions in connection with the analogues of (1)–(4):

(1α) α is bald
(2α) α is not bald
(3α) α exists
(4α) α does not exist.

For similar reasons, the direct-reference theorist is also barred from using Frege's sense-reference distinction to solve the difficulties. How, then, can the theorist ascribe content to (1α)–(4α)? In particular, how can (4α) express anything at all, let alone something true? The semantic-ascent theory of existence is refuted on the direct-reference theory no less than on Fregean theory by the Church translation argument as well as by modal considerations (among other things). The *ungerade* theory hardly fares much better on direct-reference theory in connection with (3α) and (4α). On the Millian theory, it fares no better at all. Using the superscripted 's' now as a semantic-content quotation mark, the intensional-ascent theory yields

(7α) $(\exists x)\Delta(^{s}\alpha^{s}, x)$
(8α) $\sim(\exists x)\Delta(^{s}\alpha^{s}, x)$

as purported analyses for (3α) and (4α), respectively. But according to Millianism, if α is a proper name, then $\ulcorner{}^{s}\alpha^{s}\urcorner$ refers to α's bearer. Where α is a nonreferring name, $\ulcorner{}^{s}\alpha^{s}\urcorner$ is equally nonreferring.

Canvassing some alleged cases of true sentences of the form of (4α) with α a nonreferring name reveals that the so-called problem of nonreferring names, on closer examination, frequently vanishes.

First, let the α in (3α) and (4α) be a name for a possible individual that does not actually exist, i.e. for a merely possible individual. Though there is no bald man (we may suppose) in Quine's doorway at this moment, there might have been.[20] I hereby dub the merely possible bald man in Quine's doorway (if there is exactly one there) 'Curly-0'. Even though Curly-0 might have existed, this much should be clear: Curly-0 does not exist. But how can that be?

Contemporary philosophy has revealed that my little naming ceremony was an exercise in futility. For even if we countenance merely possible individuals, at least for the purpose of naming one of them, I have not yet singled any one of them out to be named. There are many different merely possible individuals who might have been bald men standing in Quine's doorway, but none of them are actually bald or standing in Quine's doorway. The problem is to distinguish one of them. Difficult though the task may be, David Kaplan has found a way to do it.[21] Gamete *S* is a particular male

[20] *Cf.* 'On What There Is,' in Quine's *From a Logical Point of View* (New York: Harper and Row, 1953, 1961).

[21] 'Bob and Carol and Ted and Alice,' in K. J. Hintikka, J. Moravcsik, and P. Suppes, eds., *Approaches to Natural Language*, Dordrecht: D. Reidel, 1973, pp. 490–518, at 516–517n19. Kripke has also described such a procedure.

sperm cell of my father's, and gamete *E* is a particular ovum of my mother's, such that neither is ever actually united with any other gamete. Following Kaplan's instructions, I have given the name 'Noman-0' to the particular possible individual who would have resulted from the union of *S* and *E*, had they united in the normal manner to develop into a human zygote.[22] Noman (as I call him for short) is my merely possible brother. He is a definite possible individual who might have been a bald man standing in Quine's doorway. Noman does not exist. But how can that be?

The apparent difficulty here is an illusion. Consider the following analogous situation. Let the α in (4α) be the name 'Socrates'. Then (3α) is true with respect to the year 400 BC, and (4α) false. With respect to the present day, these truth values are reversed. Socrates is long gone. Consequently, singular propositions about him, which once existed, also no longer exist. Let us call the no-longer-existing proposition that Socrates does not now exist, 'Soc'. Soc is a definite proposition. Its present lack of existence does not prevent it from presently being true. Nor does its nonexistence prevent it from being semantically expressible in English. Notice that in 400 BC, the sentence 'Socrates does not exist' evidently did not express anything in English, and hence was not true or false, since the language itself had not yet come into being. Some might argue that the sentence did not yet even exist. Moreover, even if the language had come into being in 400 BC, the English sentence 'Socrates does not exist' might not have had the exactly same semantics then that it has today. Expressing a proposition (or being true or false, etc.) *with respect to* a given time *t* is not the same thing as expressing that proposition *at t*. Today the sentence 'Socrates does not exist' expresses Soc with respect to the present time. It does not follow that there exists a proposition that this sentence expresses with respect to the present time. There presently exists no such proposition, but there was such a proposition. 'Socrates does not exist' does indeed single out a definite past thing in order to say of it, correctly, that it does not now exist. It does not follow that there presently exists someone designated in the sentence (and said therein not to exist). There presently exists no one to whom the term 'Socrates', as a name for the philosopher who drank the hemlock, refers in English, but there did exist someone to whom the name now refers. The sentence 'Socrates does not exist' *now* expresses Soc, and Soc is now true. And that is why the sentence is now true in English (even though Soc does not now exist). This account of the truth of 'Socrates does not exist' applies *mutatis mutandis* to objects from the future as well as the past. Kaplan has named the first child to be born in the twenty-second century 'Newman-1'.[23] There presently exists no proposition expressed by 'Newman-1 does not exist'. But there will exist a particular proposition that is already so expressed, and it is true.

The principal facts about Socrates and Newman-1 are true as well of Noman. I call a nonreferring singular term *weakly nonreferring* if there might have existed something to which the term actually refers, and I call a nonreferring term *very weakly nonreferring* (at a time *t*) if (at *t*) there has existed, or is going to exist, something to which the term refers. 'Noman' is weakly nonreferring but not very

[22] In 'Existence,' cited above in note 3, at pp. 49–50. I draw heavily from the discussion there, especially at pp. 90–98, in the remainder of this section.

[23] In 'Quantifying In,' p. 135 of Linsky.

weakly. There exists no one to whom 'Noman' refers but there might have been a definite someone *x* such that 'Noman' *actually* refers to *x*. By the same token, there exists no proposition expressed by 'Noman does not exist', but there might have been a proposition that *actually is* expressed, and it is actually true.

Consider now *la pièce de résistance*. A *strongly nonreferring* term is one such that there could not have existed something to which the term actually refers. Curiously, an extension of the same solution may be made even for some strongly nonreferring terms. To see this, let E_{NS} be the ovum from which I actually sprang. I have introduced the name 'Nothan-0' for the merely possible individual who would have sprang from the union of *S* and E_{NS} had they been united in the normal manner. Like 'Noman-0', 'Nothan-0' is weakly nonreferring but not very weakly. It seems that Nothan (as I call him) and I are *incompossible*; we could not both exist since we each require the same ovum. Either it is true or it is false that Nothan might have been taller than I actually am. This is a truth-valued singular proposition about a definite pair of possible individuals. But unlike the proposition that Nothan is 6 feet tall, this proposition could not possibly exist; there is no possible world in which its two constituent possible people exist together. The term 'the proposition that Nothan-0 might have been taller than Nathan Salmon actually is' is thus strongly nonreferring. Still, there is in *some* sense a definite impossible thing to which the term actually refers: the very singular proposition in question, which is true if Nothan might have been taller than I actually am and is otherwise false. An analogous situation obtains in connection with the proposition, which I believe, that Plato was taller than I now am. There is no time at which this singular proposition exists. In particular, it does not now exist, yet I now believe it.[24] The negative existential 'The singular proposition that Nothan might have been taller than Nathan Salmon actually is, does not exist' is true, and its subject term is strongly nonreferring. In fact, the proposition expressed by this negative existential could not possibly exist. Yet there is in some sense a definite proposition that is in question, and it is true. Something analogous to this is true also in connection with the pair set, {Nothan-0, Nathan Salmon}; there is in some sense a definite set that is actually referred to by this piece of set-theoretic notation (assuming it is properly interpreted), yet that set could not possibly exist. Even if Nothan had existed, {Nothan, me} still could not do so. Neither could the singular proposition about the pair set that it does not exist. Yet that proposition is true, precisely in virtue of the fact that the pair set to which it makes reference does not exist. Analogously again, the pair set

[24] The same fate might befall Soc, if (as some believe) the present time did not itself exist when Socrates did. In order to facilitate the exposition I have pretended instead that times (like the present) exist eternally.

The sense in which there is a proposition that Nothan might have been taller than I actually am is troublesome. The fact that it seems to require quantification over objects that could not exist should give one pause. Still, it is difficult to deny that in *some* sense, there are such objects to be quantified over; the proposition that Nothan might have been taller than I actually am is one such. To deny this would be to undertake the burden of explaining how it is either true that Nothan might have been taller than I actually am or true that Nothan could not have been. Either way, the result seems to be a true singular proposition that exists in no possible world. A substitutional interpretation of 'there are' may be called for when impossible objects rear their ugly heads.

{Plato, me} does not exist, never did, and never will. Neither does the proposition that this pair set does not now exist. But it is a definite set with a definite membership, and the proposition is true.

It should be noted that the mentioned impossible objects are not like 'the round square,' which Alexius Meinong claimed had lower-class ontological status, a sort of being shy of existence due to its incompatible properties of shape.[25] What makes the pair set {Nothan-0, Nathan Salmon} and the proposition that Nothan might have been taller than I actually am impossible is not that they have inconsistent or otherwise incompatible properties. As a matter of pure logic, it is provable that nothing has inconsistent properties. An impossible object, like the mentioned pair set or singular proposition, is a complex entity composed of incompossible things. Any composite entity, even one whose components are incompossible, has a perfectly consistent set of attributes. An impossible object is not a Meinongian inconsistent Object. Though it cannot exist, an impossible object's properties are perfectly coherent.

Some might wish to object to the foregoing that, of the nonreferring names mentioned, only 'Socrates' refers to a definite individual, since the reference of the rest is not fixed by the entire history of the universe up to the present moment. There is not yet any objective fact, says the objector, concerning which future individual the name 'Newman-1' names.[26] This objection involves the issue of future contingencies. While a full response cannot be given here, I will provide a brief response that I think adequate to the task at hand. First, the particular example of Newman-1 could be replaced with the introduction of a name for the future result of an in-progress physically and causally determined process. Second, the objection confuses truth with a concept of unpreventability, which entails truth but is not entailed by it. The fact that 'Socrates' has the particular reference it does is now unpreventable. By contrast, perhaps it is still within our power (at least if free will is assumed) to influence who will be the first child born in the twenty-second century. Suppose it is not yet causally (or in some other manner) determined which future person will be born first in the twenty-second century. It does not follow that there is no fact of the matter, or that it is as yet neither true nor false that that future person will be born first in the twenty-second century. Many facts about the future are as yet causally open, still preventable. Suppose I am about to decide whether to listen to Beethoven or Beatles, but have not yet done so. I will either choose Beethoven or I will not. One of these two disjuncts obtains—one of them is a fact—though which one is not yet settled. There is no incompatibility between its not yet being settled which choice I will make and my eventually choosing Beethoven. On the contrary, it's not yet being settled entails that either I will choose Beethoven and it is not yet settled that I will, or else I will decide against Beethoven and that is not yet settled. Either way, there now is a fact concerning my future choice—as yet still preventable but a fact nonetheless. However I choose, although that future choice is still preventable the fact remains (however preventably) that I will make that decision instead of the other.

[25] 'The Theory of Objects,' in R. Chisholm, ed., *Realism and the Background of Phenomenology* (Glencoe, Ill.: The Free Press, 1960), pp. 76–117.

[26] Ilhan Inan brought this possible objection to my attention.

What follows from our assumption is that there is no unpreventable fact concerning whom 'Newman-1' now names, not that there is no fact at all. It is not yet *causally* (or in the other manner) fixed which future individual the name names, but the name's reference is *semantically* fixed. There is—or rather there will be—a fact concerning whom the name names, even if it is still preventable. That fact also does not yet exist, but it is already a fact, and eventually (not yet) it will even be unpreventable. Kaplan fixed the reference of 'Newman-1' *semantically* not by means of the description 'the future person who is unpreventably going to be born first in the twenty-second century', but by 'the future person who *will* be born first in the twenty-second century'. The name's reference is even *causally* fixed to the extent that, given the way in which Kaplan introduced the name, it is already settled that the name now refers to whichever future individual will turn out to be the first child born in the twenty-second century if there will be such an individual (and that the name is nonreferring otherwise). This much about the name is unpreventable (although, of course, the name's semantics can be changed from what it currently is). Though it is not yet causally fixed who will be born first in the twenty-second century, there already is (or rather, there will exist something that is now) a fact, as yet preventable, concerning who it will be. These two facts—one unpreventable, the other still preventable—entail a third fact, itself as yet preventable, concerning whom the name now names.[27] The possible causal indeterminacy, and our present ignorance, concerning who the first child born in the twenty-second century will

[27] The situation can be illustrated by means of a deductively valid argument:

(*P*1) The $\text{referent}_{\text{English}}$ of 'Newman-1' = the first child to be born in the twenty-second century.
(*P*2) The first child to be born in the twenty-second century = Newman-1.

Therefore,

(*C*) The $\text{referent}_{\text{English}}$ of 'Newman-1' = Newman-1.

Assume 'Newman-1' is used as a name of the future person who will be born first in the twenty-second century. (This assumption, of course, begs the question against the objector, but let that pass; I wish to clarify the objector's position from the perspective of one who is not persuaded by the objection.) Then the conclusion (*C*) specifies whom 'Newman-1' names; it states that the name names *that* particular future individual. Think of the argument as consisting not of these sentences, but of the propositions they express. The question at issue is whether (*C*) (the proposition) is already true. The truth or falsity of (*P*2), we are assuming, is not yet causally (or in some other manner) fixed. Equivalently, the result of prefixing the sentence (*P*2) with a temporal/modal operator. 'It is unpreventable that' is false with respect to the present, and likewise the result of prefixing its negation. (Unpreventability is closed under logical consequence.) The objector reasons that since (*P*2) (the proposition) is still preventable, both it and (*C*) are as yet neither true nor false. (The objector will want to say this about (*P*1) as well.) This wrongly assumes that (for propositions of the class in question) truth is the same thing as unpreventability, thus making ⌜It is unpreventable that ϕ⌝ truth-functional, equivalent in a three-valued logic to the double exclusion-negation of ϕ, $\ulcorner\sim_{\text{E}}\sim_{\text{E}}\phi\urcorner$. The truth of (*P*1) is already unpreventable. Contrary to the objector, (*P*2) is also true, even though that fact is still preventable. Therefore (*C*), though preventable, is true.

This same deductive argument illuminates other philosophically interesting issues. I have used it to argue that though (*P*1) is true by semantics done, and is also known by semantics alone, surprisingly (*C*)—which is established by this very argument—is neither. See 'How to Measure the Standard Metre,' *Proceedings of the Aristotelian Society* (New Series), 88, (1987/88), pp. 193–217, at 200–201n10; and 'Analyticity and Apriority,' in J. Tomberlin, ed., *Philosophical Perspectives 7, Language and Logic* (Atascadero, Ca.: Ridgeview, 1993), pp. 125–133, at 133n15.

turn out to be does not impugn the fact that whoever it turns out to be, that one is already the referent of 'Newman-1'. Nor does that future individual's present nonexistence impugn this fact, any more than Socrates's present nonexistence impugns the fact that 'Socrates' refers to him. Socrates's pastness and unpreventability does not bestow on his name any more semantic factuality, or rigidity, than 'Newman-1' enjoys—nor, for that matter, than 'Noman-0' enjoys. There is no more justification for saying that 'Socrates' is semantically superior to 'Newman-1' because Newman-1 is preventable and Socrates is not, than there is for saying that 'Newman-1' is semantically superior to 'Socrates' because Socrates is dead and Newman-1 is not.

Followers of Quine dismiss merely possible objects like Noman on the ground of a lack of clear 'identity conditions.' It is worth noticing that it is causally determined which possible individual would have sprang from gametes *S* and *E*, had they united in the normal manner to form a zygote. If causal determination were important to semantic definiteness, the name 'Noman-0', and even the term '{Nothan-0, Nathan Salmon}', should be semantically definite to a greater degree than 'Newman-1'. Despite its actual nonexistence, there is no problem about the identity conditions of the proposition that Noman does not exist. Nor is there a problem about the identity conditions of Soc. Or at least there is no more problem than there is in the case of the ordered pair consisting of Socrates first, and the temporally indexed property (or concept) of present nonexistence second. A proposition is identical with Soc if and only if it consists of these very same two constituents. Indeed, Soc might even be identified with the ordered pair. If the Principle of Extensionality suffices for giving the 'identity conditions' of sets, then an exactly analogous principle is sufficient for propositions, presently existent and not. Quine and his followers also object to such intensional entities as properties and concepts, and on similar grounds. But the particular property of nonexistence creates no special problems. One may take it to be fully definable by means of the purely logical notions of abstraction, universal quantification, negation, and identity thus: $(\lambda x)(y)[x \neq y]$.[28] There is no legitimate reason for allowing a sentence of the form (4α) to be true by virtue of expressing Soc, but to disallow such a sentence from being true by virtue of expressing the analogous proposition about Noman.

Some may balk at my proposal on the grounds that it conflicts with the metaphysical principle that any object must exist in every conceivable circumstance in which that object has any properties. This principle that existence is a precondition for having properties—that existence precedes suchness—underlies the Kantian doctrine that existence is not itself a property (or 'predicate'). It, like the Kantian doctrine it supports, is a confused and misguided prejudice. Undoubtedly, existence is a prerequisite for a very wide range of ordinary properties—being blue in color, having such-and-such mass, writing *Waverley*. But the sweeping doctrine that existence universally precedes suchness has very clear counterexamples in which an object from one circumstance has properties in another circumstance in virtue of the properties it has in the original circumstance. Socrates does not exist in my present circumstance, yet he has numerous properties here—for example, being mentioned

[28] *Cf.* note 24. The universal quantifier here cannot be substitutional. One of my central tasks in 'Existence' was to investigate the viability of an analysis of existence in terms of standard objectual quantification.

and discussed by me. Walter Scott, who no longer exists, currently has the property of having written *Waverley*. He did exist when he had the property of writing *Waverley*, of course, but as every author knows, the property of writing something is very different from the property of having written it. Among their differences is the fact that the former requires existence. On the doctrine that existence precedes suchness, Scott lacks the property of having written *Waverley* not because he did not write *Waverley* (since he did), but merely because he does not exist. Once it is conceded that Scott wrote *Waverley*, or that Socrates is admired by Jones, etc., what is gained by denying nevertheless that they have these very properties? To satisfy the prejudice, one may simply insist that objects like Socrates that no longer exist can no longer have properties. To do so is to concede that Socrates does not exist. One thereby falsifies the very position insisted upon, by bestowing on Soc the particular property of being conceded (or asserted, agreed upon, presupposed, etc.). As long as it is deemed now true that Socrates does not exist, that is sufficient for the present truth in English of 'Socrates does not exist', granted that 'Socrates does not exist' expresses in English (with respect *t*) that Socrates does not exist (at *t*). It matters little whether it is conceded that Soc has the property Truth—or for that matter whether it is conceded that 'Socrates does not exist' has the corresponding property of being a true sentence of English. And it matters not at all that Soc no longer exists.[29]

IV

Though the realm of 'logical space' may fail to provide clearly problematic examples of true negative existentials, the realms of fiction and myth may fare better. Let the α

[29] *Cf.* 'Existence,' pp. 90–97. Alvin Plantinga calls the doctrine that everything exists in any possible world in which it has properties *serious actualism*, in 'De Essentia,' in E. Sosa, ed., *Essays on the Philosophy of Roderick M. Chisholm* (Amsterdam: Rodopi, 1979), pp. 101–121, at 108–109. By analogy, *serious presentism* would be the corresponding temporal doctrine that everything exists at any time at which it has properties. The doctrine that existence precedes suchness encompasses both serious actualism and serious presentism. Kripke says that the doctrine that existence is not itself a property but a prerequisite for having any properties, though rather obscure, seems to him in some sense true. The doctrine seems to me erroneous on both counts. What can a pre-condition for a given property be if not another property?

Joseph Almog, in 'The Subject-Predicate Class I,' *Noûs*, 25 (1991), pp. 591–619, objects to my view that 'Socrates does not exist' is true in English in virtue of expressing a true singular proposition, on the ground that no sentence can be made true by Soc's being the case since Soc no longer exists. Instead, he asserts (influenced by Donnellan—see note 19) that the sentence is true because 'Socrates' refers to Socrates, who does not exist (pp. 604–607; *Cf.* Donnellan, pp. 7–8). Far from solving the problem, skepticism about propositions only makes matters worse: A sentence that mentions Socrates but expresses nothing whatever about him cannot have truth value, let alone truth. In order for a sentence to be true, what it expresses must be the case; this is what truth for sentences consists in. (Curiously, Almog seems to concede this, just one page after objecting to my view.) Further, as Frege and Church argued, 'Jones believes that Socrates does not exist', if true, requires something for Jones to believe. A genuine solution requires genuine semantic content. Worse still, Almog's purported solution is inconsistent. If Soc cannot be true only because it does not exist, then for exactly the same reason Socrates cannot be referred to—the name 'Socrates' *is* nonreferring, however weakly—and we are left with nothing that accounts for the truth in English of 'Socrates does not exist'. But Socrates is referred to, warts and all, and Soc is the case (and in addition is expressed, believed, known, etc.).

in (3α) and (4α) be a name from fiction, for example 'Sherlock Holmes'. It is a traditional view in philosophy, and indeed it is plain common sense, that (3α) is then false and (4α) = (0) true, when taken as statements about reality. For 'Sherlock Holmes', as a name for the celebrated detective, is a *very strongly* or *thoroughly nonreferring* name, one that does not in reality have any referent at all—past, present, future, forever merely possible, or even forever impossible. Bertrand Russell lent an eloquent voice to this common-sense view:

> [M]any logicians have been driven to the conclusion that there are unreal objects. . . . In such theories, it seems to me, there is a failure of that feeling for reality which ought to be preserved even in the most abstract studies. Logic, I should maintain, must no more admit a unicorn than zoology can; for logic is concerned with the real world just as truly as zoology, though with its more abstract and general features. To say that unicorns have an existence in heraldry, or in literature, or in imagination, is a most pitiful and paltry evasion. What exists in heraldry is not an animal, made of flesh and blood, moving and breathing of its own initiative. What exists is a picture, or a description in words. Similarly, to maintain that Hamlet, for example, exists in his own world, namely in the world of Shakespeare's imagination, just as truly as (say) Napoleon existed in the ordinary world, is to say something deliberately confusing, or else confused to a degree which is scarcely credible. There is only one world, the 'real' world: Shakespeare's imagination is part of it, and the thoughts that he had in writing *Hamlet* are real. So are the thoughts that we have in reading the play. But it is of the very essence of fiction that only the thoughts, feelings, etc., in Shakespeare and his readers are real, and that there is not, in addition to them, an objective Hamlet. When you have taken account of all the feelings roused by Napoleon in writers and readers of history, you have not touched the actual man; but in the case of Hamlet you have come to the end of him. If no one thought about Hamlet, there would be nothing left of him; if no one had thought about Napoleon, he would have soon seen to it that some one did. The sense of reality is vital in logic, and whoever juggles with it by pretending that Hamlet has another kind of reality is doing a disservice to thought. A robust sense of reality is very necessary in framing a correct analysis of propositions about unicorns, golden mountains, round squares, and other such pseudo-objects.[30]

Contemporary philosophy has uncovered that, unlike 'Noman', a name from fiction does not even name a merely possible object. Thus Kripke writes:

> The mere discovery that there was indeed a detective with exploits like those of Sherlock Holmes would not show that Conan Doyle was writing *about* this man; it is theoretically possible, though in practice fantastically unlikely, that Doyle was writing pure fiction with only a coincidental resemblance to the actual man. . . . Similarly, I hold the metaphysical view that, granted that there is no Sherlock Holmes, one cannot say of any possible person, that he *would have been* Sherlock Holmes, had he existed. Several distinct possible people, and even actual ones such as Darwin or Jack the Ripper, might have performed the exploits of Holmes, but there is none of whom we can say that he would have *been* Holmes had he performed these exploits. For if so, which one?
>
> I thus could no longer write, as I once did, that 'Holmes does not exist, but in other states of affairs, he would have existed' (*Naming and Necessity*, Harvard University Press, 1972, 1980, pp. 157–158).

[30] *Introduction to Mathematical Philosophy* (London: Allen and Unwin, 1919), at pp. 169–170. *Cf.* Russell's *The Philosophy of Logical Atomism*, D. Pears, ed. (La Salle, Ill.: Open Court, 1918, 1972, 1985), at pp. 87–88.

It is not merely true that Sherlock Holmes does not exist, it is a necessary truth. On Kripke's view, the name 'Sherlock Holmes' is a rigid *non*designator, designating nothing—not even a merely possible thing—with respect to every possible world. In a similar vein, Kaplan says:

> The myth [of Pegasus] is possible in the sense that there is a possible world in which it is truthfully *told*. Furthermore, there are such worlds in which the language, with the exception of the proper names in question, is semantically and syntactically identical with our own. Let us call such possible worlds of the myth, '*M* worlds'. In each *M* world, the name 'Pegasus' will have originated in a dubbing of a winged horse. The Friend of Fiction, who would not have anyone believe the myth . . . , but yet talks of Pegasus, pretends to be in an *M* world and speaks its language.
>
> But beware the confusion of our language with theirs! If *w* is an *M* world, then *their* name 'Pegasus' will denote something with respect to *w*, and *our* description 'the *x* such that *x* is called "Pegasus" will denote the same thing with respect to *w*, but *our* name 'Pegasus' will still denote nothing with respect to *w*. . . .
>
> To summarize. It has been thought that proper names like 'Pegasus' and 'Hamlet' were like 'Aristotle' and 'Newman-1', except that the individuals denoted by the former were more remote. But regarded as names of *our* language—introduced by successful or unsuccessful dubbings, or just made up—the latter denote and the former do not.[31]

The passage closes with a 'Homework Problem': If the foregoing account of names deriving from fiction is correct, how could a sentence like (0) be true? Our task is to examine this very problem from a Millian perspective.

We begin with a plausible theory of fiction and its objects. Saul Kripke and Peter van Inwagen have argued, independently, and persuasively, that wholly fictional characters should be regarded as real things.[32] Theirs is not a Meinongian view—one of Russell's targets in the passage quoted above—on which any manner of proper name or definite description, including such terms as 'the golden mountain' and 'the round square', refers to some Object, though the Object may not exist in any robust

[31] From appendix XI, 'Names from Fiction,' of 'Bob and Carol and Ted and Alice,', at pp. 505–508. Kaplan credits John Bennett in connection with this passage. The same general argument occurs in Donnellan, at pp. 24–25, and in Plantinga, *The Nature of Necessity* (Oxford University Press, 1974), section VIII.4, 'Names: Their Function in Fiction,' at pp. 159–163.

[32] Kripke, *Reference and Existence: The John Locke Lectures for 1973* (Oxford University Press, unpublished); van Inwagen, 'Creatures of Fiction,' *American Philosophical Quarterly*, 14, 4 (October 1977), pp. 299–308, and 'Fiction and Metaphysics,' *Philosophy and Literature*, 7, 1 (Spring 1983), pp. 67–77. One possible difference between them is that van Inwagen accepts an ontology of fictional characters whereas Kripke is instead merely unveiling an ontology that he argues is assumed in the way we speak about fiction while remaining neutral on the question of whether this manner of speaking accurately reflects reality. My interpretation of Kripke is based partly on notes I took at his seminars on the topic of reference and fiction at Princeton University during March-April 1981 and on recordings of his seminars at the University of California, Riverside in January 1983. See also Kit Fine, 'The Problem of Non-Existence: I. Internalism,' *Topoi*, 1 (1982), pp. 97–140; Thomas G. Pavel, *Fictional Worlds* (Harvard University Press, 1986); Amie Thomasson, 'Fiction, Modality and Dependent Abstracta,' *Philosophical Studies*, 84 (1996), pp. 295–320; Nicholas Wolterstorff, *Works and Worlds of Art* (Oxford University Press, 1980). Various articles on the philosophy and logic of fiction are collected together in *Poetics*, 8, 1/2 (April 1979)—see especially Robert Howell, 'Fictional Objects: How They Are and How They Aren't,' pp. 129–177—and in Peter McCormick, ed., *Reasons of Art* (University of Ottawa Press, 1985).

sense and may instead have only a lower class ontological status (and, as in the case of the round square, may even have inconsistent properties).[33] To be sure, wholly fictional characters like Sherlock Holmes, though real, are not real people. Neither physical objects nor mental objects, instead they are, in this sense, abstract entities. They are not eternal entities, like numbers; they are man-made artifacts created by fiction writers. But they exist just as robustly as the fictions themselves, the novels, stories, etc. in which they occur. Indeed, fictional characters have the same ontological status as the fictions, which are also abstract entities created by their authors. And certain things are true of these fictional characters—for example, that the protagonist of the *Sherlock Holmes* stories was inspired in part by an uncannily perceptive person of Sir Arthur Conan Doyle's acquaintance.

On this theory, a negative existential like (0), taken as making an assertion about the fictional character and taken literally, denies real existence of a real fictional character, and is therefore false. Yes, Virginia, there is a Sherlock Holmes. In fact, Holmes may well be the most famous of all fictional characters in existence. The same sentence, understood as making an assertion about the fictional character, may be open to a more charitable and plausible interpretation, albeit a nonliteral one. Perhaps one may reinterpret the predicate 'exists', for example, to mean *real*, in something like the sense: *not merely a character in the story, but an entity of just the sort depicted*. Then (0) may be understood, quite plausibly, as making an assertion that the character of Sherlock Holmes is a wholly fictional man, not a real one. That is to say, there is a fiction in which Holmes is a man of flesh and blood, but in reality Holmes is merely a fictional character. On this Pickwickian reading, the sentence is indeed true. But it is then not an authentic negative existential, and thus generates no special problem for Millianism, let alone for direct-reference theory.[34]

Our homework problem is not yet solved. How can this talk about the fictional character of Sherlock Holmes as a real entity be reconciled with the passage from Kripke quoted above, in which he appears to agree with Kaplan and Russell that 'Sherlock Holmes' is nonreferring?

On Kripke's account, use of the name 'Sherlock Holmes' to refer to the fictional character is in a certain sense parasitic on a prior, more fundamental use not as a name for the fictional character. Kripke and van Inwagen emphasize that the author of a fiction does not assert anything in writing the fiction. Instead, Kripke, like Kaplan, says that Conan Doyle merely *pretended* to be referring to someone in using the name 'Sherlock Holmes' and to be asserting things, expressing propositions, about him. A fiction purports to be an accurate historical recounting of real events involving real people. Of course, the author typically does not attempt to deceive the audience that the pretense is anything but a pretense; instead the fiction merely goes through the motions (hoaxes like Orson Welles's radio broadcast of H. G. Wells's

[33] *Cf.* Terence Parsons, 'A Meinongian Analysis of Fictional Objects,' *Grazer Philosophische Studien*, 1 (1975), pp. 73–86, and *Nonexistent Objects* (New Haven: Yale University Press, 1980).

[34] *Cf.* Van Inwagen, at p. 308n11. Kripke argues against any interpretation of (0) on which the name is used as a name of the fictional character but 'exist' receives a Pickwickian interpretation on which the sentence is true. I am somewhat less skeptical. See below, especially note 48. (Van Inwagen's suggestion is neutral between this sort of account and the one proposed below.)

The War of the Worlds and the legend of Santa Claus being the exceptions that prove the rule). Frege expressed the basic idea as follows:

> Assertions in fiction are not to be taken seriously: they are only mock assertions. Even the thoughts are not to be taken seriously as in the sciences: they are only mock thoughts. If Schiller's *Don Carlos* were to be regarded as a piece of history, then to a large extent the drama would be false. But a work of fiction is not meant to be taken seriously in this way at all: it's all play.[35]

According to Kripke, as the name 'Sherlock Holmes' was originally introduced and used by Conan Doyle, it has no referent whatsoever. It is a name in the make-believe world of storytelling, part of an elaborate pretense. By Kripke's lights, our language licenses a certain kind of metaphysical move. It postulates an abstract artifact, the fictional character, as a product of this pretense. But the name 'Sherlock Holmes' does not thereby refer to the character thereby postulated, nor for that matter to anything else, and the sentences involving the name 'Sherlock Holmes' that were written in creating the fiction express no propositions, about the fictional character or anything else. They are all part of the pretense, like the actors' lines in the performance of a play. It is only at a later stage when discussing the fictional character from a standpoint outside of the fiction, speaking about the pretense and not within it, that the language makes a second move, this one semantical rather than metaphysical, giving the name a new, non-pretend use as a name for the fictional character. The language allows a grammatical transformation, says Kripke, of a fictional name for a person into a name of a fictional person. Similarly van Inwagen writes, 'we have embodied in our rules for talking about fiction a convention that says that a creature of fiction *may* be referred to by what is (loosely speaking) "the name it has in the story" ' (p. 307*n*). On this account, the name 'Sherlock Holmes' is ambiguous. In its original use as a name for a human being—its use by Conan Doyle in writing the fiction, and presumably by the reader reading the fiction—it merely pretends to name someone and actually names nothing at all. But in its nonpretend use as a name for the fictional character thereby created by Conan Doyle, it genuinely refers to that particular artifactual entity. In effect, there are two names. Though spelled the same, they would be better spelled differently, as 'Holmes$_1$' for the man and 'Holmes$_2$' for the fictional character. Neither names a real man. The latter names an abstract artifact, the former nothing at all. It is the original, thoroughly nonreferring use of 'Sherlock Holmes'—its use in the same way as 'Holmes$_1$'—that Kaplan, Kripke, and Russell emphasize in the passages quoted.

Kripke's theory involves a complex account of sentences from fiction and myth, like 'Sherlock Holmes plays the violin' and 'Pegasus has wings' (*cf.* (1α)). I shall call these sentences *object-fictional*, to be contrasted with *meta-fictional* sentences like 'According to the stories, Sherlock Holmes plays the violin'. On Kripke's view, object-fictional sentences are multiply ambiguous, as a result of the two uses of the

[35] 'Logic,' in Frege's *Posthumous Writings*, at p. 130. See also Kendall L. Walton, 'On Fearing Fictions,' *Journal of Philosophy*, 75 (1978), pp. 5–27; and *Mimesis As Make-Believe: On the Foundations of the Representational Arts* (Cambridge, Mass.: Harvard University Press, 1990).

names and of differing perspectives from within and without the fiction or myth. Using the name in 'Sherlock Holmes plays the violin' in the manner of 'Holmes$_1$' as the pretend name of a pretend man, and using the sentence to make a statement not within the pretense and instead about the real world outside the fiction, the sentence expresses nothing and is therefore not literally true. (See note 19.) But object-fictional sentences may also be used from within the fiction, as part of the general pretense of an accurate, factual recounting of real events, not to be mistaken as a 'time out' reality check. Interpreted thus, the sentence 'Holmes plays the violin' is a correct depiction, part of the storytelling language-game. So used, the sentence may be counted 'true' in an extended sense—truth *in the fiction*, as we might call it—conforming to a convention of counting an object-fictional sentence 'true' or 'false' according as the sentence is true or false in, or according to, the fiction. This is the sense in which the sentence should be marked 'true' on a true–false test in English Lit 101.[36] Alternatively, the name may be used in the manner of 'Holmes$_2$' as a name for the fictional character. With the name so used, and the sentence used as a statement not about the fiction but about reality, it is false; no abstract entity can play a musical instrument. On the other hand, according to Kripke, we also have an extended use of predicates, on which 'plays the violin' correctly applies to an abstract entity when it is a character from a fiction according to which the corresponding fictional person plays the violin. Giving the name its use as a name of the fictional character, and understanding the predicate 'plays the violin' in this extended sense, the sentence is true. According to the stories, Holmes$_1$ plays the violin. In virtue of that fact we may say that Holmes$_2$ 'plays the violin.' The truth conditions of the sentence on this reading are exactly the same as the conventional truth-in-the-fiction conditions of the sentence interpreted as 'Holmes$_1$ plays the violin'. But they differ in meaning. The former invokes a new interpretation for both subject and predicate.[37]

Viewing the negative existential (0) on this same model, it has various interpretations on which it is false. Interpreted in the sense of 'Holmes$_1$ does not exist', it is like 'Holmes$_1$ does not play the violin' in pretending to express a proposition that is false in the fiction. The sentence should be marked 'false' on a true-false quiz about

[36] Kripke recognizes that this is generally equivalent, in some sense, to treating an object-fictional sentence ϕ as implicitly shorthand for the meta-fictional ⌜According to the fiction, ϕ⌝, and evaluating it as true or false accordingly. But he says that he prefers to regard it as applying 'true' and 'false' in conventionally extended senses directly to object-fictional sentences themselves in their original senses. *Cf.* David Lewis, 'Truth in Fiction,' *American Philosophical Quarterly*, 15 (1978), pp. 37–46; reprinted with postscripts in Lewis's *Philosophical Papers: Volume I* (Oxford University Press, 1983), pp. 261–280.

[37] Kripke cautions that when one is merely pretending to refer to a human being in using a name from fiction, that pretense does not in and of itself involve naming a fictional character. On the contrary, such a pretense was involved in the very creation of the as yet unnamed fictional character. He also remarks that an object-fictional sentence like 'Sherlock Holmes plays the violin' would be counted true in the conventionally extended 'according to the fiction' sense even if the name had only its 'Holmes$_1$' use and the language had not postulated fictional characters as objects. van Inwagen (pp. 305–306) invokes a notion of a fiction 'ascribing' a property to a character, but admits that his terminology is misleading. He does not explain his notion of *ascription* in terms of what sentences within the fiction express, since such sentences on his view (as on Kripke's) do not mention fictional characters and express nothing at all. Nor does he explain this kind of ascription in any other terms. Instead the notion is an undefined; primitive of the theory.

the *Sherlock Holmes* stories. Interpreted in the sense of 'Holmes$_2$ does not exist', the predicate 'exist' may be given its literal sense, or alternatively it may be given its extended sense on which it applies to a fictional character if and only according to the relevant fiction the corresponding person exists. Either way the sentence is false. The fictional character exists, and moreover the corresponding person exists according to the stories. But now read (0) again in the sense of 'Holmes$_1$ does not exist', and this time take it not as a statement within the fiction but as a statement about the real world. Then it is significantly unlike 'Holmes$_1$ does not play the violin', which expresses nothing about the real world outside the fiction. For 'Holmes$_1$ does not exist', according to Kripke, is in reality quite true. On this interpretation, the sentence is regarded by Kripke, as by traditional philosophy, as an authentic true negative existential with a thoroughly nonreferring subject term.

This was our primary concern. We have attempted to deal with the problem of negative existentials by concentrating on 'Holmes$_2$ does not exist'. But it is Holmes$_1$, not Holmes$_2$, who literally does not exist. The homework problem requires more work. Kripke says that it is 'perhaps the worst problem in the area.'

By way of a possible solution, Kripke proposes that (0) should not be viewed on the model of 'Holmes$_1$ plays the violin', understood as a statement about the real world—and which thereby expresses nothing—but instead as a special kind of speech act. Consider first the object-fictional sentence 'Sherlock Holmes does not play the violin', in the sense of 'Holmes$_1$ does not play the violin' construed as a statement about reality (*cf.* (2α)). One may utter this sentence even if one is uncertain whether Holmes$_1$ is a real person, in order to make the cautious claim that either there is no such person as Holmes$_1$ or there is but he does not play the violin. In that case, the assertion is tantamount to saying that either there is no proposition that Holmes$_1$ plays the violin, or there is such a proposition but it is not true. In short, the sentence is interpreted as meaning *there is no true proposition that Holmes$_1$ plays the violin*. A similar cautious interpretation is available whenever negation is employed.

Kripke extends this same interpretation to singular negative existentials. He proposes that whenever one utters any sentence of the form (4α) from the standpoint of the real world, what one really means is better expressed by ⌜There is no true proposition that α exists⌝. What is meant may be true on either of two very different grounds: (*i*) the mentioned proposition is not true; (*ii*) there is no such proposition. If α is 'the present king of France', so that (4α) is (4), then what one is really saying—that there is no true proposition that the present king of France exists—is true for the former reason; it is false that the present king of France exists. If (4α) is (0) with 'Sherlock Holmes' in its 'Holmes$_1$' use, then what one is really saying—that there is no true proposition that Holmes$_1$ exists—is true for the latter reason. Kripke's is not a theory that takes (4α) to express that (3α) is not true$_{\text{English}}$. Semantic-ascent theories are notoriously vulnerable to refutation (as by the Church translation argument). Instead Kripke takes (4α) to express that there is no true proposition of a certain sort, if only because there is no proposition. This is closer to the intensional-ascent theory of existence—with a wink and a nod in the direction of Millianism.

Kripke extends this account to mistaken theories. He explicitly mentions the case of the fictitious intra-Mercurial planet Vulcan, hypothesized and named by Jacques

Babinet in 1846 and later thought by Urbain Le Verrier to explain an irregularity in the orbit of Mercury. The irregularity was eventually explained by the general theory of relativity.[38] Though the Vulcan hypothesis turned out to be a mistake, it nevertheless bore existent fruit—not in the form of a massive physical object, but a man-made abstract entity of the same ontological status as Holmes_2. Vulcan even has explanatory value. It accounts not for Mercury's perihelion, but for the truth in English of 'A hypothetical planet was postulated to explain Mercury's irregular orbit'. In introducing the name 'Vulcan', Babinet meant to introduce a name for a planet, not an abstract artifact. His intentions were thwarted on both counts. Kripke holds that the dubbing ultimately resulted in two distinct uses of the name—in effect two names, 'Vulcan_1' and 'Vulcan_2'—the first as a name for an intra-Mercurial planet, and consequently thoroughly nonreferring, the second as a name of Babinet's creation. (Presumably these two uses are supposed to be different from two other pairs of uses, corresponding to the fire god of Roman mythology and Mr. Spock's native planet in *Star Trek*.) When it is said that Vulcan_1 does not influence Mercury's orbit, and that Vulcan_1 does not exist, what is meant is that there are no true propositions that Vulcan_1 influences Mercury or that Vulcan_1 exists.

The motivation for Kripke's intensional ascent is obscure. In any event, the account fails to solve the problem. The 'that' clauses 'that Holmes_1 plays the violin' and 'that Holmes_1 exists' are no less problematic than 'Holmes_1' itself. Kripke concedes, in effect, that if α is a thoroughly nonreferring name, then propositional terms like ⌜the proposition that α is bald⌝ are also thoroughly non-referring. The account thus analyzes a negative existential by means of another negative existential, generating an infinite regress with the same problem arising at each stage: If α is a thoroughly nonreferring name, how can ⌜There is no proposition that α is bald⌝ express anything at all, let alone something true (let alone a necessary truth)? To give an analogy, a proposal to analyze (4α) as ⌜Either $\{\alpha\}$ is empty or it does not exist⌝ yields no solution to the problem of how (4α) can express anything true. Even if the analysans has the right truth conditions (the first disjunct may be true if α is an improper definite description, the second is true if α is a nonreferring simple term), it also invokes a disjunct that is of the form of (4α) itself, and it leaves unsolved the mystery of how either disjunct can express anything if α is a thoroughly nonreferring name.[39]

[38] Babinet hypothesized Vulcan for reasons different than Le Verrier's. See Warren Zachary Watson, *An Historical Analysis of the Theoretical Solutions to the Problem of the Perihelion of Mercury* (doctoral dissertation, Ann Arbor, Mich: University Microfilms, 1969), pp. viii, 92–94; and N. T. Roseveare, *Mercury's Perihelion: From Le Verrier to Einstein* (Oxford University Press, 1982), at pp. 24–27. (Thanks to Alan Berger and Sidney Morgenbesser for bibliographical assistance. I also researched the Vulcan hypothesis on the Internet. When I moved to save material to a new file to be named 'Vulcan', the program responded as usual, only this time signaling a momentous occasion: Vulcan doesn't exist. Create? Y or N.)

[39] As Kripke intends the construction ⌜There is no such thing as α⌝, it seems close in meaning to (8α). In our problem case, α is 'the proposition that Holmes_1' exists'. Since the 'that' prefix is itself a device for sense-quotation (see note 17), 'Holmes_1' would thus occur in a doubly *ungerade* context. It may be, therefore, that Kripke's intensional-ascent theory presupposes (or otherwise requires) a thesis that proper names have a Fregean *ungerade Sinn*, or *indirect sense*, which typically determines the name's referent, the latter functioning as both customary content and customary referent, but

There is more. On the account proposed by Kaplan, Kripke, and van Inwagen, object-fictional sentences, like 'Sherlock Holmes plays the violin', have no genuine semantic content in their original use. This renders the meaningfulness of true meta-fictional sentences like 'According to the *Sherlock Holmes* stories, Holmes plays the violin' problematic and mysterious. (See note 37.) On Kripke's account, it is true that according to the stories Holmes_1 plays the violin, and that on Le Verrier's theory Vulcan_1 influences Mercury's orbit. But how can this be if there is no proposition that Holmes_1 plays the violin and no proposition that Vulcan_1 influences Mercury? What is it that is the case according to the stories or the theory? How can Le Verrier have believed something that is nothing at all? If object-fictional sentences like 'Holmes_1 plays the violin' express nothing and only pretend to express things, how can they be true with respect (or 'according') to the fiction, and how can meta-fictional sentences involving object-fictional subordinate clauses express anything at all, let alone something true?

More puzzling still are such cross-realm statements as 'Sherlock Holmes was cleverer than Bertrand Russell', and even worse, 'Sherlock Holmes was cleverer than Hercule Poirot'. The account as it stands seems to invoke some sort of intensional use of 'Sherlock Holmes', whereby the name is not only ambiguous between 'Holmes_1' and 'Holmes_2', but also accompanying the former use is something like an *ungerade* use, arising in constructions like 'According to the stories, Holmes_1 plays the violin', on which the name refers to a particular concept—presumably something like: *the brilliant detective who performed such and such exploits*. Kripke acknowledges this, calling it a 'special sort of quasi-intensional use.' The account thus ultimately involves an intensional apparatus. Indeed, it appears to involve industrial strength intensional machinery of a sort that is spurned by direct-reference theory, and by the very account itself. Further, the intensionality seems to get matters wrong. First, it seems to give us after all a proposition that Holmes_1 plays the violin, a proposition that Vulcan_1 influences Mercury, etc.—those things that are the case (or not) according to stories or believed by the theorist. Worse, depending on how the *ungerade* use of 'Holmes_1' is explained, it could turn out that if there were someone with many of the attributes described in the *Sherlock Holmes* stories, including various exploits much like those recounted, then there would be *true* propositions that Holmes_1 existed, that he played the violin, etc. It could even turn out that if by an extraordinary coincidence there was *in fact* some detective who was very Holmesesque, then even though Holmes_2 was purely fictional and not based in any way on this real person, there *are* nevertheless true propositions that Holmes_1 existed, played the violin, etc. The theory threatens to entail that the question of Holmes's authenticity (in the intended sense) would be settled affirmatively by the discovery of someone who was significantly Holmesesque, even if this person was otherwise unconnected to Conan Doyle. If the theory has consequences like these, then it directly contradicts the compelling passage of Kripke's quoted above, if not

which in the case of a thoroughly nonreferring name determines nothing. This would provide a reason for intensional ascent; one hits pay dirt by climbing above customary content. Kripke's theory would then involve Fregean intensional machinery that direct reference scrupulously avoids and Millianism altogether prohibits.

also itself. Kripke expresses misgivings about the theory, acknowledging that the required 'quasi-intensional' use of a name from fiction needs explanation.[40]

V

One may well demur from these tenets of Kripke's otherwise compelling account. One need not claim, as Kripke does, that a name like 'Sherlock Holmes' is ambiguous. In particular, there is no obvious necessity to posit a use of the name by Conan Doyle and his readers that is nonreferring (in any sense) and somehow prior to its use as a name for the fictional character and upon which the latter use is parasitic. There is first a general methodological consideration. Once fictional characters have been countenanced as real entities, why hold onto an alleged use of their names that fails to refer to them? It is like buying a luxurious Italian sports car only to keep it garaged. I do not advocate driving recklessly, but I do advise that having paid for the car one should permit oneself to drive it, at least on special occasions.

There is a more decisive consideration. The alleged use of 'Sherlock Holmes' on which it is thoroughly nonreferring was supposed to be a pretend use, not a real one. In writing the *Holmes* stories, Conan Doyle did not genuinely use the name at all, at least not as a name for a man. He merely pretended to. Of course, Conan Doyle

[40] *Cf.* Gareth Evans, *The Varieties of Reference*, J. McDowell, ed. (Oxford University Press, 1982), at pp. 349–352. See also note 2 above. The kind of intensionality required on Kripke's account is not merely pragmatic in nature. Taking account of note 39, the account may be steeped in intensionality. The danger of entailing such consequences as those noted is very real. The theory of fiction in Lewis, is similar to Kripke's in requiring something like an *ungerade* use for thoroughly nonreferring names from fiction. Lewis embraces the conclusion that 'the sense of "Sherlock Holmes" as we use it is such that, for any world *w* where the Holmes stories are told as known fact rather than fiction, the name denotes at *w* whichever inhabitant of *w* it is who there plays the role of Holmes' (p. 267 of his *Philosophical Papers, I*). A similar conclusion is also reached in Robert Stalnaker, 'Assertion,' P. Cole, ed., *Syntax and Semantics, 9: Semantics* (New York: Academic Press, 1978), pp.315–332, at 329–331. These conclusions directly contradict Kripke's account of proper names as rigid designators. In the first of the Locke Lectures, Kripke argues that uniquely being Holmesesque is not sufficient to be Holmes. Further, Kripke also argues there that the phenomenon of fiction cannot yield considerations against this or that particular philosophico-semantic theory of names, since it is part of the fiction's pretense, for the theorist, that the theory's 'criteria for naming, whatever they are, are satisfied.' Why should this not extend to the thesis, from direct-reference theory, that names lack Kripke's hypothesized 'quasi-intensional use'?

Donnellan, regards negative existentials as unlike other object-fictional sentences, though his solution differs significantly from Kripke's and is designed to avoid intensionality. Donnellan provides a criterion whereby if α and β are distinct names from fiction, then (in effect) the corresponding true negative existentials, taken in the sense of $\ulcorner \alpha_1$ does not exist$\urcorner$ and $\ulcorner \beta_1$ does not exist$\urcorner$ as literally true statements about reality, express the same proposition if and only if α_2 and β_2 name the same fictional character. (I have taken enormous liberties in formulating Donnellan's criterion in terms of Kripke's apparatus, but I believe I do not do any serious injustice.) This proposal fails to provide the proposition expressed. In fact, Donnellan concedes that 'we cannot . . . preserve a clear notion of what proposition is expressed for existence statements involving proper names' (p. 29; see note 19 above). This fails to solve the original problem, which is even more pressing for Donnellan. How can such sentences be said to 'express the same proposition' when by his lights neither sentence clearly expresses any proposition at all? *Cf.* note 29.

wrote the name down as part of sentences in the course of writing the *Holmes* stories. In that sense he used the name. This is like the use that stage or film actors make of sentences when reciting their lines during the performance of a play or the filming of a movie. It is not a use whereby the one speaking commits him/herself to the propositions expressed. Even when writing 'London' or 'Scotland Yard' in a *Holmes* story, Conan Doyle was not in any robust sense using these names to refer. As J. O. Urmson notes, when Jane Austen, in writing a novel, writes a sentence beginning with a fictional character's name,

> [i]t is not that there is a reference to a fictional object, nor is there the use of a referring expression which fails to secure reference (as when one says "That man over there is tall" when there is no man over there). Jane Austen writes a sentence which has the form of an assertion beginning with a reference, but is in fact neither asserting nor referring; therefore she is not referring to any character, fictional or otherwise, nor does she fail to secure reference, except in the jejune sense in which if I sneeze or open a door I fail to secure reference. Nothing would have counted on this occasion as securing reference, and to suppose it could is to be under the impression that Miss Austen was writing history. . . . I do not say that one cannot refer to a fictional character, but that Miss Austen did not on the occasion under discussion.
>
> What I am saying is that making up fiction is not a case of stating, or asserting, or propounding a proposition and includes no acts such as referring. ("Fiction," *American Philosophical Quarterly*, 13, 2 (April 1976), pp. 153–157 at p. 155)

The pretend use of 'Sherlock Holmes' by Conan Doyle does not have to be regarded as generating a use of the name on which it is nonreferring. *Pace* Kaplan, Kripke, Russell, and traditional philosophy, it *should* not be so regarded. A name semantically refers to this or that individual only relative to a particular kind of use, a particular purpose for which the name was introduced. One might go so far as to say that a pretend use by itself does not even give rise to a real name at all, any more than it gives birth to a real detective. This may be somewhat overstated, but its spirit and flavor is not.[41] Even if one regards a name as something that exists independently of its introduction into language (as is my inclination), it is a confusion to think of a name as referring, or not referring, other than as doing so *on* a particular use. On this view, a common name like 'Adam Smith' refers to different individuals on different uses. The problem with saying that 'Sherlock Holmes' is nonreferring on Conan Doyle's use is that in merely pretending that the name had a particular use, no real use was yet attached to the name on which it may be said to refer or not to refer.

The matter should be viewed instead as follows: Conan Doyle one fine day set about to tell a story. In the process he created a fictional character as the protagonist, and other fictional characters as well, each playing a certain role in the story. These characters, like the story itself, are man-made abstract artifacts, born of Conan Doyle's fertile imagination. The name 'Sherlock Holmes' was originally coined by Conan Doyle in writing the story (and subsequently understood by readers reading the *Holmes* stories) as the fictional name for the protagonist. That thing—in fact

[41] C. J. F. Williams, in *What is Existence?* (Oxford University Press, 1981), argues that 'Sherlock Holmes' is not a proper name (pp. 251–255). This is what Kaplan ought to have said, but he did not. See his 'Words,' *Proceedings of the Aristotelian Society*, 64 (1990), pp. 93–119, especially section II, 'What are Names?' at pp. 110–119.

merely an abstract artifact—is *according to the story*, a man by the name of 'Sherlock Holmes'. In telling the story, Conan Doyle pretends to use the name to refer to its fictional referent (and to use 'Scotland Yard' to refer to Scotland Yard)—or rather, he pretends to be Dr. Watson using 'Sherlock Holmes', much like an actor portraying Dr. Watson on stage. But he does not really so use the name; 'Sherlock Holmes' so far does not really have any such use, or even any related use (ignoring unrelated uses it coincidentally might have had). At a later stage, use of the name is imported from the fiction into reality, to name *the very same thing* that it is the name of according to the story. That thing—now the real as well as the fictional bearer of the name—is according to the story a human being who is a brilliant detective, and in reality an artifactual abstract entity created by Conan Doyle.

The use of 'Sherlock Holmes' represented by 'Holmes_2', as the name for what is in reality an abstract artifact, is the same use it has according to the *Holmes* stories, except that according to the stories, that use is one on which it refers to a man. The alleged thoroughly nonreferring use of 'Sherlock Holmes' by Conan Doyle, as a pretend name for a man, is a myth. Contrary to Kaplan, Kripke, *et al.*, there is no literal use of 'Sherlock Holmes' that corresponds to 'Holmes_1'—or at least I know of no convincing reason to suppose that there is one. One might say (in the spirit of the van Inwagen-Kripke theory) that there is a mythical use represented by 'Holmes_1', an allegedly thoroughly nonreferring use that pretends to name a brilliant detective who performed such-and-such exploits. This kind of use is fictitious in the same way that Sherlock Holmes himself is, no more a genuine use than a fictional detective is a genuine detective. Instead there is at first only the pretense of a use, including the pretense that the name refers to a brilliant detective, a human being, on that use. Later the name is given a genuine use, on which it names the very same entity that it named according to the pretense, though the pretense that this entity is a human being has been dropped.

Literary scholars discussing the *Holmes* stories with all seriousness may utter the name 'Sherlock Holmes' as if to import its pretend use as the name of a man into genuine discourse—as when a Holmes 'biographer' says, 'Based on the evidence, Holmes was not completely asexual.' Even then, the scholars are merely pretending to use the name as a name for a man. There is no flesh-and-blood man for the name to name, and the scholars know that.[42] If they are genuinely using the name, they are using it as a name for the fictional character. The only genuine, nonpretend use that we ever give the name—of which I feel confident—is as a name for the character. And that use, as a name for that very thing, is the very use it has in the story—though according to the story, that very thing is a human being and not an abstract entity. Conan Doyle may have used the name for a period even before the character was fully developed. Even so, this would not clearly be a genuine use of the name on which it was altogether nonreferring. For it is at least arguable that if that was a

[42] What about a foggy headed literary theorist who maintains, as a sophomoric anti-realist or Meinongian philosophical view (or quasi-philosophical view), that Sherlock Holmes is in some sense no less flesh-and-blood than Conan Doyle? The more bizarre is someone's philosophical perspective, the more difficult it is to interpret his/her discourse correctly. Such a case might be assimilated to that of myths. See below.

genuine use by Conan Doyle, then it was very weakly nonreferring, in the sense used earlier. There would soon exist a fictional character to which *that* use of the name already referred.[43] In the same way, expectant parents may begin to use a name already decided upon even before the actual birth, perhaps even before conception, and readers of Kaplan may already use the name 'Newman-1' to refer. Once the anticipated referent arrives on the scene, to use the name exactly as before is to use it with reference to that thing. At that point, to use the name in a way that it fails to refer would be to give it a new use.

It seems at least as reasonable as Kripke's account to claim instead that once the name 'Sherlock Holmes' has been imported into genuine discourse, Conan Doyle's sentences involving the name express singular propositions about his character. One might even identify the fiction with a sequence of propositions, about both fictional and nonfictional things (e.g., Scotland Yard). To say this is not to say that Conan Doyle asserted those propositions. He did not—at least not in any sense of 'assert' that involves a commitment to one's assertions. He merely pretended to be Dr. Watson asserting those propositions. In so doing, Conan Doyle pretended (and his readers pretend) that the propositions are true propositions about a real man, not untrue propositions about an abstract artifact. That is exactly what it is to pretend to assert those propositions. To assert a proposition, in this sense, is in part to commit oneself to its truth; so to pretend to assert a proposition is to pretend to commit oneself to its truth. And the propositions in question entail that Holmes was not an abstract entity but a flesh-and-blood detective. Taken literally, they are untrue.[44]

This is not quite an offer one can't refuse. Some have reacted to this proposal with a vague feeling—or a definite feeling—that I have conscripted fictional characters to perform a service for which they were not postulated and are not suited. Do I mean to say that *The Hound of the Baskervilles* consists entirely of a sequence of mostly false propositions about mostly abstract entities? Is mine a view on which the essence of fiction is to pretend that abstract entities are living, breathing people? These misgivings stem from a misunderstanding of the nature of fiction and its population. The characters that populate fiction are created precisely to perform the service of being depicted as people by the fictions in which they occur. Do not fixate on the fact that fictional characters are abstract entities. Think instead of the various *roles* that a director might cast in a stage or screen production of a particular piece of fiction. Now think of the corresponding characters as the components of the fiction that *play* or *occupy* those roles in the fiction. It is no accident that one says of an actor

[43] On the view I am proposing there is a sense in which a fictional character is prior to the fiction in which the character occurs. By contrast, Kripke believes that a fictional character does not come into existence until the final draft of the fiction is published. This severe restriction almost certainly does not accord with the way fiction writers see themselves or their characters. Even if it is correct, it does not follow that while writing a fiction, the author is using the name in such a way that it is thoroughly nonreferring. It is arguable that the name already refers to the fledgling abstract artifact that does not yet exist. There is not already, nor will there ever be, any genuine use of the name as the name of a human being; that kind of use is make-believe.

[44] See note 37. If my view is correct, then van Inwagen's use of the word 'ascribe' in saying that a fiction ascribes a particular property to a particular fictional character may be understood (apparently contrary to van Inwagen's intent) quite literally, in its standard English meaning.

in a dramatic production that he/she is playing a 'part.' The characters of a fiction—the occupants of roles in the fiction—are in some real sense *parts* of the fiction itself. Sometimes, for example in historical fiction, what fictionally plays a particular role is a real person or thing. In other cases, what plays a particular role is the brainchild of the storyteller. In such cases, the role player is a *wholly* fictional character, or what I (following Kripke) have been calling simply a 'fictional character.' Whether a real person or wholly fictional, the character is that which according to the fiction takes part in certain events, performs certain actions, undergoes certain changes, says certain things, thinks certain thoughts. An actor performing in the role of Sherlock Holmes portrays Holmes_2; it is incorrect, indeed it is literally nonsense, to say that he portrays Holmes_1, if 'Holmes_1' is thoroughly nonreferring.

It is of the very essence of a fictional character to be depicted in the fiction as the person who takes part in such-and-such events, performs such-and-such actions, thinks such-and-such thoughts. Being so depicted is the character's *raison d'etre*. As Clark Gable was born to play Rhett Butler in Margaret Mitchell's *Gone with the Wind*, that character was born to be the romantic leading man of that fiction. Mario Puzo's character of Don Corleone is as well suited to be the charismatic patriarch of *The Godfather* as Marlon Brando was to portray the character on film. Except even more so. The character was also portrayed completely convincingly by Robert De Niro. But only that character, and no other, is appropriate to the patriarch role in Puzo's crime saga. Likewise, the butler in Kazuo Ishiguro's *The Remains of the Day* would have been completely inappropriate, in more ways than one, as the protagonist of Ian Fleming's *James Bond* novels. It is of the essence of Flemings's character precisely to be the character depicted in the dashing and debonair 007 role in the *James Bond* stories—and not merely in the sense that being depicted thus is both a necessary and a sufficient condition for being the character of Bond in any metaphysically possible world. Rather, this is the condition that defines the character; being the thing so depicted in those stories characterizes exactly *what* the character of James Bond *is*.

In a sense, my view is the exact opposite of the traditional view expressed in Russell's pronouncement that 'it is of the very essence of fiction that only the thoughts, feelings, etc., in Shakespeare and his readers are real, and that there is not, in addition to them, an objective Hamlet.' To Russell's pronouncement there is Hamlet's own retort: 'There are more things in heaven and earth, Horatio, Than are dreamt of in your philosophy.' It is of the very essence of Shakespeare's *Hamlet* that there is indeed an object that is Hamlet. I am not urging that we countenance a person who is Hamlet_1 and who contemplated suicide according to the classic play but who does not exist. There is no sense in which there is any such person. The objective Hamlet is Hamlet_2—what plays the title role in the Bard's drama—and hence not a human being at all but a part of fiction, merely depicted there as anguished and suicidal. It is with the most robust sense of reality prescribed by the Metaphysician that I should urge recognition of this fictionally troubled soul.[45]

[45] In reading a piece of fiction, do we pretend that an abstract entity is a prince of Denmark (or a brilliant detective, etc.)? The question is legitimate. But it plays on the distinction between *de dicto* and *de re*. Taken *de dicto*, of course not; taken *de re*, exactly. That abstract entities are human beings is not something we pretend, but there are abstract entities that we pretend are human beings. Seen

It is an offer one shouldn't refuse lightly. Unlike Kripke's theory, a treatment of the sentences of the *Sherlock Holmes* stories on which they literally make reference (although their author may not) to the fictional character, and literally express things about that character (mostly false), yields a straightforward account—what I believe is the correct account—of the meaningfulness and apparent truth of object-fictional sentences like 'Sherlock Holmes plays the violin', and thereby also of the meaning and truth of meta-fictional sentences like 'According to the *Holmes* stories, Holmes plays the violin'. Following Kripke's lead in the possible-world semantics for modality, we say that 'Sherlock Holmes' is a rigid designator, referring to the fictional character both *with respect to the real world* and *with respect to the fiction*. The object-fictional sentence is not true with respect to the real world, since abstract entities make terrible musicians. But it is true with respect to the fiction—or true 'in the world of the fiction'—by virtue of being entailed by the propositions, themselves about fictional characters, that comprise the fiction, taken together with supplementary propositions concerning such things as the ordinary physical-causal structure of the world, usual societal customs, etc., that are assumed as the background against which the fiction unfolds.[46] When we speak within the fiction, we pretend that truth with respect to the fiction is truth *simpliciter*, hence that Holmes ($=\text{Holmes}_2$) was a human being, a brilliant detective who plays the violin, and so on. Or what is virtually functionally equivalent, we use object-fictional sentences as shorthand for a meta-fictional variants. The meta-fictional ⌜According to fiction *f*, ϕ⌝ is true with respect to the real world if and only if ϕ is true with respect to the mentioned fiction. In effect, the meta-fictional sentence receives a Fregean treatment on which the object-fictional subordinate clause has *ungerade* reference, referring to a (typically false) proposition about a fictional character. In all our genuine discourse about Holmes, we use the name in the 'Holmes_2' way. One may feign using 'Sherlock Holmes' as the name of a man, but this is only a pretend use. To say that according to the stories Holmes_1 plays the violin is to say nothing; what is true according to the stories is that Holmes_2 plays the violin.[47]

in the proper light, this is no stranger than pretending that Marlon Brando is Don Corleone. (It is not nearly so strange as Brando portraying a character in *The Freshman* who, in the story, is the real person on whom the character Marlon Brando portrayed in *The Godfather* was modelled).

[46] *Cf.* John Heintz, 'Reference and Inference in Fiction,' *Poetics*, 8, 1/2 (April 1979), pp. 85–99. Where the fiction is inconsistent, the relevant notion of entailment may have to be non-standard. Also, the notion may have to be restricted to a *trivial* sort of entailment—on pain of counting arcane and even as yet unproved mathematical theorems true with respect to fiction. *Cf.* Lewis, at pp. 274–278 of his *Philosophical Papers, I*.

[47] Philosophers have sometimes neglected to distinguish among different possible readings of an object-fictional sentence—or equivalently, between literal and extended (fictional) senses of 'true'. See, for example, Richard L. Cartwright, in 'Negative Existentials,' *Journal of Philosophy*, 57 (1960), pp. 629–639; and Jaakko Hintikka, '*Cogito Ergo Sum:* Inference or Performance,' *The Philosophical Review*, 71 (January 1962), pp. 3–32.

When we use an object-fictional sentence ϕ as shorthand for something meta-fictional, what is the longhand form? Perhaps ⌜There is a fiction according to which ϕ⌝, perhaps ⌜According to the fiction in which he/she/it/they is a character, ϕ⌝, perhaps ⌜According to *that* fiction, ϕ⌝, perhaps something else. Recognizing that we speak of fictional characters in these ways may to some extent obviate the need to posit a nonliteral, extended sense for all predicates. On the other hand,

Consider again sentence (0), or better yet, 'Sherlock Holmes does not really exist; he is only a fictional character'. Taken literally, this sentence expresses the near contradiction that $Holmes_2$ is a fictional character that does not exist. It was suggested above that the existence predicate may instead be given a Pickwickian interpretation on which it means something like: *is the very sort of entity depicted*. This suggestion, however, is questionable. In many cases, Russell's analysis (0′) seems closer to the facts. In uttering (0), the speaker may intend not merely to characterize $Holmes_2$, but to deny the *existence* of the eccentric detective. It may have been this sort of consideration that led Kripke to posit an ambiguity, and in particular a use of the name in the alleged manner of '$Holmes_1$', a pretend-referring-but-really-nonreferring use on which the '$Holmes_2$' use is parasitic (and which generates an intensional *ungerade* use). Kripke's posit, I believe, is also off target. There is a reasonable alternative. We sometimes use ordinary names, especially names of famous people, in various descriptive ways, as when it is said that so-and-so is a Napoleon, or a Nixon, another Hitler, no Jack Kennedy, or even (to segue into the fictional realm) a Romeo, an Uncle Tom, quixotic, Pickwickian, etc. I submit that, especially in singular existential statements, we sometimes use the name of a fictional character in a similar way. We may use 'Sherlock Holmes', for example, to mean something like: *Holmes more or less as he is actually depicted in the stories*, or *Holmes replete with these attributes [the principally salient ones ascribed to Holmes in the stories]*, or best, *the person who is both Holmes and Holmesesque*. In uttering (0), one would then mean that the Holmes of fiction, Holmes as depicted, does not exist in reality, that there is in reality no such person—no *such* person, no person who is both $Holmes_2$ and sufficiently like *that* (as depicted in fiction).

Since this interpretation requires a reinterpretation of the name, it might be more correct to say that the speaker expresses this proposition than to say that (0) itself does. This is not a use of 'Holmes' as a thoroughly nonreferring name, but as a kind of description that invokes the name of the fictional character. In short, the name is used *a là* Russell as a disguised improper definite description. It is very probably a nonliteral, Pickwickian use of the name. It is certainly a nonstandard use, one that is parasitic on the name's more fundamental use as a name for the fictional character, not the other way around. It need not trouble the direct-reference theorist. The disguised-description use is directly based upon, and makes its first appearance in language only after, the standard use in the manner of '$Holmes_2$' as (in Russell's words) a 'genuine name in the strict logical sense.' If an artificial expression is wanted as a synonym for this descriptive use, something clearly distinguished from both '$Holmes_2$' (which I claim represents the standard, literal use of the name) and '$Holmes_1$' (which represents a mythical use, no genuine use at all) is called for. Let us

something like Kripke's theory of extended senses may lie behind the use of gendered pronouns ('he') to refer to fictional people even in discourse about reality.

Perhaps the most difficult sentences to account for are those that assert cross-realm relations. Following Russell's analysis of thinking someone's yacht larger than it is, 'Sherlock Holmes was cleverer than Bertrand Russell' may be taken to mean that the cleverness that $Holmes_2$ had according to the stories is greater than the cleverness that Russell had. *Cf.* my *Reference and Essence* (Princeton University Press and Blackwell, 1981), at pp. 116–135, and especially 147*n.*

say that someone is a *Holmesesque-Holmes*$_2$ if he is Holmes$_2$ and sufficiently like he is depicted to be, in the sense that he has relevantly many of the noteworthy attributes that Holmes$_2$ has according to the stories. Perhaps the most significant of these is the attribute of being a person (or at least person-like) and not an abstract artifact. Following Russell, to say that *the* Holmesesque-Holmes$_2$ does not exist is to say that nothing is uniquely both Holmes$_2$ and Holmesesque—equivalently (not synonymously), that Holmes$_2$ is not Holmesesque. It is an empirical question whether Holmes$_2$—the character of which Conan Doyle wrote—was in reality like *that*, such-and-such a person, to any degree. The question of Holmes's existence *in this sense* is answered not by seeking whether someone or other was Holmesesque, but by investigating the literary activities of Conan Doyle.[48]

These various considerations, and related ones, weigh heavily in favor of account of names from fiction as unambiguous names for artifactual entities.[49] In its fundamental use that arises in connection with the fiction—and I am inclined to think, its only literal use—'Sherlock Holmes' univocally names a man-made artifact, the handiwork of Conan Doyle. Contra Russell, *et al.*, names from fiction do not have a prior, more fundamental use. They do not yield true negative existentials with thoroughly nonreferring names.

VI

The account suggested here is extendable to sentences that are uttered in debunking myths, like 'Pegasus does not exist'. By 'myth' I shall mean any mistaken theory that has been held true. A mythical object is a hypothetical entity erroneously postulated by a theory. Like a fictional object, a mythical object is an abstract (non-physical,

[48] The notion of something being *sufficiently* like Holmes$_2$ is depicted may be to some extent interest-relative. Consequently, in some cases the truth value of an assertion made using (3α), with α a name from fiction, may vary with the operative interests. Some scholars tell us, while not believing in vampires, that Bram Stoker's character of Count Dracula really existed. (This aspect of the theory I am suggesting raises a complex hornets' nest of difficult issues. Far from disproving the theory, however, some of these issues may tend to provide confirmation of sorts.)

Kripke argues that the sentence 'Sherlock Holmes does not really exist; he is only a fictional character', properly interpreted, involves an equivocation whereby the name has its original nonreferring use and 'he' is a 'pronoun of laziness' referring to the fictional character—so that the sentence means that the man Holmes$_1$ does not exist and the fictional character Holmes$_2$ is just that. Kripke also says that one should be able to assert what is meant in the first clause of the original sentence without mentioning Holmes$_2$ at all. This is precisely what I believe cannot be done. The original may even be paraphrased into 'Sherlock Holmes does not really exist and is only a fictional character'. On my alternative hypothesis, the speaker may mean something like: *The Holmesesque-Holmes$_2$ does not really exist; Holmes$_2$ is only a fictional character*. This is equivalent to: Holmes$_2$ is not Holmesesque but a fictional character. Besides avoiding the putative 'Holmes$_1$' use, my hypothesis preserves an anaphoric-like relation between pronoun and antecedent. (Other possibilities arise if Kripke's theory of extended senses for predicates is applied to 'Holmesesque'.)

[49] In later work, and even in the same work cited *above* in note 32, Kripke argued persuasively against positing ambiguities when an alternative, univocal hypothesis that explains the phenomena equally well is available. *Cf.* his '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, especially 19.

non-mental) entity created by the theory's inventor. The principal difference between myth and fiction is that a myth is believed whereas with fiction there is typically only a pretense.[50] An accidental storyteller, Le Verrier attempted in all sincerity to use 'Vulcan' to refer to a real planet. The attempt failed, but not for lack of a referent. Here as before, there is ample reason to doubt that 'Vulcan$_1$' represents a genuine use of the original name. Le Verrier held a theory according to which there is such a use, and he intended and believed himself to be so using the name. Had the theory been correct, there would have been such a use for the name. But the theory is false; it was all a mistake. Kripke says that in attempting to use the name, nineteenth-century astronomers failed to refer to anything. But this verdict seems to ignore their unintended relationship to the mythical planet. One might just as well judge that the ancients who introduced 'Hesperus' as a name for the first star visible in the dusk sky, unaware that the 'star' was in fact a planet, failed to name that planet. Nor had they inadvertently introduced two names, one for the planet and one thoroughly nonreferring. Plausibly, as the ancients unwittingly referred to a planet believing it to be a star, so Le Verrier may have unknowingly referred to Babinet's mythical planet, saying and believing so many false things about it (for example, that it affects Mercury's orbit). There may have been a period during which 'Vulcan' was misapplied to the mythical planet before such application became enshrined as the official, correct use. It does not follow that there is a prior, genuine use of the name

[50] Donnellan says that myth is not analogous to fiction (at pp. 6–8). Almog agrees, and dismisses the idea of a mythical Vulcan (pp. 611, 618n13). I am convinced these philosophers are mistaken, and that this myth about myths has also led other philosophers astray. When storytellers tell stories and theorists hypothesize, fictional and mythical creatures abound. (An interesting possibility: Perhaps the myth invented by Babinet no longer exists, now that no one believes it. Can a myth, once it is disproved, continue to exist as merely an unbelieved theory? If not, then perhaps 'Vulcan' is nonreferring after all, though only very weakly.)

Kripke extends his account in the natural way also to terms for objects in the world of appearance (e.g., a distant spec or dot), and to species names and other biological-kind terms from fiction and myth, like 'unicorn' and 'dragon'. The theory should be extended also to general terms like 'witch', 'wizard', etc. There is a mythical species designated by 'dragon', an abstract artifact, not a real species. Presumably, if *K* is the mythical species (or higher level taxonomic kind) of dragons, then there is a corresponding concept or property of being a beast of kind *K*, thus providing semantic content for the predicate 'is a dragon'. Kripke believes there is a prior use of the term, in the sense of 'dragon$_1$', which has no semantic content. But as before, on this point I find no persuasive reason to follow his lead.

Are there dragons? There are myths and fictions according to which there are dragons, for example the legend of Puff. Is Puff, then, a dragon? No, he is a fictional character—an abstract artifact and not a beast. Fictional dragons like Puff are not real dragons—though they may be said to be 'dragons,' if by saying that we mean that they are dragons in the story. (*Cf.* Kripke's hypothesized extended sense of 'plays the violin'.) Is it metaphysically possible for there to have been dragons in the literal (unextended) sense of the word? No; the mythical species *K* is not a real species, any more than Puff is a real beast, and the mythical species could not have been a species any more than Puff could have been a beast. It is essential to *K* that it not be a species. *A fortiori* there could not have been such beasts. The reasoning here is very different from that of Kripke's *Naming and Necessity*, at pp. 156–157, which emphasizes the alleged 'dragon$_1$' use (disputed here), on which 'There are dragons' allegedly expresses nothing (hence nothing that is possibly true).

The account of mythical objects as real abstract artifacts also yields a solution to P. T. Geach's famous problem about Hob's and Nob's hypothesized witch, from 'Intentional Identity,' *Journal of Philosophy*, 74, 20 (1967).

on which it is thoroughly nonreferring. I know of no compelling reason to deny that Babinet introduced a single name 'Vulcan' ultimately with a univocal use as a name for his mythical planet.[51] One might say that 'Vulcan$_1$' represents a mythical use of the name. As with 'Holmes$_1$', this kind of use is no more a genuine use than a mythical planet is a genuine planet.

It is unclear whether there are significant limitations here, and if so, what they might be. Even Meinong's golden mountain and round square should probably be seen as real mythical objects. Meinong's golden mountain is an abstract entity that is neither golden nor a mountain but as real as Babinet's Vulcan. Real but neither round nor square, Meinong's round square is both round and square according to Meinong's erroneous theory. Should we not also admit and recognize such things as fabrications, figments of one's imagination, and flights of fancy as real abstract entities? Where does it all end?

In the kingdom of France.

If one adopts a very inclusive attitude toward such applicants for Existence as fictional characters, mythical planets, fabricated boyfriends, and flights of fancy, then one is hardly in a position to urge a restrictive admissions policy when it comes to nonreferring names. We know that France has no emperor at present. But we do not know this *a priori*. We could even be mistaken. It is not *a priori* impossible that a fanatic, with the help of an underground army and the unanimous approval of the United Nations, has just seized control of the French government and declared himself the new emperor. I hereby introduce the name 'Nappy' to refer to the new emperor of France, whoever that might be, if there is one, and to refer to nothing otherwise. Take note: I do not introduce 'Nappy' as a name for a particular fictional character that I just created. I am not storytelling and I am not pretending to use 'Nappy' as a name of a person. Nor do I subscribe to any theory to the effect that France now has an emperor. Rather I introduce 'Nappy' as a name for the actual present emperor of France, provided—contrary to my every expectation—that there presently is an emperor of France. Barring a fairly radical skepticism, we know that there is no such person as Nappy. Nappy is not a fictional character, not a mythical character, not a fabrication, not a flight of fancy. There is a very good reason why Nappy is none of these things. Not to put too fine a point on it, Nappy does not exist.

Or consider again the name 'Curly-0', which I introduced above for the merely possible bald man presently standing in Quine's doorway. There is no such merely possible man. But the name itself, so introduced, is real. I introduced it. And it does not refer. It would have been a mistake to suppose that there might have been someone to whom the name actually refers. But I made no such mistake in introducing the name; I knew I had not succeeded in singling out any particular possible individual. This much, then, is not a mistake: Curly-0 does not exist.

[51] I am assuming throughout that in introducing 'Vulcan', Babinet presupposed the existence of an intra-Mercurial planet to be so named. In some cases of reference fixing, the description employed may have what I call a *Bad mock referential*, or *Ugly*, use—*i.e.*, reference is fixed by an implicit description not coreferential with the description explicitly used. See my 'The Good, the Bad, and the Ugly,' forthcoming in Paolo Leonardi's festschrift for Keith Donnellan. *Cf.* Kripke on 'Hesperus', in *Naming and Necessity*, at p. 80–34.

Why do the introductions of 'Nappy' and 'Curly-0' result in thoroughly nonreferring names when Babinet's introduction of 'Vulcan' results in a name for an existing abstract artifact? Because in inventing his theory, Babinet inadvertently invented a mythical planet, and though Babinet intended to target an independently existing planet, his referential arrow eventually struck the mythical object—not in exactly the same manner as the ancients' arrow that struck Venus despite its not being a star, but close. To the allegation that I have invented a fictional emperor of France, I plead Not Guilty. One should not suppose that to every improper definite description one might conjure up there corresponds a fiction, or mini-fiction, in which the description is proper. Even pulp fiction is not that easy to write.[52]

My contention has not been that there are no true sentences of the form (4α) with α a thoroughly nonreferring name. My point, rather, is that they are rare—and bizarre. The examples are not like an utterance of 'Sherlock Holmes does not really exist' to assert that Holmes_2 in reality is not sufficiently like the way he is depicted. The examples are also dissimilar from 'Socrates does not exist', 'Newman-1 does not exist', 'Noman does not exist', and even '{Noman-0, Nothan-0} does not exist'. In these other negative existentials, there is some sense in which the subject term refers to a definite nonexistent thing: a past, future, merely possible, or impossible object. The negative existentials say of these definite things, correctly, that they do not exist. By contrast, 'Nappy does not exist' and 'Curly-0 does not exist' have a completely different flavor and are true on altogether different grounds: In no sense is there a definite nonexistent thing referred to. Do these two sentences, then, deny existence of different things? If so, what things? How do they differ? 'Curly-0' is a different name from 'Nappy', but Curly-0 is not a different *thing* from Nappy. They are not *things* at all; they are nothing. Or perhaps I should say, there is no such thing as Curly-0, and likewise Nappy. As much as to say that Curly-0 and Nappy do not exist. That there are no such things is true, but what exactly is it?

One might be tempted to suppose that 'Nappy does not exist' expresses the proposition that there is no unique present emperor of France. This is essentially the approach of Russell. It directly conflicts with the theory of direct reference (entailing, for example, that 'Nappy' is not a rigid nondesignator), and has been discredited by the arguments supporting that theory. So with the Fregean semantic-ascent and intensional-ascent approaches to singular existentials. I shun the heavy-handed intensionality of these approaches, as well as the unexplained intensional machinery

[52] But see note 43. I introduced 'Holmes_1' as a name having the thoroughly nonreferring use that the name 'Sherlock Holmes' originally has according to Kripke's theory. That alleged use is mythical. My introduction of the name thus misfired; no genuine use was attached to the name on which it may be said either to refer or not to refer. I might have fixed the reference of a new name, say 'Holmes_3' (not a disguised description), by the description 'the $\text{Holmesesque-Holmes}_2$'. Analogously, I might have introduced a name 'Vulcan_3' as a name for the planet, if there is one, whose gravitational force (rather than general relativity) correctly explains the irregularities in Mercury's orbit, and nonreferring otherwise. I would exploit a certain myth to obtain the reference-fixing description, but would have introduced the name in such a way that it does not refer instead to Babinet's mythical planet. Had I done this, authentic true negative existentials with thoroughly nonreferring names would have been generated.

of Kripke's proposal to interpret 'Nappy does not exist' as a paraphrase of 'There is no true proposition that Nappy exists'. There is here a new homework problem.

Consider the slightly simpler issue of the meanings of sentences of the form of (1α) with α a thoroughly nonreferring name. Does 'Nappy is bald' express anything? Does 'Curly-0 is bald?' I believe the answer is clearly that they do. They are not mere strings of nonsense syllables. They have translations—very literal translations—into most natural languages (by resorting to use of the very names 'Nappy' and 'Curly-0'). Such translations preserve *something*. What? Not the proposition expressed, for these sentences express no proposition, or at least none that is a candidate for being true or false. I would propose that they be seen instead as expressing something severely disabled, the partially formed product of a failed attempt to construct a true-or-false proposition, something whose cognitive and semantic function is that of a truth-valued proposition but which is unable to fulfil its function for lack of an essential component. Think of the nondefective sentence 'Marlon Brando is bald' as expressing its semantic content in the manner of: 'This object is bald: Marlon Brando'. Then 'Nappy is bald' expresses the semantic content of 'This object is bald:'. 'Curly-0 is bald' expresses the very same thing. Let us call it a *structurally challenged proposition*. It may be thought of for the present purpose as an ordered pair, or rather a would-be ordered pair, whose second element is the concept or property of baldness and whose first element is nothing whatsoever.[53]

Granted sufficient leeway, expressions like 'the proposition that Nappy is bald' and 'that Curly-0 is bald' may be taken to refer to the structurally challenged proposition expressed in common by their complement clauses. This is one crucial respect in which the present view differs from that of Kripke, who contends that 'Nappy is bald' and 'Curly-0 is bald' express nothing, and that their corresponding 'that' clauses are consequently thoroughly nonreferring. (See note 19.) On the view I am proposing, although Nappy does not exist, the structurally challenged

[53] The set-theoretic representation can be made formally precise in an intuitive way (for example by invoking partial functions). *cf.* my discussion of *open propositions* in *Frege's Puzzle*, at pp. 155–156*n*. (The alternative terminology of 'structurally impaired proposition' is implicitly structurist, hence contrary to the inclusive spirit of the present essay, which celebrates cognitive structural diversity. I also resist the temptation to use the abbreviation '*SC*-proposition', for fear it might be mistaken as shorthand for 'Southern California proposition' and the idea then summarily dismissed.)

It is reported in Almog, p. 618n15, that Kaplan, in an unpublished 1973 lecture commenting on Kripke, proposed that 'Vulcan does not exist' expresses a true 'gappy proposition.' Kaplan briefly mentions a similar idea in 'Demonstratives,' in J. Almog, J. Perry, and H. Wettstein, eds., *Themes from Kaplan* (Oxford University Press, 1989), pp. 481–563, at 496n23. Contrary to the view imputed to Kaplan, 'Vulcan does not$_C$ exist', taken literally, expresses on my view a false structurally *un*challenged singular proposition about the mythical planet (and may frequently be understood instead as expressing the true proposition that there is no Vulcanesque Vulcan$_2$).

Plantinga, in 'On Existentialism,' *Philosophical Studies*, 44 (1983), pp. 1–20, at p. 9, argues as part of a defense of serious actualism (note 29 above) that the singular proposition about William F. Buckley that he is wise might be regarded as existing but 'ill-formed or even maimed' in a possible world in which Buckley does not exist. This is decidedly different from my view. The only defect suffered by Soc is that it does not exist; it is neither 'ill-formed' nor 'maimed.' It is even true. In a possible world in which Buckley does not exist the proposition that he is wise is neither existent nor true, but it does not face the structural challenges of singular propositions about Nappy and Curly-0.

proposition that Nappy is bald exists, and is identical to the structurally challenged proposition that Curly-0 is bald. Not all sentences of the form (1α) with α a nonreferring name or improper definite description express this structurally challenged proposition. 'Socrates is bald' expresses that Socrates is bald, a proposition that does not exist but once did. 'Newman-1 is bald' expresses a different proposition, one that will exist but does not yet. 'Noman-0 is bald' expresses a proposition that might have existed but never will, and '{Nothan-0, Nathan Salmon} is bald' (properly interpreted) a proposition that could never exist. 'Sherlock Holmes is bald' and (1) express existing propositions that are untrue. None of these propositions are structurally challenged in the manner of ⟨___, baldness⟩. But all sentences of the form (1α) with α a thoroughly nonreferring name express this same structurally challenged proposition, *this one is bald*. None of these various propositions, structurally challenged and not, are true. I shall assume here that atomic structurally challenged propositions cannot be either true or false.[54]

Though both express the same structurally challenged proposition, 'Nappy is bald' and 'Curly-0 is bald' present their common semantic content to the mind of the reader in different ways. One presents it in the manner of 'This object is bald: the present emperor of France', the other in the manner of 'This object is bald: the possible bald man presently in Quine's doorway'. The reader takes the structurally challenged proposition differently, depending in this case on the actual words used to express it.[55] I have argued in previous work that the way in which a reader takes a given proposition has no bearing on semantics; what matters as far as semantics goes is the literal meaning of the sentence and what propositions are thereby semantically expressed. Though the way in which a proposition is taken is not semantics, it bears on cognitive psychology and plays an extremely important role in pragmatics, on which I have spoken elsewhere at some length. Structurally challenged propositions do not differ from their unchallenged cousins in this respect.[56]

[54] Frege's Principle of Compositionality for Reference, as he understood it, required that the usual truth-functional connectives observe their Kleene weak three-valued truth tables, on which any truth-functional compound with a non-truth-valued component is itself without truth value regardless of the truth values of the other components. Whereas Frege's argument for this may seem inconclusive at best, an analogous argument is more persuasive as regards truth-functional compounds with structurally challenged components. At the very least, atomic structurally challenged propositions do seem, intuitively, to lack the resources necessary to achieve truth value. If it is incorrect to say that Nappy is bald, it is equally incorrect to say that Nappy is not_c bald, and for the very same reason. Mimicking Russell, if we enumerated the things that are bald, and then the things that are not bald, we should not find Nappy in either list. Even Russell, who loved truth value (and abhorred a synthesis), would probably have withheld falsity as well as truth from ⟨___, baldness⟩—unless he was prepared to label such things as Picadilly Circus and his own singleton false.

[55] The same point might be made by using Kaplan's '*dthat*' operator, on its originally intended interpretation. *Cf.* Kaplan's 'Afterthoughts' to his 'Demonstratives,' pp. 565–614, at 578–582. I am arguing that, on that original interpretation, the two sentences '*Dthat* [the present emperor of France] is bald' and '*Dthat* [the possible bald man presently in Quine's doorway] is bald' express the same thing, though each presents the structurally challenged proposition in its own special way.

[56] Thus one who believes that Curly-0 is bald thereby also believes (despite any denials) that Nappy is bald. *Cf. Frege's Puzzle*, at p. 7, and especially pp. 127–128. The present essay delivers on the promissory note issued there.

VII

Structurally challenged propositions provide content for the most intransigent instances of (4α). Even if (4α) does not express a nonexistent singular proposition (past, future, merely possible, or impossible), there is always the structurally challenged proposition. But if α is thoroughly nonreferring, all of (1α)–(4α) express structurally challenged propositions. It would seem that (4α) must then be neither true nor false, hence not true. But if α is nonreferring, (4α) is true. In philosophy, this is what is known as a *Headache*.[57]

I prescribe relief in the form of a new theory of singular existence, or rather of nonexistence. Although the intensional-ascent theory of existence improves upon Frege's semantic-ascent theory by capturing (or at least by approaching) the right modal intensions for singular existentials, there remains an intuitive difference between 'The present queen of England exists', which evidently mentions Queen Elizabeth II, and '$(\exists x)\Delta(^{s}(\iota y)(\textit{Present-queen-of-England}(y)^{s}, x)$', which does not. There is an alternative to both approaches that, although still within the spirit of Fregean theory, has not to my knowledge been explicitly proposed before. We saw in Section I that the distinction between choice and exclusion negation reveals an ambiguity in (2) for which there is no corresponding ambiguity in (1). According to Frege, one who utters (2) using 'not' in the sense of choice negation erroneously presupposes that there presently is a unique king of France. But one may use 'not' in the sense of exclusion negation to commit oneself only to the significantly weaker claim that no unique present king of France is bald. This same ambiguity occurs wherever 'not' does. One may thus take (3) to be analyzed by (3″), as was the original idea, while taking (4) to be ambiguous between the following:

(9) $\sim_{C}(\exists x)[(\iota y)\textit{Present-king-of-France}(y) = x]$

(10) $\sim_{E}(\exists x)[(\iota y)\textit{Present-king-of-France}(y) = x]$.

These correspond exactly to the two readings of the negation sign in (4″). In the general case, on this theory, (3α) receives its usual analysis (alternatively, the existence predicate may be regarded as primitive), while the 'not' in (4α) yields two readings. On one reading, (4α) means the same as ⌜α does not$_{C}$ exist⌝, on the other the same as ⌜The proposition that α exists is not$_{C}$ true⌝, or ⌜It is untrue that α exists⌝.

[57] David Braun, in 'Empty Names,' *Noûs*, 27 (December 1993), pp. 449–469, at 460–465, develops Kaplan's idea of gappy propositions in connection with sentences like 'Vulcan is bald' and 'Vulcan does not exist'. See note 53 above. To repeat: Vulcan does exist, and such sentences as these express ordinary, structurally unchallenged propositions. Aside from this, Braun illegitimately makes the problem too easy for himself, arguing by analogy (in effect) that since all structurally unchallenged propositions have truth value so too do all structurally challenged ones, then asserting without further argument that atomic monadic singular propositions are false whenever there is nothing in the subject position that has the property in the predicate position—so that without any further ado, all atomic structurally challenged propositions are straightforwardly false. Against this, see note 54 above.

Let us call this analysis of singular existentials and their negations *the choice/exclusion theory of nonexistence*.[58]

The choice/exclusion theory still has the consequence by Frege's lights that (3) is neither true nor *F*-false$_1$, and hence not false. But at least it is thus judged untrue (*F*-false$_2$). The choice/exclusion theory also has the consequence that (4) has a true reading while (3) does not. This might be deemed satisfactory.

It might even be deemed insightful. There is something odd about (4). If one wishes to correct the view that France presently has a king, it is more natural to do so by saying 'There presently is no king of France' (accompanied with an explanation that France is no longer a monarchy) or 'There is no such thing as the present king of France'. The former suggests (4′), the latter something like (8). By contrast, (4) itself seems to involve a faulty presupposition. We can use (4) to say something acceptable, but when we do, we seem to mean that it is untrue that the present king of France exists—precisely what (10) expresses. (This is what we mean, that is, unless someone whom we wish to enlighten about international politics has inadvertently created a mythical king of France, so that the description in (4) is used with invisible scare quotes to mean *the mythical object that Smith believes is presently king of France, thus depicted*.) Some of (4)'s oddness is present also in (3), and even in true singular existentials. If (1) presupposes (3′), as Frege and Strawson claim, then how could (3) fail to do so? (Compare Frege's comments about the name 'Sachse'.) If Britain were to dissolve its monarchy during the present queen's lifetime, 'The present queen of England exists', uttered after the dissolution, would become untrue. But would it become straightforwardly false?

[58] As mentioned in note 16, Church cites (4) as an example of a true sentence in which a singular term has an *ungerade* occurrence. He also cites 'Lady Hamilton was like Aphrodite in beauty' and 'The fountain of youth is not located in Florida'. It is possible that Church held that the constructions '___ is located in Florida' and 'Lady Hamilton is like ___ in beauty' are (at least sometimes) *ungerade* devices. On such a view the un-negated sentences, 'The fountain of youth is located in Florida' and (3) would be *F*-false$_1$ sentences in which the subject terms have *ungerade* occurrences, the first expressing that the concept ˢthe fountain of youthˢ determines something with a certain location. But it seems at least as likely, assuming that 'the fountain of youth' is nonreferring, that this sentence is neither true nor *F*-false$_1$, and the *ungerade* device in 'The fountain of youth is not located in Florida', and that in (4), is instead something common to both sentences.

In light of the fountain of youth's role in fable and myth (not to mention its impact on Ponce de Leon), Church's example might be better replaced with a sentence like 'The present king of France is not among the bald men of the world', which may be more readily accepted as true than (2). It is unclear whether Church would have held that this sentence, assuming it is true, means that the concept ˢthe present king of Franceˢ does not determine something that is among the bald men of the world (analogously to the intensional-ascent theory of existence), or instead that the proposition ˢthe present king of France is among the bald men of the worldˢ is not true (analogously to the exclusion theory of nonexistence). Church's abstention from citing (2) itself as another example of the same phenomenon may suggest the former interpretation___on which such expressions as 'located in Florida' and 'among the bald men of the world' are distinguished from 'bald' as *ungerade* devices. (C. Anthony Anderson conjectures that the relational aspect of '___ is located in ___' and '___ is like ___ in beauty' may have played a role in Church's view that they are *ungerade* devices. This would involve assimilating them to '___ seeks ___', which on Church's view expresses a relation between an object and a concept, thus distinguishing them from '___ is bald'. *Cf. ibid.*, p. 8n20. Anderson notes that '___ is among ___' is likewise relational.) On the other hand, the mere juxtaposition of two examples involving negation may suggest the latter interpretation. (It is possible that relational phrases like 'located in Florida' and 'among the bald men of the world' have a greater tendency than 'bald' to induce the exclusion reading of their negation.)

I propose combining the choice/exclusion theory of nonexistence with structurally challenged propositions. The resulting theory applies across the board to sentences with improper definite descriptions, nonreferring proper names, or other nonreferring terms. The negative existential 'Socrates does not exist' receives two readings: Soc, and *it is untrue that Socrates exists*. Neither proposition currently exists, but both are true. Similarly for 'Newman-1 does not exist' and 'Noman-0 does not exist'. The sentences 'Nappy does not exist' and 'Curly-0 does not exist' are also deemed ambiguous. On one reading, they each express the same structurally challenged proposition, one that is neither true nor false. On the other reading, they each express the same true proposition, that the structurally challenged proposition ⟨___, existence⟩ is untrue. Both readings, because of the involvement of structurally challenged propositions, are to some extent bizarre. The presence of distinct bizarre readings contributes towards the overall oddness of these negative existentials.

This theory relieves the Headache without capitulating to golden mountains. It also respects distinctions of content among intuitively nonsynonymous true negative existentials, like 'Socrates does not exist' and 'Noman does not exist'. And while it equates true negative existentials with thoroughly nonreferring names as expressing the same thing (or the same things), it respects their nonsemantic differences regarding how they present their common content. The theory diverges from Kripke's theory that a sentence like (2α) is sometimes true on the same ground as ⌜There is no proposition that α is bald⌝ and (4α) on the same ground as ⌜There is no proposition that α exists⌝—whatever that ground is. There is no true proposition that Nappy is bald, or that Nappy exists, but these propositions exist. Instead (2α) sometimes means the same as ⌜It is untrue that α is bald⌝ and (4α) as ⌜It is untrue that α exists⌝, where the 'that' clauses always refer. Unlike Kripke's account, mine makes no intensional concessions that run against the grain of direct-reference theory.[59]

More important, the theory is intuitively correct as applied to a very wide range of sentences with nonreferring terms. The theory also coheres with Millianism to form a unified theory of content for singular terms, referring and not, and for sentences, existential and not. If there remain problematically true negative existentials for which the present theory does not provide a plausible account, I do not know which ones they are. Most importantly, if there are such, it may be that the Unified Metaphysico-Semantic Theory that some of us have sought exists only in fable and myth.

[59] The choice/exclusion ambiguity may extend also to the negation in 'Nappy is nonexistent', and even to the negations in 'Nappy is innocuous, since he is nonexistent'. The theory may even be sufficiently flexible to accommodate those who remain unconvinced concerning the nonexistent propositions mentioned above, like Soc. A skeptic concerning a particular nonexistent proposition may replace the offending proposition with the corresponding structurally challenged proposition, which does exist. It is not always possible to do so, however, while preserving truth value. The nonexistent proposition that Nothan, had he been born instead of me, would have been taller than I actually am is either true or false, but the corresponding structurally challenged proposition is evidently neither. Even if the latter is deemed to have truth value, then so must be the structurally challenged propositions corresponding to the nonexistent propositions that Nothan would have been shorter than I actually am and that Nothan would have been exactly the same height as I actually am. At least one of these existing structurally challenged surrogates fails to preserve the truth value of the nonexistent proposition it was put in to replace.

3

Mythical Objects (2002)

NOTIONAL AND RELATIONAL

It is widely recognized that a sentence like

(1) Ralph wants a sloop

is subject to a nonlexical ambiguity not duplicated in, for example,

(2) Ralph owns a sloop.

(1) may indeed be read analogously with (2): There is a sloop that Ralph wants/owns. This is what W. V. Quine calls the *relational* reading. On this reading, (1) is like (2) in logically entailing the existence of at least one sloop, and the author of (1), like that of (2), is thus ontologically committed to sloops. But (1) may be read instead as indicating an aimless desire on Ralph's part for the very state of affairs described by (2): Ralph's relief from slooplessness. Quine calls this the *notional* reading. Here (1) asserts not that a relation obtains between Ralph and a sloop, but that one obtains between Ralph and the generalized, nonspecific concept of *some sloop or other* (or some counterpart of this concept, like the property of being a class that includes some sloop or other among its elements). No sloop in particular need be the object of Ralph's desire; for that matter, all sloops everywhere may be destroyed. Ralph can still notionally want one. There is no analogous reading for (2). Sloop ownership is as commonplace as sloops. Whatever it would be to stand in the ownership relation to a concept, it is clear that (2) does not attribute such a state to Ralph.

The same asymmetry arises in connection with the following pair:

(3) Ralph believes a spy has stolen his documents.
(4) A spy has stolen Ralph's documents.

On its relational reading (3) asserts that there is a spy whom Ralph suspects of having stolen his documents—just as (4) asserts that there is a spy who has indeed taken the missing documents. This is the so-called *de re* reading of (3), what Russell (1905)

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calls the *primary occurrence* reading.[1] On this reading, some spy is under suspicion, and the speaker is logically committed to there being at least that one spy, in just the same way that the author of (4) is committed to the existence of at least one spy. On its notional reading, (3) reports Ralph's more generalized belief of the very proposition contained in (4): that some spy or other has made off with the documents. No one in particular need be under suspicion. There need not even be any spies anywhere, as long as Ralph believes otherwise. This is the *de dicto* reading, what Russell calls the *secondary occurrence* reading. It asserts a relation not between Ralph and a spy, but one between Ralph and the concepts of *some spy or other* and *stealing documents*. There is no analogous reading for (4). Concepts are not thieves, nor does (4) make any accusation against any concept. Underlying the relational/notional dichotomy in (1) and (3) is the pertinent fact that wanting and believing are psychological states that may be directed equally toward concepts or objects (or concepts that involve objects, or propositions that involve objects, etc.). Ownership and theft are not states of this sort.

Care must be taken not to confuse the notional/relational distinction with various alternative distinctions. One such alternative concerns different uses that a speaker might make of an indefinite descriptive phrase. Though 'a sloop' expresses the indefinite concept *some sloop or other*, there is no bar against using the phrase with reference to a particular sloop (as, for example, in 'I was in a sloop yesterday. Was it yours?'). Such a use flies in the face of the indefinite character of the concept semantically expressed by the phrase. We say something nonspecific and mean something specific; in effect, we say 'some sloop' but mean 'that sloop.' And yet life goes on relatively unperturbed. Keith Donnellan famously pointed out (as did some others independently) that definite descriptions are likewise used sometimes with a particular object in mind ('referential use'), sometimes not ('attributive'). Let us call a use of a definite or indefinite description in uttering a sentence *directed* when there is a particular object to which the use is relevantly connected (e.g., the speaker intends a specific object or person) and the speaker may be regarded as thereby asserting (or asking) something specific directly about that object, and let us call a use of a description *undirected* when the speaker instead merely intends something general to the effect that whatever (whoever) is the only such-and-such/at least one such-and-such or other.[2]

The distinction between directed and undirected uses is clearly genuine; of that there can be no legitimate doubt. What is subject to serious dispute is whether the

[1] W. V. Quine, 'Quantifiers and Propositional Attitudes.' *Journal of Philosophy* 53. Reprinted in Quine's *The Ways of Paradox* (New York: Random House, 1966), 183–94. B. Russell, 'On Denoting.' *Mind* 14 (1905), pp. 479–93. Russell would extend his primary/secondary occurrence distinction to (1) by rewriting it in sentential-operator form, for example, as ⌜Ralph desires that (2)⌝.

[2] K. Donnellan, 'Reference and Definite Descriptions.' *The Philosophical Review* 75 (1966), pp. 281–304. Donnellan's referential/attributive distinction for definite descriptions is a special case of the directed/undirected distinction, which also covers indefinite descriptions. A use of 'some atheist' in uttering 'Some atheist is a spy' may be undirected even if the speaker is regarded as thereby designating a higher-order entity relevantly connected to that same use (for example, the function from functions-from-individuals-to-truth-values that assigns *truth* to any function assigning *truth* to at least one atheist and otherwise assigns *falsity*).

distinction has a direct bearing on the semantics of descriptive phrases. In particular, is (2) literally true, even if only by dumb luck, when 'a sloop' is used directedly for a sloop Ralph does not in fact own, if Ralph nevertheless owns a sloop? Intuition strongly favors an affirmative response. Russell recognized the point, and urged it in favor of his theory (now generally taken for granted) that indefinite descriptions function univocally as existential quantifiers:

> What do I really assert when I assert 'I met a man'? Let us assume, for the moment, that my assertion is true, and that in fact I met Jones. It is clear that what I assert is *not* 'I met Jones.' I may say 'I met a man, but it was not Jones'; in that case, though I lie, I do not contradict myself, as I should do if when I say I met a man I really mean that I met Jones. It is clear also that the person to whom I am speaking can understand what I say, even if he is a foreigner and has never heard of Jones.
>
> But we may go further: not only Jones, but no actual man, enters into my statement. This becomes obvious when the statement is false, since then there is no more reason why Jones should be supposed to enter into the proposition than why anyone else should. . . . Thus it is only what we may call the concept that enters into the proposition.

More systematic considerations can also be brought to bear, discrediting the thesis that the directed/undirected distinction is relevantly relevant.[3] Still some remain unconvinced. Joseph Almog (pp. 77–81) has claimed that the distinction (or one like it in all relevant respects) is not only semantically significant, but indeed provides the basis for the notional/relational distinction.[4] The relational reading of (1), Almog contends, is generated by a directed use of the relevant indefinite description, the notional reading by an undirected use (1998, 79–81; Almog speaks of 'readings' rather than 'uses'). The account extends the notional/relational distinction to (2), portraying the undirected use of the indefinite as generating a notional reading. In fact, Almog explains the notional reading of (1) as the exact analog of the reading generated by an undirected use of (2).

The fact that the directed/undirected distinction applies to sentences like (2) and (4), not just (1) and (3), is in itself reason for suspicion of the proposal. Almog's account gets things exactly reversed with the facts. It is the relational reading of (1), not the notional, that arises by reading it on the model of (2): There is some sloop or other that Ralph owns/wants. A genuinely notional reading of (2) should depict Ralph as somehow standing in the ownership relation to a nonspecific concept!

[3] Kripke, S. See, '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, 1977).

[4] J. Almog, 'The Subject Verb Object Class.' In J. Tomberlin (ed.), *Philosophical Perspectives 12: Language, Mind, and Ontology* (Cambridge, Mass.: Blackwell, 1998). Others who also maintain that the directed/undirected distinction is semantically relevant include Barbara Partee ('Opacity, Coreference, and Pronouns.' In D. Davidson and G. Harman (eds.), *Semantics of Natural Language* (Boston: D. Reidel, 1972). Almog follows Partee in confusing relational/notional with directed/undirected), Jon Barwise and John Perry (J. Barwise, and J. Perry). *Situations and Attitudes* (Cambridge, Mass.: MIT Press, 1983), and Howard Wettstein ('Demonstrative Reference and Definite Descriptions.' *Philosophical Studies* 40 (1981), pp. 241–57. 'The Semantic Significance of the Referential-Attributive Distinction.' *Philosophical Studies* 44 (1983), pp. 187–96). I challenge Wettstein's account in Salmon. 'The Pragmatic Fallacy.' *Philosophical Studies* (1991), pp. 83–97).

Likewise, it is the relational reading of (3), not the notional, that arises by reading it on the model of (4): There is some spy or other who has stolen Ralph's documents—or whom Ralph believes has stolen them.[5]

The explanation for the collapse of the notional/relational distinction on Almog's account is straightforward. Consider the relational reading of (1): A sloop is such that Ralph specifically wants it. Whereas 'a sloop' may be used directedly, there is nothing to prevent the speaker from instead using the indefinite phrase undirectedly, and to mean by (1), understood relationally, that Ralph's desire is focused on some sloop or other: There is a very particular sloop—which sloop is not here specified—that Ralph has his heart set on. (I maintain that this accords with the literal meaning of (1), read relationally, regardless of whether the indefinite is used directedly or undirectedly, whereas the specific thought that Ralph wants *that sloop I have in mind* provides more information than is semantically encoded into the relational reading.) Exactly similarly for (3): There is a very particular spy—which spy is not here specified—to whom Ralph's finger of blame is pointed in a most *de re*, accusatory way. In neither case does an undirected use preclude the relational reading; read relationally, the indefinite may be used either directedly or undirectedly.

Ironically, an undirected use in fact evidently precludes the notional reading. If (1) is read notionally, the description 'a sloop' functions not to *express* the generalized concept of some sloop or other, but to *refer to* it, in order for (1) to

[5] Almog explains the notional reading of 'Madonna seeks a man' (misidentified with its undirected use) by saying that it is true if and only if Madonna seeks at least one instance of the kind *Man* ('Subject Verb Object,' pp. 57, 80). This is at best a tortured expression of Madonna's objective ('Mankind, schmankind. I'm just looking for a man.'). Worse, the formulation leaves the notional/relational ambiguity unresolved. In seeking at least one instance of mankind, is there anyone in particular who is the object of Madonna's desire, or is she merely seeking relief from her unbearable loneliness? Almog disambiguates in exactly the wrong direction, saying: (*i*) ' "Madonna met a man" . . . is true on this parsing [its undirected use] . . . iff Madonna met at least one man'; furthermore, (*ii*) 'no special treatment accrues intensional verbs. Thus to get the truth conditions of the [notional] reading of "Madonna seeks a man", simply substitute "seek" [in (*i*)]' (p. 80). Substitution of *seeking* for *having met* in Madonna's having met at least one man (or in Madonna's standing to mankind in the relative product, *x* met at least one instance of *y*) directly results in a targeted search by the diva.

Almog denies (pp. 53–54) that (2) logically entails (2′) 'There is a sloop that Ralph owns', on the grounds that (1), which has the same logical form as (2), can be true without (1′) 'There is a sloop that Ralph wants'—while conceding that it is nevertheless necessary and knowable *a priori* that if Ralph owns a sloop then there is a sloop that he owns. This argument carries no conviction. Logic can no more tolerate a divergence in truth value between 'Ralph owns at least one sloop' and 'At least one sloop is such that Ralph owns it' than it can between 'The number of planets is such as to be not even' and 'It is not the case that: the number of planets is even'. The second pair are equivalent despite the fact that substitution of 'possibly' for 'not' yields a falsehood and a truth, respectively. There is a reading of (1) on which it evidently entails (1′)—viz., the relational reading. In any event, on this reading (1) yields (1′) with the same sort of modality as between (2) and (2′)—whether the connection is deemed logical or only necessary, *a priori*, intuitive, conceptual, true by virtue of meaning, and whatever else (knowable by reason alone?). The relational/notional distinction may even be defined or characterized by contrasting the reading of (1) on which it is yields (1′) *via* the same sort of modality as between (2) and (2′), with that on which it instead attributes a desire for slooplessness relief compatible with (1′)'s denial. Owning and finding provide a template for wanting and seeking, but only for wanting and seeking in the relational senses. The desire for mere relief from slooplessness provides a new paradigm (familiarity of grammatical form notwithstanding).

express that Ralph stands to this very concept in the specified relation.[6] Analogously, on the notional reading of (3), the complement clause functions not to express the proposition that some spy or other has stolen Ralph's documents but to refer to the proposition, enabling the sentence to express that Ralph believes it. As Frege noted, in such cases the indefinite phrase does not have its customary content or reference, i.e., its customary *Sinn* or *Bedeutung*. Instead it is in *ungerade* ('oblique') mode. Insofar as the phrase is used to refer to a generalized concept, it is naturally used directedly for that very concept. The notional reading is thus generally accompanied by a directed use by the speaker (albeit an *ungerade* use), not an undirected one. Here again, Almog's account has matters exactly reversed with the facts.[7]

Taking (2) as a model for the notional reading of (1) inevitably yields exactly the wrong results. In effect, Almog attempts to capture the relational/notional distinction by contrasting directed and undirected uses of the relational reading, missing the notional reading altogether. The failure of the directed/undirected distinction as an analysis of the notional/relational is confirmed by Russell's insight that the latter distinction replicates itself in increasingly complex constructions. This is Russell's notion of scope. Thus the sentence.

Quine doubts that Ralph wants a sloop

yields not merely two, but three distinct readings: There is a sloop that Quine specifically doubts Ralph wants (*wide scope*); Quine doubts that there is any sloop that Ralph wants (*intermediate*); Quine doubts that Ralph seeks relief from slooplessness (*narrow*). The intermediate-scope reading is notional with respect to Quine and relational with respect to Ralph; the narrow-scope reading is doubly notional. The intermediate- and narrow-scope readings report Quine's doubt of the relational and notional readings, respectively, of (1). The wide-scope reading is the next generation of readings. Prefixing further operators introduces successive generations ('You understand that Salmon reports that Quine doubts . . .'). By contrast, the directed/undirected distinction does not reproduce with operators. The distinction naturally arises in the wide-scope reading, which is neutral between a directed and an undirected use of 'a sloop'. Each is permissible. ('A sloop [*that sloop I have in mind*

[6] This is not to say that Ralph wants to own a concept. There is no sloop or concept that Ralph specifically wants in virtue of wanting relief from slooplessness. Rather, Ralph stands in a certain relation to the generalized concept, *some sloop or other*. The relation is expressed in some English constructions by 'wants'. To say that Ralph notionally wants a concept is to assert that this same relation obtains between Ralph and a concept of a concept. *Cf.* Alonzo Church (A. Church, *Introduction to Mathematical Logic I* (Princeton: Princeton University Press, 1956), p. 8*n*20).

[7] Almog depicts (2) on an undirected use as expressing (or at least as true exactly on the condition) that Ralph stands to the kind *Sloop* in the relative product, *x* owns at least one instance of *y*. This would suggest that, in such a use, the word 'sloop' refers to, and is directed toward, the kind *Sloop* while the words 'owns a' express the relative product (p. 79). Similarly for the analogous use of (1), yielding its relational reading (directly contrary to Almog's stated purpose; see note 5 above). The phrase 'a sloop' (as opposed to the word 'sloop' occurring therein) on such a use would refer neither to the kind nor to the relative product, nor to anything else. In effect, it is contextually defined away. (Alternatively, it might be taken as referring to a higher-order entity, e.g., $(\lambda F)[(\exists z)(z$ is an instance of the kind *Sloop* & $Fz)]$; *Cf.* note 2 above. But Almog eschews such entities in his semantic analysis.) By contrast, 'a sloop' on the notional reading of (1) refers to, and its use is directed toward, the concept, *some sloop or other* (or if one prefers, *at least one instance of Sloop*).

vs. *some sloop or other*] is such that Quine specifically doubts that Ralph wants *it*.') In both the intermediate-and narrow-scope readings, 'a sloop' is in *ungerade* mode, and hence, insofar as it is used directedly or undirectedly, is presumably directed.[8]

GEACH'S PUZZLE

The notional/relational distinction may be tested by anaphoric links to a descriptive phrase. Consider:

> Ralph wants a sloop, but it is a lemon
>
> Ralph believes a female spy has stolen his documents; she also tampered with the computer.

These sentences strongly favor a relational reading. Appropriately understood, each evidently entails the relational reading of its first conjunct, even if the first conjunct itself is (somewhat perversely) read notionally. If, as alleged, it is a lemon, then there must be an *it* that is a lemon, and that *it* must be a sloop that Ralph wants. Similarly, if she tampered with the computer, then there must be a *she* who is a spy and whom Ralph suspects of the theft.

[8] The various considerations demonstrating the failure of the directed/undirected analysis of relational/notional are well known in connection with definite descriptions. *Cf.* Kripke (*Contemporary Respectives*, p. 9–10). Analogous considerations are at least as forceful with regard to indefinite descriptions. In responding to Kripke's arguments against the alleged semantic significance of the directed/undirected distinction, Almog ('Subject Verb Object,' pp. 91–98) barely acknowledges these more decisive—and more fundamental—considerations against his proposal. Almog's defense of the semantic-significance thesis suffers furthermore from the confusions limned above, including, for example, the false premise that the notional reading of (1) asserts that one sloop or other has the property of being wanted by Ralph (something in fact entailed by the relational reading). Michael McGlone has pointed out (in conversation) that Almog might restrict his directed/undirected account of relational/notional to constructions like (1), not extending it to (3). (*Cf.* Almog 'Subject Verb Object,' pp. 104n20.) Such a restriction would be both *ad hoc* and irrelevant. (The scope considerations apply equally to 'Diogenes wants to seek an honest man'.) The account fails for both sorts of cases, and for the same basic reason: The analogue for (1)/(3) of an undirected use of (2)/(4) is a straightforwardly relational reading, and hence fails as an analysis of the notional reading.

Perhaps Almog will recant and concede that verbs like 'want' and 'seek' do after all require special treatment to capture the elusive notional readings. On its notional reading, (1) is true iff Ralph is related to the kind *Sloop* by notionally wanting at least one instance of the latter, as opposed to relationally wanting one, as entailed by the discredited account. (See notes 5 and 7 above.) This of itself leaves the former condition unexplained. In particular, appealing to an alleged undirected use of 'a sloop' by the reporter yields the wrong reading. But Almog also explicitly rejects the Frege-inspired analysis (which I believe is essentially correct): that certain expressions including 'seek' and 'want' (not including 'find' and 'own') are *ungerade* operators, which induce 'a sloop' to refer to rather than to express the concept *some sloop or other*, eliciting a directed use by the speaker. (The relational reading of (1) is explicable on this analysis as a matter of wide scope/primary occurrence.)

A case can be made that the relational reading of (1) goes hand in hand with a directed use of 'a sloop', or a propensity toward a directed use, *on the part of Ralph* rather than the speaker, and the notional reading correspondingly with an undirected use, or a propensity thereto, by Ralph. A logico-semantic account of relational/notional along these lines, although not as conspicuously flawed as Almog's, is also significantly wide of the mark. (Suppose Ralph speaks no English. Consider also the Church–Langford translation test.) Almog anyway explicitly rejects the idea (p. 56).

The notional/relational distinction comes under severe strain, however, when confronted with Peter T. Geach's (1967) ingenious Hob/Nob sentence:

(5) Hob thinks a witch has blighted Bob's mare, and Nob wonders whether she (the same witch) killed Cob's sow.[9]

This puzzling sentence seems to resist both a relational and a notional reading. If there is a *she* whom Nob wonders about, then that *she*, it would appear, must be a witch whom Hob suspects of mare blighting. But the sincere utterer of (5) intuitively does not seem committed in this way to the reality of witches. Barring the existence of witches, though (5) may be true, there is no actual witch about whom Hob suspects and Nob wonders. Any account of the notional/relational that depicts (5) as requiring the existence of a witch is *ipso facto* wrong. There is a natural reading of (5) that carries an ontological commitment to witches, viz., the straightforward relational reading. The point is that the intended reading does not.

A tempting response construes (5) as fully notional, along the lines of

(5_n) (i) Hob thinks: a witch has blighted Bob's mare; and (ii) Nob wonders whether: the witch that (Hob thinks) blighted Bob's mare also killed Cob's sow.

Yet this will not do; (5) may be neutral concerning whether Nob has a true belief about, let alone shares, Hob's suspicion. Nob's wondering need not take the form 'Did the same witch that (Hob thinks) blighted Bob's mare also kill Cob's sow?' It may be that Hob's thought takes the form 'Maggoty Meg has blighted Bob's mare' while Nob's takes the form 'Did Maggoty Meg kill Cob's sow?' If so, (5) would be true, but no fully notional reading forthcoming.

Worse, Hob's and Nob's thoughts need not involve the same manner of specification. It may be that Hob's thought takes the form 'Maggoty Meg has blighted Bob's mare' while Nob's wondering takes the form 'Did the Wicked Witch of the West kill Cob's sow?' This appears to preclude a neo-Fregean analysis along the lines of the following:

(*F*) $(\exists\alpha)$[α corepresents for both Hob and Nob & Hob notionally-thinks $\ulcorner\alpha$ is a witch who has blighted Bob's mare$\urcorner$ & Nob notionally-thinks $\ulcorner\alpha$ is a witch$\urcorner$ and Nob notionally-wonders $\ulcorner$Did α kill Cob's sow?$\urcorner$].[10]

Geach himself argues (pp. 148–149) that since (5) does not commit its author to the existence of witches, it must have some purely notional reading or other.

[9] Peter Geach, 'Intentional Identity.' *Journal of Philosophy* 64: 627–32. Reprinted in Geach *Logic Matters* (Oxford: Basil Blackwell, 1972). Though the puzzle has generated a considerable literature, its general importance to the philosophy of logic and language remains insufficiently appreciated. (As will emerge, I believe Geach's moniker for the puzzle as one of 'intentional identity' is a likely misnomer.)

[10] *Cf.* David Kaplan ('Quantifying In.' In D. Davidson and J. Hintikka (eds.), *Words and Objections: Essays on the Work of W. V. Quine* (Dordrecht: D. Reidel, 1969), pp. 225–31). Contrary to Daniel C. Dennett ('Geach on Intentional Identity.' *Journal of Philosophy* 65 (1968), pp. 335–41), the intelligibility (indeed the fact) of Hob's and Nob's thoughts having a common focus, somehow on the same unreal witch, does not require that they agree on every possible issue regarding the witch in question—which would in any case entail their agreeing on every possible issue.

He suggests an alternative neo-Fregean analysis, evidently along the lines of the following:

(*G*) $(\exists\alpha)(\exists\beta)[\alpha$ is a witch-representation & β is a witch-representation & α and β corepresent for both Hob and Nob & Hob notionally-thinks ⌜α has blighted Bob's mare⌝ & Nob notionally-wonders ⌜Did β kill Cob's sow?⌝$]$.[11]

This proposal faces certain serious difficulties, some of which are also problems for (*F*): The relevant notion of a *witch-representation* must be explained in such a way as to allow that an individual representation α (e.g., an individual concept) may be a witch-representation without representing any actual witch, and for that matter, without representing anything at all. More important, the relevant notion of *corepresentation* needs to be explained so as to allow the following: that a pair of individual representations α and β may co-represent for two thinkers without representing anything at all for either thinker. Geach does not explicitly employ the notion of corepresentation. I have included it on his behalf because it, or something like it, is crucial to the proposed analysis. Any analysis, if it is correct, must capture the idea that Hob's and Nob's thoughts have a common focus. Though there is no witch, Hob and Nob are, in some sense, thinking about the *same* witch. It is on this point that notional analyses generally fail. Even something as strong as (5_n)—already too strong—misses this essential feature of (5). On the other hand, however the notion of vacuously corepresenting witch-representations is ultimately explained, by contrast with (*G*), (5) evidently commits its author no more to corepresenting witch-representations than to witches. More generally, any analysis along the lines of (*F*) or (*G*) cannot forever avoid facing the well-known difficulties with neo-Fregean, notional analyses of relational constructions generally (e.g., the Twin Earth considerations).[12]

An alternative approach accepts the imposingly apparent relational character of (5) at face value, and construes it along the lines of the following:

(6) There is someone whom: (*i*) Hob thinks a witch that has blighted Bob's mare; (*ii*) Nob also thinks is a witch; and (*iii*) Nob wonders whether she killed Cob's sow.

[11] Peter Geach 'Two Kinds of Intentionality.' *Monist* 59 (1976), pp. 306–20, pp. 314–18.

[12] Stephen Neale (*Descriptions* (Cambridge, Mass.: MIT Press, 1990), p. 221), proposes analyzing the relevant reading of (5) along the lines of: (*i*) Hob thinks: a witch has blighted Bob's mare; and (*ii*) Nob wonders whether: the *such-and-such* witch killed Cob's sow, where 'the *such-and-such* witch' is fleshed out by the context, e.g., as 'the local witch'. But (5) evidently does not attribute to Nob the particular thought 'Did *the local witch* kill Cob's sow?' nor any similarly descriptive thought. Worse, Neale's proposal fails to capture the crucial feature of (5) that Nob's wondering allegedly regards the very witch that Hob suspects. Michael McKinsey ('Mental Anaphora.' *Synthese* 66 (1986), pp. 159–75) argues that the only readings of (5) that do not commit its author to the existence of a witch (or to there being some real person whom Hob and Nob relationally suspect of witchcraft) are given by (5_n) (which he regards as ambiguous). Dennett apparently holds that the only such readings of (5) are either those given by (5_n) or else something similar to the less specific (*F*). *Pace* Geach, Dennett, McKinsey, and Neale, (5) is evidently relational yet free of commitment to witches (or to anyone who is a suspect). (Contrary to Dennett, the speaker's basis or justification for uttering (5) is mostly irrelevant.)

This happily avoids commitment to witches. But it does not provide a solution. Hob's and Nob's thoughts need not concern any real person. Maggoty Meg is not a real person, and there may be no one whom either Hob or Nob believe to be the wicked strega herself.

Some proposed solutions to Geach's puzzle make the unpalatable claim that Hob's and Nob's musings concern a Meinongian Object—a particular witch who is both indeterminate and nonexistent.[13] Many proposed solutions instead reinterpret relational attributions of attitude so that they are not really relational, i.e., they do not make genuine reference to the individuals apparently mentioned therein by name or pronoun. These responses inevitably make equally unpalatable claims involving relational constructions—for example, that Nob's wondering literally concerns the very same witch/person as Hob's belief yet neither concerns anyone (or anything) whatsoever, or that relational constructions mention or generalize over speech-act tokens and/or connections among speech-act tokens.[14] It would be more

[13] *Cf.* Esa Saarinen ('Intentional Identity Interpreted: A Case Study of the Relations Among Quantifiers, Pronouns, and Propositional Attitudes.' *Linguistics and Philosophy* 2 (1978), pp. 151–223). A variant of this approach imputes thoughts to Hob and Nob concerning a particular possible and fully determinate but nonexistent witch. This proposal cannot be summarily dismissed on the ground of an alleged ontological commitment to merely possibles. The proposed analysis may be understood instead as follows: There *might have existed* (even if there does not exist) a witch such that *actually*: (*i*) Hob thinks she has blighted Bob's mare; and (*ii*) Nob wonders whether she killed Cob's sow. Whereas this is in some sense committed to merely possible witches, it avoids commitment to their actual existence. The more serious difficulty is that neither Hob nor Nob (assuming they are real) is connected to any particular possible witch, to the exclusion of other possible witches, in such a manner as to have relational thoughts about her. How could they be? Witches do not exist. *Cf.* Kripke (*Naming and Necessity* (Cambridge, Mass.: Harvard University Press, 1972), p. 158) '. . . one cannot say of any possible person that he *would have been* Sherlock Holmes, had he existed. Several distinct possible people, and even actual ones such as Darwin or Jack the Ripper, might have performed the exploits of Holmes, but there is none of whom we can say that he would have *been* Holmes had he performed these exploits. For if so, which one?'

[14] The Hob/Nob sentence (5) is logically consistent with neither Hob nor Nob articulating his musings, explicitly or implicitly. Tyler Burge's ('Russell's Problem and Intentional Identity.' In J. Tomberlin (ed.), *Agent, Language, and the Structure of the World* (Indianapolis: Hackett, 1983), pp. 94–98) analysis seems to be roughly the following:

> Hob believes ⌜$(\exists x)$(x is a witch who has blighted Bob's mare)⌝ & ∴ Hob believes ⌜(the$_{13}$ x) (x is a witch who has blighted Bob's mare) exists⌝ & Nob wonders ⌜y_{13} killed Cob's sow⌝.

Burge stipulates that the recurring subscript 'marks the anaphoric or quasi-anaphoric connection between the terms' (1983, 97), where 'a more explicit way of capturing the point of the subscripts' would explicitly generalize over communication chains, including both Hob's application of 'the$_{13}$' and Nob's application of 'y_{13}' (1983, 98).

Burge's apparatus is not explained sufficiently for this to qualify as a proposed solution to the problem. Aside from questions raised by the connective adjoining the first two conjuncts (how does a single statement contain an argument?), the analysis is inadequate on its most natural interpretations. An immediate problem is that (5), as intended, does not entail that Hob notionally thinks only one witch has blighted Bob's mare; the argument of the first two conjuncts is invalid. More problematic, if the special quotation marks indicate ordinary quotation (as seems to conform with Burge's intended interpretation), the analysis miscasts relational constructions as reporting dispositions toward sentences (e.g., purported utterances or implicit utterances) rather than the content of the attitudes thereby expressed and their relation to objects. Assuming instead (apparently contrary to Burge's intent) that the occurrence of 'y_{13}' is in bindable position, the variable remains free even assuming that the definite-descriptions operator 'the$_{13}$' is variable binding.

sensible to deny that (5) can be literally true on the relevant reading, given that there are no actual witches.[15] The problem with this denial is that its proponent is clearly in denial. As intended, (5) can clearly be true (assuming Hob and Nob are real) even in the absence of witches. Numerous postmodern solutions jump through technical hoops to allow a pronoun ('she') to be a variable bound by a quantifier within a belief context ('a witch') despite standing outside the belief context, hence also outside the quantifier's scope, and despite standing within an entirely separate belief context. These 'solutions' do not satisfy the inquiring mind as much as boggle it. It is one thing to construct an elaborate system on which (5) may be deemed true without 'There is a witch'. It is quite another to provide a satisfying explanation of the content of Nob's attitude, one for which the constructed system is appropriate. How can Nob wonder about a witch, and a particular witch at that—the very one Hob suspects—when there is no witch and, therefore, no particular witch about whom he is wondering? This is the puzzle in a nutshell. It combines elements of intensionality puzzles with puzzles concerning nonexistence and puzzles concerning identity, and has been deemed likely intractable.[16]

Burge's stipulation suggests the variable is to have a value assigned to it *via* Hob's alleged description 'the witch who has blighted Bob's mare', thus recasting the third conjunct into 'Nob wonders whether she—the witch who has blighted Bob's mare—killed Cob's sow'. (Otherwise, the 'y_{13}' evidently remains both free and value-less, leaving (5) without propositional content, hence untrue.) This, however, is evidently ambiguous between a reading on which the value-fixing is affected on the part of the author of (5)—call it *primary occurrence*—and a *secondary-occurrence* reading on which the value-fixing is allegedly affected on the part of Nob. (The terminology is intended to recall Russell's distinction. The ambiguity corresponds even more closely to two competing interpretations of David Kaplan's rigidifying operator '*dthat*'.) On the secondary-occurrence reading, the value-fixing description plays a representational role on Nob's behalf. On the primary-occurrence reading, the value-fixing is shielded from the shift-from-customary-mode function of the quotation marks, leaving the pronoun to carry the weight of representing for Nob. The analysans on the secondary-occurrence reading, like (5_n), commits not only Hob but also Nob to the existence of a witch who has blighted Bob's mare. Worse, the more likely primary-occurrence reading commits (5)'s author to the existence of such a witch. Neither is correct.

A further problem with the proposal is that the truth of (5) does not require that Nob make any pronominal application that is anaphoric on an application by Hob. The two might never communicate. Burge therefore offers something like the following as an alternative analysis ('Russell's Problem,' p. 96):

> The community believes $\ulcorner(\exists x)(x$ is a witch wreaking havoc$)\urcorner$ & $\therefore$ the community believes $\ulcorner(\text{the}_{13}\, x)(x$ is a witch who is wreaking havoc) exists$\urcorner$ & Hob thinks $\ulcorner y_{13}$ has blighted Bob's mare$\urcorner$ & Nob wonders $\ulcorner z_{13}$ killed Cob's sow$\urcorner$.

This is subject to some of the same difficulties as the previous analysis and more besides, including some of the same defects as Neale's proposal (see note 12)—as well as some of the defects of the Fregean analyses that Burge eschews. By contrast, for example, (5) makes no claim regarding community-held beliefs, let alone regarding a specific alleged community belief that there is only one witch wreaking havoc.

[15] The account in Almog ('Subject Verb Object,' pp. 68, 75–76, and *passim*), extended to propositional-attitude attributions, apparently depicts (5) as modally equivalent on its intended reading to 'Hob thinks Maggoty Meg has blighted Bob's mare, and Nob wonders whether she killed Cob's sow', and depicts the latter as expressing a necessary falsehood in virtue of the failure of 'Maggoty Meg' to refer.

[16] Michael Clark ('Critical Notice of P. T. Geach, *Logic Matters*.' *Mind* 74 (1975), pp. 122–36, p. 124).

MYTHS

The solution I shall urge takes (5) at face value, and takes seriously the idea that false theories that have been mistakenly believed—what I call *myths*—give rise to fabricated but genuine entities.[17] These entities include such oddities as: Vulcan, the hypothetical planet proposed by Babinet and which Le Verrier believed caused perturbations in Mercury's solar orbit; the ether, once thought to be the physical medium through which light waves propagate; phlogiston, once thought to be the element (material substance) that causes combustion; the Loch Ness Monster; Santa Claus; and Meinong's Golden Mountain. Such *mythical objects* are real things, though they are neither material objects nor mental objects ('ideas'). They come into being with the belief in the myth. Indeed, they are created by the mistaken theory's inventor, albeit without the theorist's knowledge. But they do not exist in physical space, and are, in that sense, abstract entities. They are an unavoidable by-product of human fallibility.

Vulcan is a mythical planet. This is not to say, as one might be tempted to take it, that Vulcan is a planet but one of a rather funny sort, e.g., a Meinongian Object that exists in myth but not in reality.[18] On the contrary, Vulcan exists in reality, just as robustly as you the reader. But a mythical planet is no more a planet than a toy duck is a duck or a magician is someone who performs feats of magic. A mythical object is an imposter, a pretender, a stage prop. Vulcan is not a real planet, though it is a very real object—not concrete, not in physical space, but real. One might say that the planet Mercury is also a 'mythical object,' in that it too figures in the Vulcan myth, wrongly depicted as being gravitationally influenced by Vulcan. If we choose to speak this way, then it must be said that some 'mythical planets' are real planets, though not really as depicted in the myth. Vulcan, by contrast with the 'mythical' Mercury, is a *wholly mythical* object, not a real planet but an abstract entity inadvertently fabricated by the inventor of the myth. I shall continue to use the simple word 'mythical' as a shorthand for the notion of something wholly mythical.[19]

The existence of fictional objects, in something close to this sense, has been persuasively urged by Peter van Inwagen and Saul Kripke as an ontological commitment of our ordinary discourse about fiction.[20] Their account, however, is significantly

[17] *Cf.* Salmon. 'Nonexistence.' *Noûs*, 32 (1998), pp. 277–319, pp. 304–5; especially 317n50.

[18] Geach. 1967b. 'The Perils of Pauline.' *Review of Metaphysics* 23. Reprinted in Geach, *Logic Matters*, (Oxford: Basil Blackwell, 1972), 153–65) misconstrues the claim in just this way.

[19] Sachin Pai asks whether there is in addition to Mercury a wholly mythical planet that astronomers like Le Verrier wrongly believed to be Mercury. I leave this as a topic requiring further investigation.

[20] P. van Inwagen, 1977. 'Creatures of Fiction.' *American Philosophical Quarterly* 14 (1977), pp. 299–308; Saul Kripke. 'Reference and Existence: The John Locke Lectures for 1973' (Oxford University Press, 1973, unpublished). Kripke does not himself officially either accept or reject an ontology of mythical objects. My interpretation is based partly on notes I took at Kripke's seminars on the topic of reference and fiction at Princeton University during March–April 1981 and on recordings of his seminars at the University of California, Riverside, in January 1983. Kripke's account of fictional and mythical objects is explicated and criticized, and my alternative theory defended, in Salmon 'Nonexistence,' pp. 293–305.

different from the one I propose. Kripke contends that a mythical-object name like 'Vulcan' is ambiguous between two uses, one of which is parasitic on the other. It would be less deceptive to replace the ambiguous name with two univocal names, 'Vulcan$_1$' and 'Vulcan$_2$'. The name on its primary use, 'Vulcan$_1$', was introduced into the language, *sans* subscript, by Babinet as a name for an intra-Mercurial planet. Le Verrier used the name in this way in theorizing about Mercury's perihelion. In this use, the name names nothing; 'Vulcan$_1$' is entirely vacuous. Giving the name this use, we may say such things as that Le Verrier believed that Vulcan$_1$ affected Mercury's perihelion. Le Verrier's theory is a myth concerning Vulcan$_1$. The name on its secondary use, 'Vulcan$_2$', is introduced into the language (again *sans* subscript) at a later stage, when the myth has finally been exposed, as a name for the mythical planet erroneously postulated, and thereby inadvertently created, by Babinet. Perhaps it would be better to say that a new *use* of the name 'Vulcan' is introduced into the language. 'Vulcan$_2$' is fully referential. Using the name in this way, we say such things as that Vulcan$_2$ was a mythical intra-Mercurial planet hypothesized by Babinet. The difference between Vulcan$_1$ and Vulcan$_2$ could not be more stark. The mistaken astronomical theory believed by Babinet and Le Verrier concerns Vulcan$_1$, which does not exist. Vulcan$_2$, which does exist, arises from the mistaken theory itself. Vulcan$_2$ is recognized through reflection not on events in the far-off astronomical heavens but on the more local story of man's intellectual triumphs and defeats, particularly on the history of science.

Kripke's account is vulnerable to a familiar family of thorny problems: the classical problem of true negative existentials and the more general problem of the content and truth value of sentences involving vacuous names. Vulcan$_1$ does not exist. This sentence is true, and seems to say about something (viz., Vulcan$_1$) that it fails to exist. Yet the sentence entails that there is nothing for it to attribute nonexistence to. Furthermore, on Kripke's account, Le Verrier believed that Vulcan$_1$ has an impact on Mercury's perihelion. What can the content of Le Verrier's belief be if there is no such thing as Vulcan$_1$? Furthermore, is the belief content simply false? If so, then it may be said that Vulcan$_1$ has no impact on Mercury's perihelion. Yet this claim too seems to attribute something to Vulcan$_1$, and thus seems equally wrong, and for exactly the same reason, with the claim that Vulcan$_1$ does have such an impact. Kripke is aware of these problems but offers no viable solution.

I submit that Kripke's alleged primary use of a mythical-object name is itself a myth. To be sure, Babinet believed himself to be naming a real planet in introducing a use of 'Vulcan' into the language, and other users like Le Verrier believed themselves to be referring to a real planet. But this linguistic theory of the name 'Vulcan' is mistaken, and is in this respect exactly like the astronomical theory that Vulcan is a real planet. The two theories complement each other, and fall together hand in hand. The situation should be viewed instead as follows: Babinet invented the theory—erroneous, as it turns out—that there is an intra-Mercurial planet. In doing this, he inadvertently created Vulcan. Indeed, Babinet even introduced a name for this mythical planet. The name was intended for a real planet, and Babinet believed the name thus referred to a real planet (notionally, not relationally!). But here again, he was simply mistaken. Other astronomers, most notably Le Verrier,

became convinced of Babinet's theory, both as it concerns 'Vulcan' (that it is a very real intra-Mercurial planet) and as it concerns 'Vulcan' (that it names the intra-Mercurial planet). Babinet and Le Verrier both believed, correctly, that the name 'Vulcan', on the relevant use, refers to Vulcan. But they also both believed, mistakenly, that Vulcan is a real planet. They might have expressed the latter belief by means of the French version of the English sentence 'Vulcan is a planet', or other shared beliefs by means of sentences like 'Vulcan's orbit lies closer to the Sun than Mercury's'. These beliefs are mistakes, and the sentences (whether English or French) are false.

Importantly, there is no relevant use of the name 'Vulcan' by Babinet and Le Verrier that is vacuous. So used, the name refers to Vulcan, the mythical planet. Le Verrier did *not* believe that Vulcan_1 is an intra-Mercurial planet—or, to put the point less misleadingly, there is no real use marked by the subscript on 'Vulcan' on which the string of words 'Vulcan_1 is an intra-Mercurial planet' expresses anything for Le Verrier to have believed, disbelieved, or suspended judgment about. To put the matter in terms of Kripke's account, what Le Verrier believed was that Vulcan_2 is a real intra-Mercurial planet. Le Verrier's belief concerns the mythical planet, a very real object that had been inadvertently created, then named 'Vulcan', by Babinet. Their theory about Vulcan was completely wrong. Vulcan is in fact an abstract object, one that is depicted in myth as a massive physical object.

A common reaction is to charge my proposal with miscasting mythical objects as the objects with which myths are concerned. On the contrary, it is objected, if they exist at all, mythical objects enter the intellectual landscape only at a later stage, not in the myth itself but in the subsequent historical account of the myth. A robust sense of reality demands that the myth itself be not about these abstract objects but about *nothing*, or at most about representations of nothing. No one expresses this sentiment more forcefully than Russell (1919):

> [Many] logicians have been driven to the conclusion that there are unreal objects . . . In such theories, it seems to me, there is a failure of that feeling for reality which ought to be preserved even in the most abstract studies. Logic, I should maintain, must no more admit a unicorn than zoology can; for logic is concerned with the real world just as truly as zoology, though with its more abstract and general features. To say that unicorns have an existence in heraldry, or in literature, or in imagination, is a most pitiful and paltry evasion. What exists in heraldry is not an animal, made of flesh and blood, moving and breathing of its own initiative. What exists is a picture, or a description in words. . . . A robust sense of reality is very necessary in framing a correct analysis of propositions about unicorns . . . and other such pseudo-objects.[21]

I heartily applaud Russell's eloquent plea for philosophical sobriety. But his attitude toward 'unreal' objects is fundamentally confused. To repeat, a mythical planet is not a massive physical object but an abstract entity, the product of creative astronomizing. Likewise, a mythical unicorn or a mythical winged horse is not a living creature but a fabricated entity, the likely product of blurred or fuzzy vision, just as mermaids are the likely product of a deprived and overactive imagination under the influence of liquor—creatures not really made of flesh and blood and fur

[21] Bertrand Russell, *Introduction to Mathematical Philosophy* (London: George Allen and Unwin, 1919), chap. 16, 169–70.

or scales, not really moving and breathing of their own initiative, but depicted as such in myth, legend, hallucination, or drunken stupor.

It is frequently objected even by those who countenance mythical objects that the Vulcan theory, for example, is merely the theory that there is an intra-Mercurial planet, not the bizarre hypothesis that the relevant abstract entity is that planet. Babinet and Le Verrier, it is observed, did not believe that an abstract entity is a massive heavenly object. Quite right, but only if meant notionally. Understood relationally—as the claim that, even if there is such an abstract entity as the mythical object that is Vulcan, Babinet and Le Verrier did not believe it to be an intra-Mercurial planet—it turns mythical objects into a philosophical black box. What role are these abstract entities supposed to play, and how exactly are their myth-believers supposed to be related to them in virtue of believing the myth? In fact, this issue provides yet another reason to prefer my account over Kripke's. On my account, in sharp contrast, the role of mythical objects is straightforward: They are the things depicted as such-and-such in myth, the fabrications erroneously believed by wayward believers to be planets or the medium of light-wave propagation or ghosts, the objects the mistaken theory is about when the theory is not about any real planet or any real medium or any real ghost. It is not merely that being depicted as such-and-such is an essential property of a mythical object, a feature the object could not exist without. Rather, being so depicted is the metaphysical function of the mythical object; that is *what* it is, its *raison d'être*. To countenance the existence of Vulcan as a mythical planet while at the same time denying that Babinet and Le Verrier had beliefs about this mythical object, is in a very real sense to miss the point of recognizing Vulcan's existence. It is precisely the astronomers' false beliefs about the mythical planet that makes it a mythical planet; if no one had believed it to be a planet, it would not *be* a mythical planet. Come to that, it would not even exist.[22]

Another important point: I am not *postulating* mythical objects. For example, I am not postulating Vulcan. Even if I wanted to, Babinet beat me to it—though he postulated Vulcan as a real planet, not a mythical one.[23] Mythical objects would exist even if I and everyone else had never countenanced or recognized them, or admitted them into our ontology. Rather, I see myself as uncovering some evidence for their independent and continued existence, in something like the manner of the

[22] Mythical objects are of the same metaphysical/ontological category as fictional characters, and it is an essential property of any such entity that it be of this category. Perhaps a mythical object might instead have been a fictional character, or vice versa, but no mythical or fictional object could have been, say, an even integer. Some philosophers who accept the reality of fictional characters nevertheless reject mythical objects. The usual motivation is the feeling that whereas Sherlock Holmes is a real object, a character created by Sir Arthur Conan Doyle, the Vulcan theory was wrong precisely because Vulcan simply does not exist. This ignores the nearly perfect similarity between fiction and myth. Whatever good reason there is for acknowledging the real existence of Holmes extends to Vulcan. The Vulcan theory is wrong not because there is no such thing as Vulcan, but because there is no such *planet* as Vulcan as it is depicted. Or better put, Vulcan is no such planet. (Likewise, there was no such detective as Holmes, who is a fictional detective and not a real one.) Myths and fictions, are both made up. The principal difference between mythical and fictional objects is that the myth is believed while the fiction is only make-believe. This difference does nothing to obliterate the reality of either fictional or mythical objects.

[23] *Cf.* Salmon 'Nonexistence,' p. 315n38.

paleontologist who infers dinosaurs from their fossil remains, rather than the theoretical physicist who postulates a new category of physical entity in order to make better sense of things (even if what I am actually doing is in important respects more like the latter).[24]

Perhaps the most important evidence in favor of this theory of mythical objects is its logical entailment by our thoughts and beliefs concerning myths. We are sometimes led to say and think such things as, 'An intra-Mercurial planet, Vulcan, was hypothesized by Babinet and believed by Le Verrier to affect Mercury's perihelion, but there has never been a hypothetical planet whose orbit was supposed to lie between Mercury and Venus' and 'Some hypothetical species have been hypothesized as linking the evolution of birds from dinosaurs, but no hypothetical species have been postulated to link the evolution of mammals from birds.' The distinctions drawn cannot be made without a commitment to mythical objects, i.e., without attributing existence, in some manner, to mythical objects. No less significant, beliefs are imputed about the mentioned mythical objects, to the effect that they are not mythical. Being wrongly believed not to be mythical is just what it is to be mythical. Furthermore, beliefs are imputed to distinct believers concerning the very same mythical object.[25]

Further evidence—in fact, evidence of precisely the same sort—is provided by the Hob/Nob sentence. The puzzle is solved by construing (5) on its principal reading,

[24] I am aware some philosophers see no significant difference between the paleontologist and the theoretical physicist. But they are asleep, or blind.

[25] Linguistic evidence tends to support the general claim that if someone believes there is an *F* that is such-and-such when in fact there is no such thing, then there is a mythical *F* thereby believed to be such-and-such. It does not follow that whenever someone notionally believes an *F* is such-and-such, there is always something or someone (either an *F* or a mythical *F*) relationally believed to be such-and-such. That the latter is false is demonstrated by the believer who notionally believes some spy is shorter than all others. (Thanks to James Pryor and Robert Stalnaker for pressing me on this point.) If two believers notionally believe there is an *F* that is such-and-such when in fact there is no such thing, they may or may not believe in the same mythical *F,* depending on their interconnections. (This may help explain why it is more difficult to form beliefs about the shortest spy than about a mythical planet: Le Verrier and we are all *de re* connected to Vulcan.)

Mark Richard ('Commitment.' In J. Tomberlin (ed.), *Philosophical Perspectives 12: Language, Mind, and Ontology.* (Cambridge, Mass.: Blackwell, 1998), pp. 262–64, 278–79n16) criticizes my account of mythical objects while defending a version of Kripke's. Richard objects (279) to the examples given here on the ground that, for example, the first quoted sentence is in fact untrue and is easily confused with a true variant that avoids attributing to Babinet and Le Verrier any ontological commitment to, or beliefs concerning, the mythical planet: 'It was hypothesized by Babinet that there is an intra-Mercurial planet, Vulcan_1, and it was believed by Le Verrier that Vulcan_1 affects Mercury's perihelion, but it has never been hypothesized that there is a planet whose orbit lies between Mercury and Venus'. (Richard denies, with Kripke, that Babinet and Le Verrier have beliefs concerning Vulcan_2.) Richard explains the alleged confusion as the product of an exportation inference from $\ulcorner \alpha$ believes that β is an *F* that is $G \urcorner$ to $\ulcorner \beta$ is an *F* that α believes is a $G \urcorner$, where β is a proper name. Richard says this inference pattern is valid if, but only if, the name β, as used by the referent of α (e.g., 'Vulcan' as used by Babinet and Le Verrier), has a referent. This explanation is dubious. For one thing, the particular exportation-inference pattern is invalid regardless of the logico-grammatical status of β. Moreover, it does not yield the quoted sentence. As will be seen shortly, Geach's puzzle demonstrates that Richard's substitute sentence does not do justice to the data. Babinet's and Le Verrier's beliefs concern *something;* indeed they each concern the *same* thing.

or at least in one of its principal readings, as fully relational, not in the manner of (6) but along the lines of:

(7) There is a mythical witch such that (*i*) Hob thinks: she has blighted Bob's mare; and (*ii*) Nob wonders whether: she killed Cob's sow.[26]

This has the distinct advantage over (6) that it does not require that both Hob and Nob believe someone to be the witch in question. In fact, it allows that there be no one in particular whom either Hob or Nob believes to be a witch. It does require something not unrelated to this, but no more than is actually required by (5): that there be something that both Hob and Nob believe to be a witch—some*thing*, not some*one*, not a witch or a person, certainly not an indeterminate Meinongian Object, but a very real entity that Nob thinks a real witch who has blighted Bob's mare. Nob also believes this same mythical witch to be a real witch and wonders about 'her' (really: about *it*) whether she killed Cob's sow. In effect, the proposal substitutes ontological commitment to mythical witches for the ontological commitment to real witches intrinsic to the straightforward relational reading of (5) (obtained from (7) by deleting the word 'mythical'). There are other witch-free readings for (5), but I submit that any intended reading is a variant of (7) that equally commits the author to the existence of a (real or) mythical witch, such as:

(*i*) Hob thinks: some witch or other has blighted Bob's mare; and (*ii*) the (same) mythical witch that Hob thinks has blighted Bob's mare is such that Nob wonders whether: she killed Cob's sow.[27]

Significantly, one who accepts Kripke's account may not avail him/herself of this solution to Geach's puzzle. On Kripke's account it may be observed that

(*i*) Hob thinks: Meg_1 has blighted Bob's mare; and (*ii*) Nob wonders whether: Meg_1 killed Cob's sow.

[26] Quasi-formally:

($\exists x$)(*x* is a mythical-witch & Hob *thinks* ^*x* has blighted Bob's mare^ & Nob *wonders* ^*x* killed Cob's sow^),

where '^' serves as a content-quotation mark. Note the quantification into both *ungerade* contexts. (*Cf.* note 13 above regarding the error of replacing 'mythical' with 'merely possible'.)

[27] This may better capture Geach's intent. The first conjunct is notional. The second is relational, and entails that there is exactly one mythical witch whom Hob relationally thinks has blighted Bob's mare. Quasi-formally:

Hob *thinks* ^($\exists x$)(*x* is a witch & *x* has blighted Bob's mare)^ and (λy)[Nob *wonders* ^*y* killed Cob's sow^](ιx)(*x* is a mythical-witch & Hob *thinks* ^*x* has blighted Bob's mare^).

The principally intended reading of (5) is perhaps best captured by an equivalent formulation:

Hob *thinks* ^($\exists$x)(x is a witch & x has blighted Bob's mare)^ & Nob *wonders* ^*dthat*[([(ιx)(x is a mythical-witch & Hob *thinks* ^x has blighted Bob's mare^)] killed Cob's sow^,

interpreting '*dthat*'-terms so that their content is their referent (*Cf.* note 14 above). Elizabeth Harman has suggested (in conversation) a neutral reading on behalf of the speaker who remains cautiously agnostic on the question of witchcraft: replace '*x* is a mythical-witch' with the disjunction, '*x* is a witch & *x* is a mythical-witch'.

The Hob/Nob sentence (5) is not obtainable by existential generalization on 'Meg_1', since by Kripke's lights, this name is supposed to be vacuous and to occur in nonextensional ('referentially opaque,' *ungerade*) position. Nor on Kripke's account can 'Meg_2' be correctly substituted for 'Meg_1'; Hob's and Nob's theories are supposed to concern the nonexistent witch Meg_1 and not the mythical witch Meg_2. Kripke might instead accept the following, as a later-stage observation about the Meg_1 theory:

Meg_2 is the mythical witch corresponding to Meg_1.

Here the relevant notion of *correspondence* places 'Meg_2' in extensional position. While 'Meg_2' is thus open to existential generalization, 'Meg_1' supposedly remains in a nonextensional position where it is not subject to quantification. It is impossible to deduce (5) from any of this. Geach's puzzle does not support Kripke's account. On the contrary, the puzzle poses a serious threat to that account, with its denial that Hob's and Nob's thoughts are, respectively, a suspicion and a wondering regarding Meg_2.

On my alternative account, we may instead observe that

Maggoty Meg is a mythical witch. Hob thinks she has blighted Bob's mare.

Nob wonders whether she killed Cob's sow.

We may then conjoin and EG to obtain (7). In the end, what makes (7) a plausible analysis is that it (or some variant) spells out in more precise language what (5) literally says to begin with, Babinet and Le Verrier provide a real-life case in which the thoughts of different thinkers converge on a single mythical object: Babinet thought he had seen an intra-Mercurial planet, and Le Verrier believed that it (the same 'planet') impacted Mercury's perihelion. The primary lesson of Geach's puzzle is that when theoretical mistakes are made mythical creatures are conceived, and in acknowledging that misbelievers are sometimes related as Nob to Hob, or as Le Verrier to Babinet, we commit ourselves to their illegitimate progeny.[28]

[28] It can happen that Hob misidentifies Maggoty Meg with, say, her mythical sister. Hob might thus notionally think that only one witch has blighted Bob's mare even though there are two mythical witches each of whom Hob relationally thinks has blighted Bob's mare.

One further note: The present analysis entails that (5) is committed to mythical witches. The analysis is not itself thus committed, and is consistent with the thesis that (5) is untrue precisely because of this commitment. Disbelief in mythical objects is insufficient ground for rejecting the analysis. It is a basis for rejecting the present solution to Geach's puzzle (which takes it that (5), so analyzed, can be true in the absence of witches, assuming Hob and Nob are real), but carries with it the burden of explaining the intuition that (5) can be true *sans* witches—a challenge that might be met by providing a plausible rendering of (5), as intended, that is free of mythical objects. (Good luck.)

5

Puzzles about Intensionality

NATHAN SALMON

I

Nonextensional notions – such as *necessity*, *possibility*, and especially notions of propositional attitude like *believing that* – raise a number of perplexing philosophical questions, some very old. One issue concerns the sorts of objects that are necessary or possible or are believed or disbelieved. What exactly are they? The standard answer is *propositions*, understood as units of information semantically expressed by declarative sentences but not belonging to any particular language, like the common content of 'Snow is white' and the French '*La neige est blanche*.' W. V. Quine (1956) has objected to propositions as the contents of sentences and the objects of belief on grounds of an alleged obscurity of the 'conditions' under which a pair of propositions p and q are the same. Quine proposes replacing a sentence like

(1) Chris believes that the Earth is round,

which evidently entails the existence of a proposition (that the Earth is round), with

(2) Chris believes-true$_{ENG}$ 'The Earth is round,'

which, Quine says, is committed to the existence of an English sentence but not to any proposition thereby expressed. He cautions that *believing-true* a sentence is not to be confused with believing the sentence to be true, since Chris (who may speak no English) can believe that the Earth is round – or as we now put it, Chris can believe-true$_{ENG}$ 'The Earth is round' – without believing that the English sentence 'The Earth is round' is true (i.e. without believing-true$_{ENG}$ ' 'The Earth is round' is true$_{ENG}$'). On closer inspection this proposal collapses. Quine's cautionary remark raises the question of just what belief-truth of a sentence is. Quine argues that one who accepts propositions cannot legitimately complain that the notion of belief-truth is obscure, since (2) is definable for the propositionalist as

(3) Chris believes the proposition expressed$_{ENG}$ by 'The Earth is round.'

On this explanation, the word for Quine's surrogate notion might be more perspicuously spelled 'believes-the-content$_{ENG}$-of.' Truth, it turns out, is beside the point. Contra Quine, however, (3) is exactly how the notion *cannot* be defined. If it is, then (2) is as committed to the proposition that the Earth is round as (1) is. If (2) is to fulfill its mission, its content must be explained without any appeal to the proposition that the Earth is round. Furthermore, Alonzo Church (1956) demonstrated that (3) does not mean the same as (1). Both designate the offending proposition, but (3) merely describes it as whatever is expressed by a certain English sentence whereas (1) identifies the actual proposition more directly. This is easily seen by translating both (1) and (3) into another language, say, French, while preserving literal meaning:

(1′) *Chris croit que la terre est ronde*.
(3′) *Chris croit la proposition exprimée$_{ANG}$ par* 'The Earth is round.'

It is apparent that these sentences do not carry the same information for a French speaker who speaks no English. Quine concedes Church's point, protesting that he does not claim that (2) has the same meaning as (1), only the same truth value. But if (1) and (2) are alike in truth value, it follows once again that (2) is true only if there is a proposition that the Earth is round. The case for propositions is strikingly powerful, while no viable alternative has yet been offered.

Acknowledging propositions as the objects of belief and other attitudes provides an answer to one question, only to raise a host of further questions. *Kripke's Puzzle* about belief concerns a normal French speaker, Pierre, who on reflection sincerely assents to the French sentence '*Londres est jolie*.' Later, Pierre learns the English language through immersion. Aware that 'London' names the city where he now resides, but unaware that it names the same city he calls '*Londres*,' Pierre sincerely and reflectively assents to 'London is not pretty' – while still sincerely and reflectively assenting to '*Londres est jolie*.' Does Pierre believe (the proposition) that London is pretty? Assuming an extremely plausible Principle of Disquotation, and assuming standard literal translation of French into English, any normal French speaker who sincerely and reflectively assents to '*Londres est jolie*' and who is not under any relevant linguistic confusion culminating in misunderstanding, believes that London is pretty. Whereas by the English version of Disquotation, Pierre's assent to 'London is not pretty' likewise indicates a belief that London is not pretty. Yet Pierre evidently does not contradict himself. Worse, assuming a Strengthened Principle of Disquotation – that a normal speaker who is not reticent or under a relevant linguistic confusion sincerely and reflectively assents to a declarative sentence iff the speaker believes the proposition thereby expressed – Pierre's failure to assent to 'London is pretty' indicates he does *not* believe that London is pretty.

II

Another cluster of issues concerns the distinction of *de dicto* and *de re*. Quine noted that a sentence like 'The number of planets might have been even' may be understood two ways. On the *de dicto* reading, it expresses that the prospect of an even number of planets is a possibility. This is true in some ordinary sense of 'possible' or 'might,' since

there might have been ten planets instead of nine. On the *de re* reading the sentence instead asserts something of the actual number of planets, that is nine: that *it* might have been even instead of odd. This is false on any natural understanding of 'might.' The distinction arises also for belief. Thus 'Smith believes the number of planets is even' may be understood as expressing that Jones believes there are an even number of planets (*de dicto*), or alternatively, that Smith believes of the number nine that it is even (*de re*). (A common confusion conflates the distinction of *de dicto* and *de re* with Keith Donnellan's (1966) distinction between two types of uses of definite descriptions: the *attributive* use on which 'the such-and-such' is used to mean *whatever is uniquely such-and-such*, and the *referential* use on which the description is used instead to name something in particular to which the speaker is relevantly connected. That the two distinctions are different is proved by the fact that a *de re* reading allows the description to be used referentially or attributively.) Kripke's Puzzle demonstrates that *de dicto* belief alone generates hard riddles. Adding *de re* attitudes into the mix compounds the mystery. Whether or not Pierre believes that London is pretty, it seems beyond reasonable dispute that Pierre believes *of* London that it is pretty. But if propositions are the objects of *de dicto* belief, *de re* beliefs appear to be something else again. Is there something – some object – common to all who believe of Socrates that, say, if he is a man then he is mortal? There is the man, Socrates himself, but is there anything else? If so, what?

Related questions took on a distinctly logical flavor, and new questions in philosophical logic arose, when Russell introduced his Theory of Descriptions, with its concomitant distinction between *primary* and *secondary occurrence* – a distinction that for all intents and purposes duplicates *de re* and *de dicto*, respectively, where definite or indefinite descriptions ('denoting phrases') are involved. *Russell's Puzzle* of how George IV could wish to know whether Scott is the author of *Waverley* without wishing to know whether Scott is Scott was solved, in part, by recognizing two senses of wondering whether Scott is the author of *Waverley*: King George may wonder whether Scott and no one else wrote *Waverley* (secondary occurrence); or instead (or in addition), George may wonder concerning *Waverley*'s author (i.e. Scott), whether Scott is *him* (primary). The *de re* is aptly represented using a pronoun ('him') or the logician's variable:

($\exists x$)[x is sole author of *Waverley* & George IV wondered whether: Scott = x],
($\exists n$)[there are exactly n planets & it is possible that: n is even]
(λx)[Pierre believes that: x is pretty](London), etc.

Assuming (with Russell, for the sake of illustration) that 'Scott' and 'London' are genuine names, the attributed *de re* attitudes are indeed a wonder whether Scott is Scott and a belief that London is pretty. Russell offered an answer to the question of what interrelations of logical dependence exist, given that Scott = the author of *Waverley*, between believing that Scott is the author of *Waverley* and believing that Scott is Scott. His answer is: none. But deep questions concerning their connections remain.

Characteristic of representing the *de re* using the apparatus of first-order logic is the occurrence of a variable within a nonextensional context bound from outside that context. The question of what it is to believe (or wonder, etc.) something *de re* con-

cerning Scott receives a sharpened formulation: what is the proper way to interpret an open sentence of the form

George believes that: . . . *x* . . .

under the assignment of Scott as value for the free variable or pronoun? *Quine's Puzzle* about Ralph and Ortcutt is best posed using this apparatus. Given that Ralph believes that the man in the brown hat is a spy but not that the man seen at the beach is a spy, even though it is Ortcutt in both cases, what sense can be made of

(4) Ralph believes that: *x* is a spy

under the assignment of Ortcutt to '*x*'? Consider first an easier question: is (4) true or false (in English, plus variables) under this assignment? Or in the terminology of Alfred Tarski, does Ortcutt *satisfy* (4)? The obvious reply, as Quine set out the case, is that he does. Quine misled a generation of readers into thinking his puzzle is to some extent a puzzle of philosophical psychology, and is less tractable than it is, by objecting on the questionable grounds that if Ortcutt satisfies (4), then Ralph believes that Ortcutt is a spy even while sincerely and vehemently affirming 'Ortcutt is no spy.' *Pace* Quine, the problem is not how to make Ralph come out consistent. The problem is one of philosophical logic, and is concerned not so much with Ralph as with Ortcutt: is he believed to be a spy? The answer is that despite Ralph's denials, Ortcutt is indeed so believed. If it follows from this (I agree that it does, though most might disagree, perhaps even Quine) that Ralph also believes, *de dicto*, that Ortcutt is a spy, then so he does. Ralph's believing that Ortcutt is a spy while failing to assent to 'Ortcutt is a spy' violates Kripke's Strengthened Principle of Disquotation. But Kripke's own examples demonstrate how dubious that principle is. The principle should be measured against the examples, not the other way around. Belief need not always culminate in assent – even belief with understanding, on reflection, without reticence, etc. – witness Kripke's Pierre. Pierre's doxastic disposition with regard to the question of London's pulchritude parallels Ralph's with regard to Ortcutt's participation in unlawful espionage.

Recognizing that Ortcutt satisfies (4) places an important restriction on the answer to the question of how to interpret (4), but the question still needs an answer. *Neo-Fregeanism* encompasses attempts to provide an answer faithful to the idea that the objects of belief are propositions of a particular sort: Fregean *thoughts*, which are purely conceptual through and through. Neo-Fregeanism faces a number of serious difficulties. Indeed, Hilary Putnam's imaginative Twin Earth thought-experiment seems to demonstrate that *de re* belief and other *de re* attitudes are not adequately captured by Fregean thoughts, since any pair of individuals who are molecule-for-molecule duplicates will entertain the very same set of Fregean thoughts despite having different *de re* attitudes. *Neo-Russellianism* provides a simple alternative solution: (4) attributes belief of a *singular proposition*, which is about Ortcutt in virtue of including Ortcutt himself among the proposition's constituents. Neo-Russellianism does not merely avoid the problems inherent in neo-Fregeanism. It is strongly supported by considerations from philosophical syntax and logic. An English sentence of the form

α believes that ϕ,

is true if and only if the individual designated by α believes the proposition expressed by ϕ. Thus, for example, (1) is true_{ENG} if and only if Chris believes the proposition $\text{expressed}_{\text{ENG}}$ by 'The Earth is round,' to wit, that the Earth is round. Likewise, then, (4) is true_{ENG} under the assignment of Ortcutt as value for the variable '*x*' if and only if Ralph believes the proposition $\text{expressed}_{\text{ENG}}$ by '*x* is a spy' under the same assignment of Ortcutt to '*x*.' What proposition does '*x* is a spy' $\text{express}_{\text{ENG}}$ under this assignment? (Cf. What does 'He is a spy' $\text{express}_{\text{ENG}}$ under the assignment of Ortcutt to the pronoun 'he'?) The variable '*x*' has an assigned value (viz., Ortcutt) but, unlike the description 'the man in the brown hat,' does not have a Fregean *sense* which determines this value. If it did, (4) would be *de dicto* rather than *de re*. The variable's only semantic content is its value. The proposition expressed is thus exactly as neo-Russellianism says it is: the singular proposition about Ortcutt, that he is a spy.

III

The *de dicto*/*de re* distinction may be tested by anaphoric links to a descriptive phrase. Consider:

> Quine wishes he owned a sloop, but it is a lemon.
> Ralph believes a female spy has stolen his documents; she also tampered with the computer.

These sentences strongly favor a *de re* reading. Appropriately understood, each evidently entails the *de re* reading of its first conjunct, even if the first conjunct itself is (somewhat perversely) read *de dicto*. If, as alleged, it is a lemon, then there must be an *it* that is a lemon, and that *it* must be a sloop that Quine wants. Similarly, if she tampered with the computer, then there must be a *she* who is a spy and whom Ralph suspects of the theft. The *de dicto*/*de re* distinction comes under severe strain, however, when confronted with Peter T. Geach's (1967) ingenious Hob/Nob sentence:

(5) Hob thinks a witch has blighted Bob's mare, and Nob wonders whether she (the same witch) killed Cob's sow.

This puzzling sentence seems to resist both a *de re* and a *de dicto* reading. If there is a *she* whom Nob wonders about, then that *she*, it would appear, must be a witch whom Hob suspects of mare blighting. But the sincere utterer of (5) intuitively does not seem committed in this way to the reality of witches. Barring the existence of witches, though (5) may be true, there is no actual witch about whom Hob suspects and Nob wonders. Any account of the *de dicto*/*de re* that depicts (5) as requiring the existence of a witch is *ipso facto* wrong. There is a natural reading of (5) that carries an ontological commitment to witches, viz., the straightforward *de re* reading. The point is that the intended reading does not.

A tempting response to Geach's Puzzle construes (5) along the lines of

(5_{dd}) (*i*) Hob thinks: a witch has blighted Bob's mare; and (*ii*) Nob wonders whether: the witch that (Hob thinks) blighted Bob's mare also killed Cob's sow.

Yet this will not do; (5) may be neutral concerning whether Nob has a true belief about, let alone shares, Hob's suspicion. Nob's wondering need not take the form "Did the same witch that (Hob thinks) blighted Bob's mare also kill Cob's sow?" It may be that Hob's thought takes the form "Maggoty Meg blighted Bob's mare" while Nob's takes the form "Did Maggoty Meg kill Cob's sow?" If so, (5) would be true, but no fully *de dicto* reading forthcoming.

Worse, Hob's and Nob's thoughts need not involve the same manner of specification. It may be that Hob's thought takes the form "Maggoty Meg has blighted Bob's mare" while Nob's wondering takes the form "Did the Wicked Witch of the West kill Cob's sow?" This appears to preclude a neo-Fregean analysis along the lines of the following:

(*F*) $(\exists\alpha)[\alpha$ **co-represents** for both Hob and Nob & Hob thinks ⌜α is a witch who has blighted Bob's mare⌝ & Nob **thinks** ⌜α is a witch⌝ & Nob **wonders** ⌜Did α kill Cob's sow?⌝$]$.

Geach himself argues that since (5) does not commit its author to the existence of witches, it must have some purely *de dicto* reading or other. He suggests an alternative neo-Fregean analysis, evidently along the lines of the following:

(*G*) $(\exists\alpha)(\exists\beta)[\alpha$ is a witch-representation & β is a witch-representation & α and β **co-represent** for both Hob and Nob & Hob **thinks** ⌜α has blighted Bob's mare⌝ & Nob **wonders** ⌜Did β kill Cob's sow?⌝$]$.

This proposal faces certain serious difficulties, some of which are also problems for (*F*): The relevant notion of a *witch-representation* must be explained in such a way as to allow that an individual representation α (e.g. an individual concept) may be a witch-representation without representing anything at all. More important, the relevant notion of *co-representation* needs to be explained so as to allow that a pair of individual representations α and β may co-represent for two thinkers without representing anything at all for either thinker. Geach does not explicitly employ the notion of co-representation. I include it on his behalf because it, or something like it, is crucial to the proposed analysis. Any analysis, if it is correct, must capture the idea that Hob's and Nob's thoughts have a common focus. Though there is no witch, Hob and Nob are, in some sense, thinking about the *same* witch. It is on this point that *de dicto* analyses generally fail. Even something as strong as (5_{dd}) – already too strong – misses this essential feature of (5). On the other hand, however the notion of vacuously co-representing witch-representations is ultimately explained, by contrast with (*G*), (5) evidently commits its author no more to co-representing witch-representations than to witches. More generally, any analysis along the lines of (*F*) or (*G*) cannot forever avoid facing the well-known difficulties with neo-Fregean analyses generally (e.g. the Twin Earth considerations).

An alternative approach accepts the imposingly apparent *de re* character of (5) at face value, and construes it along the lines of the following:

(6) There is someone whom: (*i*) Hob thinks a witch that has blighted Bob's mare; (*ii*) Nob also thinks a witch; and (*iii*) Nob wonders whether she killed Cob's sow.

This happily avoids commitment to witches. But it does not provide a solution. Hob's and Nob's thoughts need not concern any real person. Maggoty Meg is not a real person, and there may be no one whom either Hob or Nob believe to be the wicked strega herself.

Some proposed solutions to Geach's Puzzle make the unpalatable claim that Hob's and Nob's musings concern a Meinongian Object – a particular witch who is both indeterminate and nonexistent. Many proposed solutions instead reinterpret *de re* attributions of attitude so that they do not make genuine reference to the individuals apparently mentioned therein by name or pronoun. These responses inevitably make equally unpalatable claims involving *de re* constructions – for example, that Nob's wondering literally concerns the very same witch/person as Hob's belief yet neither concerns anyone (or anything) whatsoever, or that *de re* constructions mention or generalize over speech-act tokens and/or connections among speech-act tokens. It would be more sensible to deny that (5) can be literally true on the relevant reading, given that there are no actual witches. The problem with this denial is that its proponent is clearly in denial. As intended, (5) can clearly be true (assuming Hob and Nob are real) even in the absence of witches. Numerous postmodern solutions jump through technical hoops to allow a pronoun ('she') to be a variable bound by a quantifier within a belief context ('a witch') despite standing outside the belief context, hence also outside the quantifier's scope, and despite standing within an entirely separate belief context. These 'solutions' do not satisfy the inquiring mind as much as boggle it. It is one thing to construct an elaborate system on which (5) may be deemed true without 'There is a witch.' It is quite another to provide a satisfying explanation of the content of Nob's attitude, one for which the constructed system is appropriate. How can Nob wonder about a witch, and a particular witch at that – the very one Hob suspects – when there is no witch and, therefore, no particular witch about whom he is wondering? This is the puzzle in a nutshell. It combines elements of intensionality puzzles with puzzles concerning nonexistence and puzzles concerning identity, and has been deemed likely intractable.

IV

The solution I urge takes (5) at face value, and takes seriously the idea that false theories that have been mistakenly believed – what I call *myths* – give rise to fabricated but genuine entities. These entities include such oddities as: Vulcan, the hypothetical planet proposed by Babinet and which Le Verrier believed caused perturbations in Mercury's solar orbit; the ether, once thought to be the physical medium through which light waves propagate; phlogiston, once thought to be the element (material substance) that causes combustion; the Loch Ness Monster; Santa Claus; and Meinong's Golden Mountain. Such *mythical objects* are real things, though they are neither material objects nor mental objects ('ideas'). They come into being with the belief in the myth. Indeed, they are created by the mistaken theory's inventor, albeit without the theorist's knowledge. But they do not exist in physical space, and are, in that sense, abstract entities. They are an unavoidable by-product of human fallibility.

Vulcan is a mythical planet. This is not to say, as one might be tempted to take it, that Vulcan is a planet but one of a rather funny sort, for example a Meinongian Object

that exists in myth but not in reality. On the contrary, Vulcan exists in reality, just as robustly as you the reader. But a mythical planet is no more a planet than a toy duck is a duck or a magician is someone who performs feats of magic. A mythical object is an imposter, a pretender, a stage prop. Vulcan is not a real planet, though it is a very real object – not concrete, not in physical space, but real. One might say that the planet Mercury is also a 'mythical object,' in that it too figures in the Vulcan myth, wrongly depicted as being gravitationally influenced by Vulcan. If we choose to speak this way, then it must be said that some 'mythical planets' are real planets, though not really as depicted in the myth. Vulcan, by contrast with the 'mythical' Mercury, is a *wholly mythical* object, not a real planet but an abstract entity inadvertently fabricated by the inventor of the myth. I shall continue to use the simple word 'mythical' as a shorthand for the notion of something wholly mythical.

The existence of fictional objects, in something close to this sense, has been persuasively urged by Peter van Inwagen (1977) and Saul Kripke (1973) as an ontological commitment of our ordinary discourse about fiction. Their account, however, is significantly different from the one I propose. Kripke contends that a mythical-object name like 'Vulcan' is ambiguous between two uses, one of which is parasitic on the other. It would be less deceptive to replace the ambiguous name with two univocal names, 'Vulcan$_1$' and 'Vulcan$_2$.' The name on its primary use, 'Vulcan$_1$,' was introduced into the language, *sans* subscript, by Babinet as a name for an intra-Mercurial planet. Le Verrier used the name in this way in theorizing about Mercury's perihelion. On this use, the name names nothing; 'Vulcan$_1$' is entirely vacuous. Giving the name this use, we may say such things as that Le Verrier believed that Vulcan$_1$ affected Mercury's perihelion. Le Verrier's theory is a myth concerning Vulcan$_1$. The name on its secondary use, 'Vulcan$_2$,' is introduced into the language (again *sans* subscript) at a later stage, when the myth has finally been exposed, as a name for the mythical planet erroneously postulated, and thereby inadvertently created, by Babinet. Perhaps it would be better to say that a new *use* of the name 'Vulcan' is introduced into the language. 'Vulcan$_2$' is fully referential. Using the name in this way, we say such things as that Vulcan$_2$ was a mythical intra-Mercurial planet hypothesized by Babinet. The difference between Vulcan$_1$ and Vulcan$_2$ could not be more stark. The mistaken astronomical theory believed by Babinet and Le Verrier concerns Vulcan$_1$, which does not exist. Vulcan$_2$, which does exist, arises from the mistaken theory itself. Vulcan$_2$ is recognized through reflection not on events in the far-off astronomical heavens but on the more local story of man's intellectual triumphs and defeats, particularly on the history of science.

Kripke's account is vulnerable to a familiar family of thorny problems: the classical problem of true negative existentials and the more general problem of the content and truth value of sentences involving vacuous names. Vulcan$_1$ does not exist. This sentence is true, and seems to say about something (viz., Vulcan$_1$) that it fails to exist. Yet the sentence entails that there is nothing for it to attribute nonexistence to. Furthermore, on Kripke's account, Le Verrier believed that Vulcan$_1$ has an impact on Mercury's perihelion. What can the content of Le Verrier's belief be if there is no such thing as Vulcan$_1$? Furthermore, is the belief content simply false? If so, then it may be said that Vulcan$_1$ has no impact on Mercury's perihelion. Yet this claim too seems to attribute something to Vulcan$_1$, and thus seems equally wrong, and for exactly the same

reason, with the claim that Vulcan_1 does have such an impact. Kripke is aware of these problems but offers no viable solution.

I submit that Kripke's alleged primary use of a mythical-object name is itself a myth. To be sure, Babinet believed himself to be naming a real planet in introducing a use of 'Vulcan' into the language. And other users like Le Verrier believed themselves to be referring to a real planet. But this linguistic theory of the name 'Vulcan' is mistaken, and is in this respect exactly like the astronomical theory that Vulcan is a real planet. The two theories complement each other, and fall together hand in hand. The situation should be viewed instead as follows. Babinet invented the theory – erroneous, as it turns out – that there is an intra-Mercurial planet. In doing this, he inadvertently created Vulcan. Indeed, Babinet even introduced a name for this mythical planet. The name was intended for a real planet, and Babinet believed the name thus referred to a real planet (*de dicto*, not *de re*!). But here again, he was simply mistaken. Other astronomers, most notably Le Verrier, became convinced of Babinet's theory, both as it concerns Vulcan (that it is a very real intra-Mercurial planet) and as it concerns 'Vulcan' (that it names the intra-Mercurial planet). Babinet and Le Verrier both believed, correctly, that the name 'Vulcan', on the relevant use, refers to Vulcan. But they also both believed, mistakenly, that Vulcan is a real planet. They might have expressed the latter belief by means of the French version of the English sentence 'Vulcan is a planet,' or other shared beliefs by means of sentences like 'Vulcan's orbit lies closer to the Sun than Mercury's.' These beliefs are mistakes, and the sentences (whether English or French) are false.

Importantly, there is no relevant use of the name 'Vulcan' by Babinet and Le Verrier that is vacuous. So used the name refers to Vulcan, the mythical planet. Le Verrier did *not* believe that Vulcan_1 is an intra-Mercurial planet – or, to put the point less misleadingly, there is no real use marked by the subscript on 'Vulcan' on which the string of words 'Vulcan_1 is an intra-Mercurial planet' expresses anything for Le Verrier to have believed, disbelieved, or suspended judgment about. To put the matter in terms of Kripke's account, what Le Verrier believed was that Vulcan_2 is a real intra-Mercurial planet. Le Verrier's belief concerns the mythical planet, a very real object that had been inadvertently created, then named 'Vulcan,' by Babinet. Their theory about Vulcan was completely wrong. Vulcan is in fact an abstract object, one that is depicted in myth as a massive physical object.

A common reaction is to charge my proposal with miscasting mythical objects as the objects with which myths are concerned. On the contrary, it is objected, if they exist at all, mythical objects enter the intellectual landscape only at a later stage, not in the myth itself but in the subsequent historical account of the myth. A robust sense of reality demands that the myth itself be not about these abstract objects but about *nothing*, or at most about representations of nothing. No one expresses this sentiment more forcefully than Russell:

> [Many] logicians have been driven to the conclusion that there are unreal objects. . . . In such theories, it seems to me, there is a failure of that feeling for reality which ought to be preserved even in the most abstract studies. Logic, I should maintain, must no more admit a unicorn than zoology can; for logic is concerned with the real world just as truly as zoology, though with its more abstract and general features. To say that unicorns have an

> existence in heraldry, or in literature, or in imagination, is a most pitiful and paltry evasion. What exists in heraldry is not an animal, made of flesh and blood, moving and breathing of its own initiative. What exists is a picture, or a description in words. . . . A robust sense of reality is very necessary in framing a correct analysis of propositions about unicorns . . . and other such pseudo-objects. (Russell 1919: 169–70)

I heartily applaud Russell's eloquent plea for philosophical sobriety. But his attitude toward 'unreal' objects is fundamentally confused. To repeat, a mythical planet is not a massive physical object but an abstract entity, the product of creative astronomizing. Likewise, a mythical unicorn or a mythical winged horse is not a living creature but a fabricated entity, the likely product of blurred or fuzzy vision, just as mermaids are the likely product of a deprived and overactive imagination under the influence of liquor – creatures not really made of flesh and blood and fur or scales, not really moving and breathing of their own initiative, but depicted as such in myth, legend, hallucination, or drunken stupor.

It is frequently objected even by those who countenance mythical objects that the Vulcan theory, for example, is merely the theory that there is an intra-Mercurial planet, not the bizarre hypothesis that the relevant abstract entity is that planet. Babinet and Le Verrier, it is observed, did not believe that an abstract entity is a massive heavenly object. Quite right, but only if the sentence is meant *de dicto*. Understood *de re* – as the claim that, even if there is such an abstract entity as the mythical object that is Vulcan, Babinet and Le Verrier did not believe it to be an intra-Mercurial planet – it turns mythical objects into a philosophical black box. What role are these abstract entities supposed to play, and how exactly are their myth-believers supposed to be related to them in virtue of believing the myth? In fact, this issue provides yet another reason to prefer my account over Kripke's. On my account, in sharp contrast, the role of mythical objects is straightforward: they are the things depicted as such-and-such in myth, the fabrications erroneously believed by wayward believers to be planets or the medium of light-wave propagation or ghosts, the objects the mistaken theory is about when the theory is not about any real planet or any real medium or any real ghost. It is not merely that being depicted as such-and-such is an essential property of a mythical object, a feature the object could not exist without. Rather, being so depicted is the metaphysical function of the mythical object; that is *what* it is, its *raison d'être*. To countenance the existence of Vulcan as a mythical planet while at the same time denying that Babinet and Le Verrier had beliefs about this mythical object, is in a very real sense to miss the point of recognizing Vulcan's existence. It is precisely the astronomers' false beliefs about the mythical planet that makes it a mythical planet; if no one had believed it to be a planet, it would not *be* a mythical planet. Come to that, it would not even exist.

Another important point: I am not *postulating* mythical objects. For example, I am not postulating Vulcan. Even if I wanted to, Babinet beat me to it – though he postulated Vulcan as a real planet, not a mythical one. Mythical objects would exist even if I and everyone else had never countenanced or recognized them, or admitted them into our ontology, etc. Rather, I see myself as uncovering some evidence for their independent and continued existence, in something like the manner of the paleontologist who infers dinosaurs from their fossil remains, rather than the theoretical physicist who

postulates a new category of physical entity in order to make better sense of things (even if what I am actually doing is in important respects more like the latter).

Perhaps the most important evidence in favor of this theory of mythical objects is its logical entailment by our thoughts and beliefs concerning myths. We are sometimes led to say and think things like "An intra-Mercurial planet, Vulcan, was hypothesized by Babinet and believed by Le Verrier to affect Mercury's perihelion, but there has never been a hypothetical planet whose orbit was supposed to lie between Mercury and Venus" and "Some hypothetical species have been hypothesized as linking the evolution of birds from dinosaurs, but no hypothetical species have been postulated to link the evolution of mammals from birds." The distinctions drawn cannot be made without a commitment to mythical objects, that is without attributing existence, in some manner, to mythical objects. No less significant, beliefs are imputed about the mentioned mythical objects, to the effect that they are not mythical. Being wrongly believed not to be mythical is just what it is to be mythical. Furthermore, beliefs are imputed to distinct believers concerning the very same mythical object.

Further evidence – in fact, evidence of precisely the same sort – is provided by the Hob/Nob sentence. Geach's Puzzle is solved by construing (5) on its principal reading, or at least on one of its principal readings, as fully *de re*, not in the manner of (6) but along the lines of:

(7) There is a mythical witch such that (*i*) Hob thinks: she has blighted Bob's mare; and (*ii*) Nob wonders whether: she killed Cob's sow.

This has the distinct advantage over (6) that it does not require that both Hob and Nob believe someone to be the witch in question. In fact, it allows that there be no one in particular whom either Hob or Nob believes to be a witch. It does require something not unrelated to this, but no more than is actually required by (5): that there be something that both Hob and Nob believe to be a witch – some*thing*, not some*one*, not a witch or a person, certainly not an indeterminate Meinongian Object, but a very real entity that Nob thinks a real witch who has blighted Bob's mare. Nob also believes this same mythical witch to be a real witch and wonders about 'her' (really: about *it*) whether she killed Cob's sow. In effect, the proposal substitutes ontological commitment to mythical witches for the ontological commitment to real witches intrinsic to the straightforward *de re* reading of (5) (obtained from (7) by deleting the word 'mythical'). There are other witch-free readings for (5), but I submit that any intended reading is a variant of (7) that equally commits the author to the existence of a mythical witch, such as:

(*i*) Hob thinks: some witch or other has blighted Bob's mare; and (*ii*) the (same) mythical witch that Hob thinks has blighted Bob's mare is such that Nob wonders whether: she killed Cob's sow.

Significantly, one who accepts Kripke's account may not avail him/herself of this solution to Geach's Puzzle. On Kripke's account it may be observed that

(*i*) Hob thinks: Meg_1 has blighted Bob's mare; and (*ii*) Nob wonders whether: Meg_1 killed Cob's sow.

The Hob/Nob sentence (5) is not obtainable by existential generalization on 'Meg_1,' since by Kripke's lights, this name is supposed to be vacuous and to occur in non-extensional ('referentially opaque,' *ungerade*) position. Nor on Kripke's (1973) account can 'Meg_2' be correctly substituted for 'Meg_1'; Hob's and Nob's theories are supposed to concern the nonexistent witch Meg_1 and not the mythical witch Meg_2. Kripke might instead accept the following, as a later-stage observation about the Meg_1 theory:

> Meg_2 is the mythical witch corresponding to Meg_1.

Here the relevant notion of *correspondence* places 'Meg_2' in extensional position. While 'Meg_2' is thus open to existential generalization, 'Meg_1' supposedly remains in a non-extensional position where it is not subject to quantification. It is impossible to deduce (5) from any of this. Geach's Puzzle does not support Kripke's account. On the contrary, the puzzle poses a serious threat to that account, with its denial that Hob's and Nob's thoughts are, respectively, a suspicion and a wondering regarding Meg_2.

On my alternative account, we may instead observe that

> Maggoty Meg is a mythical witch. Hob thinks she has blighted Bob's mare. Nob wonders whether she killed Cob's sow.

We may then conjoin and EG (existential generalize) to obtain (7). In the end, what makes (7) a plausible analysis is that it (or some variant) spells out in more precise language what (5) literally says to begin with. Babinet and Le Verrier provide a real-life case in which the thoughts of different thinkers converge on a single mythical object: Babinet thought he had seen an intra-Mercurial planet, and Le Verrier believed that it (the same 'planet') impacted Mercury's perihelion. The primary lesson of Geach's Puzzle is that when theoretical mistakes are made mythical creatures are conceived, and in acknowledging that misbelievers are sometimes related as Nob to Hob, or as Le Verrier to Babinet, we commit ourselves to their illegitimate progeny.

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2

Fiction, Myth, and Reality

Nathan Salmon

1

Among the most difficult, and perennial, of philosophical problems are those arising from sentences involving nondesignating names. Chief among these problems is that of true singular negative existentials. Negative existentials naturally arise in separating fact from fiction and in debunking mistaken theories. Consider, for example,

(~1) Sherlock Holmes is nonexistent

interpreted not as an assertion within the Sherlock Holmes canon but as an assertion about reality. So interpreted, the sentence is evidently true. It seems as if (~1) designates someone (by its subject term) in order to say (by its predicate) that he does not exist. But it also entails that there is no such thing to be designated. How can any sentence with a nondesignating term in subject position be true? I call a mistaken theory that has been believed a *myth*. Myth-smashing sentences like 'Santa Claus isn't real' and 'There's no such intra-Mercurial planet as Vulcan' give rise to the same philosophical conundrum as (~1). G. E. Moore put the problem as follows:

> [I]t seems as if purely imaginary things, even though they be absolutely contradictory like a round square, must still have some kind of *being* – must still be in a sense – simply because we can think and talk about them. . . . And now in saying that there is no such thing as a round square, I seem to imply that there *is* such a thing. It seems as if there must be such a thing, merely

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> in order that it may have the property of not-being. It seems, therefore, that to say of anything whatever that we can mention that it absolutely *is not*, were to contradict ourselves: as if everything we can mention must be, must have some kind of being. (*Some Main Problems of Philosophy*, London: George Allen & Unwin, 1953, at p. 289)

Saul Kripke's insightful and penetrating work on names from fiction and myth, though unpublished, has generated a great deal of discussion. Kripke's account illuminates and yet exacerbates the chestnut of negative existentials. However, the consistency of Kripke's account is questionable.

Russell's celebrated theory of descriptions provides an account of such sentences involving names from fiction and myth as the following:

(2) Sherlock Holmes used cocaine
(~2) Sherlock Holmes did not use cocaine.

Russell held that a proper name generally abbreviates some definite description. In the case of 'Sherlock Holmes' the abbreviated description might be something along the lines of: 'the brilliant but eccentric late-19th-century British detective who, inter alia, solved such-and-such mysteries'. Let us abbreviate this characterization by the artificial adjective 'Holmesesque'. Russell analyzes (2) as equivalent to:

(2′) Something that is uniquely Holmesesque used cocaine.

Russell analyzes (~2) as ambiguous between the following two readings:

(~2′$_1$) Something that is uniquely Holmesesque didn't use cocaine
(~2′$_2$) Nothing that is uniquely Holmesesque used cocaine.

The former is the wide-scope (or *primary occurrence*) reading of (~2). This is false for the same reason as (2′). In reality, there has never been a Holmesesque individual. The latter is the narrow-scope (*secondary occurrence*) reading of (~2). This genuinely contradicts (2′) and is therefore true. In *Principia Mathematica*, instead of analyzing

(1) Sherlock Holmes exists

by replacing 'used cocaine' in (2′) with 'exists', Russell and Whitehead analyze it more simply as

(1′) Something is uniquely Holmesesque.

This is equivalent to its analysis in the style of (2′), since the formal symbolization of '*x* exists' is a theorem of *Principia Mathematica*. Although Russell did not distinguish two readings for (~1), he might well have. The narrow-scope reading is equivalent to the following:

(~1′$_2$) Nothing is uniquely Holmesesque.

This does not designate anyone in order to say of him that he does not exist. It is not merely consistent; it is true. By contrast, the wide-scope reading, (~1′$_1$) 'There exists something that both is uniquely Holmesesque and doesn't exist', is inconsistent, and hence, presumably, cannot be what would normally be intended by (~1).

Frege's celebrated theory of sense (*Sinn*) and designation (*Bedeutung*, reference, denotation) provides an alternative explanation of how sentences like (2) can semantically express propositions (*Gedanken*, thoughts). While Frege's principle of extensionality requires that such sentences lack truth value, the same principle creates a problem for Frege in connection with existential sentences like (1). It would have been natural for Frege to take (1) and (~1) to be analyzable respectively as:

(1″) Something is the Holmesesque individual
(~1″$_2$) Nothing is the Holmesesque individual.

The intended truth conditions for (1″) and (~1″$_2$) are given by (1′) and (~1′$_2$). But since the definite description 'the Holmesesque individual' is improper, (1″) and (~1″$_2$) must instead for Frege be neither true nor false (assuming the standard interpretation for existential quantification, identity, and negation, as Frege gave them in connection with his own notation, on which each is fully extensional).

By way of a solution to this difficulty, Frege suggested that (1) is properly interpreted not by (1″) but as covertly quotational. He wrote:

> We must here keep well apart two wholly different cases that are easily confused, because we speak of existence in both cases. In one case the question is whether a proper name designates, names, something; in the other whether a concept takes objects under itself. If we use the words 'there is a ———' we have the latter case. Now a proper name that designates nothing has no logical justification, since in logic we are concerned with truth in the strictest sense of the word; it may on the other hand still be used in fiction and fable. ("A Critical Elucidation of Some Points in E. Schroeder's *Algebra der Logik*," published 1895, translated by Peter Geach in P. Geach and M. Black, eds., *Translations from the Philosophical Writings of Gottlob Frege*, Oxford: Basil Blackwell, 1970, at p. 104)

Elsewhere Frege made similar remarks about singular existentials and their negations: "People certainly say that Odysseus is not an historical person, and mean by this contradictory expression that the name 'Odysseus' designates nothing, has no designatum" (from the section on "Sense and Designation" of Frege's 1906 diary notes, "Introduction to Logic," in H. Hermes, F. Kambartel, and F. Kaulbach, eds., *Posthumous Writings*,

translated by P. Long and R. White,[1] Chicago: University of Chicago Press, 1979, at p. 191). Earlier in his "Dialogue with Pünjer on Existence" (pre-1884, also in Hermes, Kambartel, and Kaulbach), Frege observed: "If 'Sachse exists' is supposed to mean 'The word "Sachse" is not an empty sound, but designates something', then it is true that the condition 'Sachse exists' must be satisfied [in order for 'There are men' to be inferred from 'Sachse is a man']. But this is not a new premise, but the presupposition of all our words – a presupposition that goes without saying" (p. 60).[2]

The suggestion is that (1) and (~1), at least on one reading (on which the latter is true), are correctly analyzed as:

(1↑) 'Sherlock Holmes' designates$_{\text{English}}$ something
(~1↑$_2$) 'Sherlock Holmes' designates$_{\text{English}}$ nothing.

Assuming (as Frege evidently did) both that 'Sherlock Holmes' is synonymous with 'the Holmesesque individual' and that each instance of the following metalinguistic schema is true

(*F*) 'the'+NP designates$_{\text{English}}$ something iff that thing is uniquely ϕ,

where ϕ is a formalization in first-order-logic notation of the English NP, then (1↑) is true if and only if (1′) is, and (~1↑$_2$) is true if and only if (~1′$_2$) is. Frege's semantic ascent strategy thus attains the same truth conditions for (1) and (~1) as Russell.[3]

Frege's semantic ascent succeeds in capturing information that is indeed conveyed in the uttering of (1) or (~1). But to invoke a distinction I have emphasized in previous work, this concerns what is *pragmatically imparted* in (1) and (2), and not necessarily what is *semantically encoded* or *contained*.[4] Frege does not attain the same semantic content as Russell or even the same modal intension, that is, the same corresponding function from possible worlds to truth values. Indeed, that the semantic-ascent interpretation of (1) by (1↑) is incorrect is demonstrated by a variety of considerations. The semantic-ascent theory of existence is analogous to Frege's account of identity in *Begriffsschrift* (1879). Curiously, Frege evidently failed to see that his objection in "*Über Sinn und Bedeutung*" to the semantic-ascent theory of identity applies with equal force against

[1] Except that I here render '*Bedeutung*' as 'designatum'.

[2] Frege also suggests here that there may be an alternative reading for 'Sachse exists', on which it is tantamount to 'Sachse = Sachse', which Frege says is self-evident. He might well have said the same about '$(\exists x)$[Sachse = x]'.

[3] The term 'semantic ascent' is due to W. V. O. Quine. See his *Word and Object* (Cambridge: MIT Press, 1960), §56.

[4] *Cf.* my *Frege's Puzzle* (Atascadero, CA: Ridgeview, 1986,), pp. 58–60 and especially 78–9, 84–5, 100, 114–15, 127–8.

the semantic-ascent theory of existence. Another objection to semantic-ascent analyses has been raised by Frege's most effective apologist and defender, Alonzo Church.[5] Translating 'The present king of France does not exist' into French, one obtains:

Le roi présent de France n'existe pas.

Translating its proposed analysis into French, one obtains:

'The present king of France' ne fait référence à rien en anglais.

These two translations, while both true, clearly mean different things in French. So too, therefore, do what they translate.

A theory of singular existence statements that is equally Fregean in spirit but superior to the semantic-ascent account takes the verb 'exist' as used in singular existentials to be an *ungerade* device, so that both (1) and (2) concern not the name 'Sherlock Holmes' but its English sense.[6] This is analogous to the semantic-ascent theory of existence except that one climbs further up to the level of intension. On an intensional-ascent theory of existence, (1) and (~1) may be analyzed respectively thus:

(1^) ^Sherlock Holmes^ is a concept of something
(~1^$_2$) ^Sherlock Holmes^ is not a concept of anything,

where 'is a concept of' is a dyadic predicate for the relation between a Fregean sense and the object that it determines and the caret '^' is a device for *indirect quotation*, that is, quotation not of the expression but of its semantic content (in the home language, in this case a standard notation for first-order logic with 'concept of').[7] Like the semantic-ascent theory, this intensional-ascent account of existence is not disproved by

[5] See Church's "On Carnap's Analysis of Statements of Assertion and Belief," *Analysis*, 10, 5 (1950), pp. 97–9. For a defense of the Church-Langford translation argument, see my "The Very Possibility of Language: A Sermon on the Consequences of Missing Church," in C. A. Anderson and M. Zeleney, eds., *Logic, Meaning and Computation: Essays in Honor of Alonzo Church* (Boston: Kluwer, 2001), pp. 573–95.

[6] Church cites 'The present king of France does not exist' as an example of a true sentence containing an *ungerade* occurrence of a singular term ("name"), in *Introduction to Mathematical Logic I* (Princeton: Princeton University Press, 1956), at p. 27 n.

[7] Cf. my "Reference and Information Content: Names and Descriptions," in D. Gabbay and F. Guenthner, eds., *Handbook of Philosophical Logic*, 2nd ed. (Dordrecht: Kluwer, 2003), pp. 39–85, at 69 on Fregean indirect quotation. The idea comes from David Kaplan's "Quantifying In," in D. Davidson and J. Hintikka, eds., *Words and Objections: Essays on the Work of W. V. O. Quine* (Dordrecht: D. Reidel, 1969), pp. 178–214; reprinted in L. Linsky, ed., *Reference and Modality* (Oxford: Oxford University Press, 1971), pp. 112–44, at 120–1. In English, the word 'that' attached to a subordinate clause (as in ⌜Jones believes that φ⌝ or ⌜It is necessary that φ⌝) typically functions in the manner of indirect-quotation marks.

substitution of co-designative terms in existential contexts. On a Fregean philosophy of semantics, indirect-quotation marks create an *ungerade* context – one might even say that they create the paradigm *ungerade* context as Frege understood the concept – so that any expression occurring within them designates in that position its own customary sense. The intensional-ascent theory is not as easily refuted as the semantic-ascent approach by the Church translation argument.[8] In place of schema (*F*), we invoke the following:

(*C*) ^the NP^ is a concept of something iff that thing, and nothing else, is a NP.

Assuming 'Sherlock Holmes' is synonymous with 'the Holmesesque individual', one thereby attains the same Russellian truth and falsehood conditions for (1) and (~1). Unlike (*F*), every instance of (*C*) expresses a necessary truth. The intensional-ascent theory of existence thus obtains the correct modal intensions for (1) and (~1).

Let us say that a singular term is *nondesignating* if there does not exist anything that the term designates. A term may be nondesignating by not designating anything at all. But a term may also be nondesignating by designating a nonexistent object, as with names of the dead. Either way, on Millianism, a nondesignating proper name is devoid of existing semantic content. Furthermore, a Millian like myself, and even a less committal direct-reference theorist like Kripke, may not avail him/herself of Russell's theory of descriptions to solve the problems of sentences with nondesignating names.[9] If α is a proper name, designating or not, it is not a definite

[8] On this application of the translation argument, see my "A Problem in the Frege-Church Theory of Sense and Denotation," *Noûs*, 27, 2 (June 1993), pp. 158–66, and "The Very Possibility of Language: A Sermon on the Consequence of Missing Church."

[9] Kripke does not officially endorse or reject Millianism. Informal discussions lead me to believe he is deeply skeptical. (See his repeated insistence in "A Puzzle about Belief" that Pierre does not have inconsistent beliefs – in A. Margalit, ed., *Meaning and Use*, Dordrecht: D. Reidel, 1979, pp. 239–83; reprinted in N. Salmon and S. Soames, eds., *Propositions and Attitudes*, Oxford: Oxford University Press, 1988, pp. 102–48.) Nevertheless, Kripke believes that a sentence using a proper name in an ordinary context (not within quotation marks, and so on) expresses a proposition only if the name refers. Similarly, Keith Donnellan, in "Speaking of Nothing," *The Philosophical Review*, 83 (January 1974), pp. 3–32 (reprinted in S. Schwartz, ed., *Naming, Necessity, and Natural Kinds*, Ithaca, NY: Cornell University Press, 1977, pp. 216–44), says, "when a name is used and there is a failure of designation, then no proposition has been expressed – certainly no true proposition. If a child says, 'Santa Claus will come tonight,' he cannot have spoken the truth, although, for various reasons, I think it better to say that he has not even expressed a proposition. [He adds in a footnote:] Given that this is a statement about reality and that proper names have no descriptive content, then how are we to represent the proposition expressed?" (pp. 20–1).

description, nor by the direct-reference theory's lights does it abbreviate any definite description. For similar reasons, the direct-reference theorist is also barred from using Frege's sense/designation distinction to solve the difficulties. How, then, can the theorist ascribe content to (1), (2), or their negations? In particular, how can (~1) express anything at all, let alone something true? The semantic-ascent theory of existence is refuted on the direct-reference theory no less than on Fregean theory by the Church translation argument as well as by modal considerations (among other things). The *ungerade*, intensional-ascent theory hardly fares much better on direct-reference theory in connection with (1) and (~1). On the Millian theory, it fares no better at all. According to Millianism, if α is a proper name, then its indirect quotation designates α's bearer. If 'Sherlock Holmes' is a nondesignating name, '^Sherlock Holmes^' is equally nondesignating.

It is a traditional view in philosophy, and indeed it is plain common sense, that (1) is false and (~1) true, when taken as statements about reality. For 'Sherlock Holmes', as a name for the celebrated detective, is evidently a *very strongly* or *thoroughly nondesignating* name, one that does not in reality have any designatum at all – past, present, future, or forever merely possible (or even forever impossible). Bertrand Russell lent an eloquent voice to this common-sense view:

> [M]any logicians have been driven to the conclusion that there are unreal objects.... In such theories, it seems to me, there is a failure of that feeling for reality which ought to be preserved even in the most abstract studies. Logic, I should maintain, must no more admit a unicorn than zoology can; for logic is concerned with the real world just as truly as zoology, though with its more abstract and general features. To say that unicorns have an existence in heraldry, or in literature, or in imagination, is a most pitiful and paltry evasion. What exists in heraldry is not an animal, made of flesh and blood, moving and breathing of its own initiative. What exists is a picture, or a description in words. Similarly, to maintain that Hamlet, for example, exists in his own world, namely in the world of Shakespeare's imagination, just as truly as (say) Napoleon existed in the ordinary world, is to say something deliberately confusing, or else confused to a degree which is scarcely credible. There is only one world, the "real" world: Shakespeare's imagination is part of it, and the thoughts that he had in writing *Hamlet* are real. So are the thoughts that we have in reading the play. But it is of the very essence of fiction that only the thoughts, feelings, etc., in Shakespeare and his readers are real, and that there is not, in addition to them, an objective Hamlet. When you have taken account of all the feelings roused by Napoleon in writers and readers of history, you have not touched the actual man; but in the case of Hamlet you have come to the end of him. If no one thought about Hamlet, there would be nothing left of him; if no one had thought about Napoleon, he would have soon seen to it that some one did.

> The sense of reality is vital in logic, and whoever juggles with it by pretending that Hamlet has another kind of reality is doing a disservice to thought. A robust sense of reality is very necessary in framing a correct analysis of propositions about unicorns, golden mountains, round squares, and other such pseudo-objects.[10]

Contemporary philosophy has uncovered that (unlike my example of 'Noman') a name from fiction does not even designate a merely possible object. Thus Kripke writes:

> The mere discovery that there was indeed a detective with exploits like those of Sherlock Holmes would not show that Conan Doyle was writing *about* this man; it is theoretically possible, though in practice fantastically unlikely, that Conan Doyle was writing pure fiction with only a coincidental resemblance to the actual man.... Similarly, I hold the metaphysical view that, granted that there is no Sherlock Holmes, one cannot say of any possible person, that he *would have been* Sherlock Holmes, had he existed. Several distinct possible people, and even actual ones such as Darwin or Jack the Ripper, might have performed the exploits of Holmes, but there is none of whom we can say that he would have *been* Holmes had he performed these exploits. For if so, which one?
>
> I thus could no longer write, as I once did, that 'Holmes does not exist, but in other states of affairs, he would have existed.' (*Naming and Necessity*, Cambridge: Harvard University Press, 1980, pp. 157–8)

It is not merely true that Sherlock Holmes does not exist; it is necessarily true. On Kripke's view, the name 'Sherlock Holmes' is a rigid *non*designator, designating nothing – not even a merely possible thing – with respect to every possible world. In a similar vein, Kaplan says:

> The myth [of Pegasus] is possible in the sense that there is a possible world in which it is truthfully *told*. Furthermore, there are such worlds in which the language, with the exception of the proper names in question, is semantically and syntactically identical with our own. Let us call such possible worlds of the myth, '*M* worlds'. In each *M* world, the name 'Pegasus' will have originated in a dubbing of a winged horse. The Friend of Fiction, who would not have anyone believe the myth..., but yet talks of Pegasus, pretends to be in an *M* world and speaks its language.
>
> But beware the confusion of our language with theirs! If *w* is an *M* world, then *their* name 'Pegasus' will denote something with respect to *w*, and *our* description 'the *x* such that *x* is called 'Pegasus'' will denote the same thing with respect to *w*, but *our* name 'Pegasus' will still denote nothing with respect to *w*....

[10] *Introduction to Mathematical Philosophy* (London: Allen and Unwin, 1919), at pp. 169–70. Cf. Russell's *The Philosophy of Logical Atomism*, D. Pears, ed. (La Salle, IL: Open Court, 1918, 1972, 1985), at pp. 87–8.

> To summarize. It has been thought that proper names like 'Pegasus' and 'Hamlet' were like 'Aristotle' and 'Newman-1', except that the individuals denoted by the former were more remote. But regarded as names of *our* language – introduced by successful or unsuccessful dubbings, or just made up – the latter denote and the former do not.[11]

II

Kripke and Peter van Inwagen have argued independently, and persuasively, that wholly fictional characters should be regarded as real things.[12] Theirs is not a Meinongian view – one of Russell's targets in the passage quoted earlier – on which any manner of proper name or definite description, including such terms as 'the golden mountain' and 'the round square', designates some Object, though the Object may not exist in any robust sense and may instead have only a lower-class ontological status (and, as in the case of the round square, may even have inconsistent properties).[13] To be sure, wholly fictional characters like Sherlock Holmes, though real, are not real people. Neither physical objects nor mental objects, instead they are, in this sense, abstract entities. They are not eternal entities, like numbers; they are human-made artifacts created by fiction writers. But they exist just as robustly as the fictions themselves, the novels, stories, and so on in which they occur. Indeed, fictional characters have the same ontological status as the fictions, which are also abstract entities created by their authors. And certain things are true

[11] From appendix XI, "Names from Fiction," of "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, 1973), pp. 490–518, at pp. 505–8. Kaplan credits John Bennett in connection with this passage. The same general argument occurs in Donnellan, "Speaking of Nothing," at pp. 24–5, and in Alvin Plantinga, *The Nature of Necessity* (Oxford: Oxford University Press, 1974), section VIII.4, "Names: Their Function in Fiction," at pp. 159–63.

[12] Kripke, *Reference and Existence: The John Locke Lectures for 1973* (unpublished); van Inwagen, "Creatures of Fiction," *American Philosophical Quarterly*, 14, 4 (October 1977), pp. 299–308, and "Fiction and Metaphysics," *Philosophy and Literature*, 7, 1 (Spring 1983), pp. 67–77. One possible difference between them is that van Inwagen accepts an ontology of fictional characters whereas Kripke is instead merely unveiling an ontology that he argues is assumed in the way we speak about fiction while remaining neutral on the question of whether this manner of speaking accurately reflects reality. My interpretation of Kripke is based primarily on the manuscript of his 1973 Locke Lectures as well as his seminars, which I attended, on the topic of designation, existence, and fiction at Princeton University during the spring of 1981 and at the University of California, Riverside, in January 1983.

[13] Cf. Terence Parsons, "A Meinongian Analysis of Fictional Objects," *Grazer Philosophische Studien*, 1 (1975), pp. 73–86, and *Nonexistent Objects* (New Haven: Yale University Press, 1980).

of these fictional characters – for example, that the protagonist of the Sherlock Holmes stories was inspired in part by an uncannily perceptive person of Sir Arthur Conan Doyle's acquaintance.

On this theory, a negative existential like (~1), taken as making an assertion about the fictional character and taken literally, denies real existence of a real fictional character, and is therefore false. In fact, Holmes may well be the most famous of all fictional characters in existence. The same sentence, understood as making an assertion about the fictional character, may be open to a more charitable and plausible interpretation, albeit a nonliteral one. Perhaps one may reinterpret the predicate 'exists', for example, to mean *real*, in something like the sense: *not merely a character in the story, but an entity of just the sort depicted*. Then (~1) may be understood, quite plausibly, as making an assertion that the character of Sherlock Holmes is a wholly fictional man, not a real one. That is to say, there is a fiction in which Holmes is a man of flesh and blood, but in reality Holmes is merely a fictional character. On this Pickwickian reading, the sentence is indeed true. But it is then not an authentic negative existential, and thus generates no special problem for Millianism, let alone for direct-reference theory.[14]

How can this talk about the fictional character of Sherlock Holmes as a real entity be reconciled with the passage from Kripke quoted earlier, in which he appears to agree with Kaplan and Russell that 'Sherlock Holmes' is nondesignating?

On Kripke's account, use of the name 'Sherlock Holmes' to refer to the fictional character is in a certain sense parasitic on a prior, more fundamental use not as a name for the fictional character. Kripke and van Inwagen emphasize that the author of a fiction does not assert anything in writing the fiction. Instead, Kripke, like Kaplan, says that Conan Doyle merely *pretended* to be designating someone in using the name 'Sherlock Holmes' and to be asserting things, expressing propositions, about him. A fiction purports to be an accurate historical recounting of real events involving real people. Of course, the author typically does not attempt to deceive the audience that the pretense is anything but a pretense; instead the fiction merely goes through the motions (hoaxes like Orson Welles's radio broadcast of H. G. Wells's *The War of the Worlds* and the

[14] Cf. van Inwagen, "Creatures of Fiction," at p. 308 n. 11. Kripke argues against any interpretation of (~1) on which the name is used as a name of the fictional character but 'exist' receives a Pickwickian interpretation on which the sentence is true. I am less skeptical. See below, especially note 29. (Van Inwagen's suggestion is neutral between this sort of account and the one proposed there.)

legend of Santa Claus being the "exceptions that prove the rule"). Frege expressed the basic idea as follows:

> Assertions in fiction are not to be taken seriously: they are only mock assertions. Even the thoughts are not to be taken seriously as in the sciences: they are only mock thoughts. If Schiller's *Don Carlos* were to be regarded as a piece of history, then to a large extent the drama would be false. But a work of fiction is not meant to be taken seriously in this way at all: it's all play.[15]

According to Kripke, as the name 'Sherlock Holmes' was originally introduced and used by Conan Doyle, it has no designatum whatsoever. It is a name in the make-believe world of storytelling, part of an elaborate pretense. By Kripke's lights, our language licenses a certain kind of metaphysical move. It postulates an abstract artifact, the fictional character, as a product of this pretense. But the name 'Sherlock Holmes' does not thereby refer to the character thereby postulated, nor for that matter to anything else, and the sentences involving the name 'Sherlock Holmes' that were written in creating the fiction express no propositions, about the fictional character or anything else. They are all part of the pretense, like the actors' lines in the performance of a play. Names from fiction occurring within the fiction are thoroughly nondesignating. It is only at a later stage when discussing the fictional character from a metastandpoint, speaking about the pretense and not within it, that the language makes a second move, this one semantical rather than metaphysical, giving the name a new, nonpretend use as a name for the fictional character. The language allows a linguistic transformation, says Kripke, of a fictional name for a person into a name of a fictional person. Similarly, van Inwagen writes, "we have embodied in our rules for talking about fiction a convention that says that a creature of fiction *may* be referred to by what is (loosely speaking) 'the name it has in the story'" ("Creatures of Fiction," p. 307 n.). On this account, the name 'Sherlock Holmes' is ambiguous. In its original use as a name for a human being – its object-fictional use by Conan Doyle in writing the fiction, and presumably by the reader reading the fiction – it merely pretends to name someone and actually names nothing at all. But in its metafictional, nonpretend use as a name for the fictional character thereby created by Conan Doyle, it genuinely designates that particular artifactual entity. In effect, there are two names. Though spelled the same, they would be better spelled

[15] "Logic," in Frege's *Posthumous Writings*, at p. 130. See also Kendall L. Walton, "On Fearing Fictions," *Journal of Philosophy*, 75 (1978), pp. 5–27; and *Mimesis as Make-Believe: On the Foundations of the Representational Arts* (Cambridge: Harvard University Press, 1990).

differently, as 'Holmes$_1$' for the man and 'Holmes$_2$' for the fictional character. Neither names a real man. The latter names an abstract artifact, the former nothing at all. It is the original, thoroughly nondesignating use of 'Sherlock Holmes' – its use in the same way as 'Holmes$_1$' – that Kaplan, Kripke, and Russell emphasize in the passages quoted.

Kripke's theory involves a complex account of object-fictional sentences like 'Sherlock Holmes plays the violin', 'Odysseus was set ashore at Ithaca while sound asleep', 'Pegasus has wings', and (2). By contrast, 'According to the stories, Sherlock Holmes used cocaine' is metafictional, and literally true. On Kripke's view, object-fictional sentences are multiply ambiguous, as a result of the two uses of the names and of differing perspectives from within and without the fiction or myth. Using the name in (2) in the manner of 'Holmes$_1$' as the pretend name of a pretend man, and using the sentence to make a statement not within the pretense and instead about the real world outside the fiction, the sentence expresses nothing and is therefore not literally true. (See note 17.) But object-fictional sentences may also be used from within the fiction, as part of the general pretense of an accurate, factual recounting of real events, not to be mistaken as a "time out" reality check. Interpreted thus, sentence (2) is a correct depiction, part of the storytelling language-game. So used, the sentence may be counted "true" in an extended sense – *truth in the fiction*, as we might call it – conforming to a convention of counting an object-fictional sentence "true" or "false" according as the sentence is true or false with respect (or according) to the fiction. This is the sense in which the sentence should be marked "true" on a true-false test in English Lit 101.[16] Alternatively, the name may be used in the manner of 'Holmes$_2$' as a name for the fictional character. With the name so used, and the sentence used as a statement not about the fiction but about reality, it is false; no abstract entity uses cocaine or even can. On the other hand, according to Kripke, we also have an extended use of predicates, on which 'uses cocaine' correctly applies to an abstract entity when it is a character from a fiction according to which the corresponding fictional person uses cocaine. Giving the name its use as a name of

[16] Kripke recognizes that this is generally equivalent, in some sense, to treating an object-fictional sentence φ as implicitly shorthand for the metafictional ⌜According to the fiction, φ⌝, and evaluating it as true or false accordingly. But he says that he regards it as applying 'true' and 'false' in conventionally extended senses directly to object-fictional sentences themselves in their original senses. Cf. David Lewis, "Truth in Fiction," *American Philosophical Quarterly*, 15 (1978), pp. 37–46; reprinted with postscripts in Lewis's *Philosophical Papers: Volume I* (Oxford: Oxford University Press, 1983), pp. 261–80.

the fictional character, and understanding the predicate 'used cocaine' in this extended sense, sentence (2) is true. According to the stories, Holmes_1 used cocaine. In virtue of that fact we may say that Holmes_2 "used cocaine." The truth conditions of sentence (2) on this reading are exactly the same as the conventional truth-in-the-fiction conditions of the sentence interpreted as 'Holmes_1 used cocaine'. But they differ in meaning. The former invokes a new interpretation for both subject and predicate.[17]

Viewing the negative existential (~1) on this same model, it has various interpretations on which it is false. Interpreted in the sense of 'Holmes_1 does not exist', it is like 'Holmes_1 did not use cocaine' in pretending to express a proposition, one that is false in the fiction. The sentence should be marked "false" on a true-false quiz about the Sherlock Holmes stories. Interpreted in the sense of 'Holmes_2 does not exist', the predicate 'exist' may be given its literal sense, or alternatively it may be given its extended sense on which it applies to a fictional character if and only according to the relevant fiction the corresponding person exists. Either way the sentence is false. The fictional character exists, and moreover the corresponding person existed according to the stories. But suppose (1) is read again in the sense of 'Holmes_1 does not exist', this time not as a statement within the fiction but as a statement about the real world. Then it is significantly unlike 'Holmes_1 did not use cocaine', which expresses nothing about the real world outside the fiction. For according to Kripke, 'Holmes_1 does not exist' is in reality quite true. On this interpretation, the sentence is regarded by Kripke, as by traditional philosophy, as an authentic true negative existential with a thoroughly nondesignating subject term.

This was our primary concern. We have attempted to deal with the problem of negative existentials by concentrating on 'Holmes_2 does not exist'. But it is Holmes_1, not Holmes_2, who literally does not exist. The

[17] Kripke cautions that when one is merely pretending to refer to a human being in using a name from fiction, that pretense does not in and of itself involve naming a fictional character. On the contrary, such a pretense was involved in the very creation of the as-yet-unnamed fictional character. He also remarks that an object-fictional sentence like (2) would be counted true in the conventionally extended "according to the fiction" sense even if the name had only its 'Holmes_1' use and the language had not postulated fictional characters as objects. Van Inwagen ("Creatures of Fiction," pp. 305–6) invokes a notion of a fiction "ascribing" a property to a character, but admits that his terminology is misleading. He does not explain his notion of *ascription* in terms of what sentences within the fiction express, since such sentences on his view (as on Kripke's) do not express anything. Instead this kind of ascription is an undefined primitive of the theory.

problem requires more work. Kripke says that it is "perhaps the worst problem in the area."

By way of a possible solution, Kripke proposes that (1) should not be viewed on the model of 'Holmes$_1$ used cocaine', understood as a statement about the real world – and which thereby expresses nothing – but instead as a special kind of speech act. Consider first the object-fictional sentence (~2), in the sense of 'Holmes$_1$ did not use cocaine', construed as a statement about reality. One may utter this sentence even if one is uncertain whether Holmes$_1$ is a real person, in order to make the cautious claim that either there is no such person as Holmes$_1$ or there is but he did not use cocaine. In that case, the assertion is tantamount to saying that either there is no proposition that Holmes$_1$ uses cocaine, or there is such a proposition but it is not true. In short, the sentence is interpreted as meaning *there is no true proposition that Holmes$_1$ uses cocaine*. A similar cautious interpretation is available whenever negation is employed.

Kripke extends this same interpretation to singular negative existentials. He proposes that in uttering a sentence of the form ⌜α does not exist⌝ from the standpoint of the real world, what one really means is better expressed by ⌜There is no true proposition that α exists⌝. What is meant may be true on either of two entirely different grounds: (*i*) the mentioned proposition is not true; alternatively (*ii*) there is no such proposition. If α is 'the present king of France', then one's assertion is true for the former reason. If α is 'Sherlock Holmes' in its 'Holmes$_1$' use, then one's assertion is true for the latter reason. Kripke's is not a theory that takes (~1) to express that (1) is not true$_{\text{English}}$. Semantic-ascent theories are notoriously vulnerable to refutation (as by the Church translation argument). Instead, Kripke takes (~1) to express that there is no true proposition of a certain sort even if only because there is no proposition of that sort at all. This is closer to the intensional-ascent theory of existence – with a wink and a nod in the direction of Millianism.

Kripke extends this account to mistaken theories that have been believed – what I call *myths*. He explicitly mentions the case of the fictitious intra-Mercurial planet Vulcan, hypothesized and named by Jacques Babinet in 1846 and later thought by Urbain Le Verrier to explain an irregularity in the orbit of Mercury. The irregularity was eventually explained by the general theory of relativity.[18] Though the Vulcan

[18] Babinet hypothesized Vulcan for reasons different from Le Verrier's. See Warren Zachary Watson, *An Historical Analysis of the Theoretical Solutions to the Problem of the Perihelion of Mercury* (doctoral dissertation, Ann Arbor, MI: University Microfilms, 1969), pp. viii, 92–4; and N. T. Roseveare, *Mercury's Perihelion: From Le Verrier to Einstein* (Oxford: Oxford

hypothesis turned out to be a myth, it nevertheless bore fruit – not a massive physical object, but in the form of a mythical object, an artifactual abstract entity of the same ontological status as $Holmes_2$. Vulcan even has explanatory value. It accounts not for Mercury's perihelion, but for the truth in English of 'A hypothetical planet was postulated to explain Mercury's irregular orbit'. In introducing the name 'Vulcan', Babinet meant to introduce a name for a planet, not an abstract artifact. His intentions were thwarted on both counts. Kripke holds that the dubbing ultimately resulted in two distinct uses of the name – in effect two names, '$Vulcan_1$' and '$Vulcan_2$' – the first as a name for an intra-Mercurial planet (and consequently thoroughly nondesignating), the second as a name of a mythical object, Babinet's accidental creation. (Presumably these two uses are supposed to be different from two other pairs of uses, corresponding to the fire god of Roman mythology and Mr. Spock's native planet in *Star Trek*.) When it is said that $Vulcan_1$ does not influence Mercury's orbit, and that $Vulcan_1$ does not exist, what is meant is that there are no true propositions that $Vulcan_1$ influences Mercury or that $Vulcan_1$ exists.

III

Kripke's intensional ascent fails to solve the problem. The 'that' clauses 'that $Holmes_1$ uses cocaine' and 'that $Holmes_1$ exists' are no less problematic than '$Holmes_1$' itself. Kripke concedes, in effect, that if α is a thoroughly nondesignating name, then propositional terms like $\ulcorner$the proposition that α used cocaine$\urcorner$ are also thoroughly nondesignating. The account thus analyzes a negative existential by means of another negative existential, generating an infinite regress with the same problem arising at each stage: If α is a thoroughly nondesignating name, how can $\ulcorner$There is no proposition that α used cocaine$\urcorner$ express anything at all, let alone something true (let alone a necessary truth)? To give an analogy, a proposal to analyze $\ulcorner\alpha$ does not exist$\urcorner$ as $\ulcorner$Either $\{\alpha\}$ is the empty set or it does not exist$\urcorner$ yields no solution to the problem of how (~1) can express anything true. Even if the analysans has the right truth conditions, it also invokes a disjunct that is itself a negative existential, and it

University Press, 1982), at pp. 24–7. (Thanks to Alan Berger and the late Sidney Morgenbesser for bibliographical assistance. I also researched the Vulcan hypothesis on the Internet. When I moved to save material to a new file to be named 'Vulcan', the program responded as usual, only this time signaling a momentous occasion: **Vulcan doesn't exist. Create? Y or N**.)

leaves unsolved the mystery of how either disjunct can express anything if α is a thoroughly nondesignating name.[19]

There is more. On the accounts proposed by Kaplan, Kripke, and van Inwagen, object-fictional sentences, like 'Sherlock Holmes uses cocaine', have no genuine semantic content in their original use. This renders the meaningfulness of true metafictional sentences like 'According to the Sherlock Holmes stories, Holmes used cocaine' problematic and mysterious. (See note 18.) On Kripke's account, it is true that according to the stories Holmes_1 used cocaine, and that on Le Verrier's theory Vulcan_1 influences Mercury's orbit. How can these things be true if there is no proposition that Holmes_1 used cocaine and no proposition that Vulcan_1 influences Mercury? What is it that is the case according to the stories or the theory? How can Le Verrier have believed something that is nothing at all? If object-fictional sentences like 'Holmes_1 used cocaine' express nothing, and we merely pretend that they express things, how can they be true with respect (according) to the fiction, and how can metafictional sentences involving object-fictional subordinate clauses express something, let alone something true?

More puzzling still are such cross-realm statements as 'Sherlock Holmes was cleverer than Bertrand Russell', and even worse, 'Sherlock Holmes was cleverer than Hercule Poirot'. The account as it stands seems to invoke some sort of intensional use of 'Sherlock Holmes', whereby not only is the name ambiguous between 'Holmes_1' and 'Holmes_2', but also accompanying the former use is something like an *ungerade* use, arising in constructions like 'According to the stories, Holmes_1 used cocaine', on which the name designates a particular concept – presumably something of the form *the brilliant detective who performed such and such exploits*. Kripke acknowledges this, calling it a "special sort of quasi-intensional use." The account thus ultimately involves an intensional apparatus.

[19] As Kripke intends the construction ⌜There is no such thing as α⌝, it seems close in meaning to ⌜^α^ is not a concept of anything⌝. In our problem case, α is 'the proposition that Holmes_1 exists'. Since the 'that' prefix is itself a device for indirect quotation (see n. 7), 'Holmes_1' would thus occur in a doubly *ungerade* context. It may be, therefore, that Kripke's intensional-ascent theory presupposes (or otherwise requires) a thesis that proper names have a Fregean *ungerade Sinn*, or indirect sense, which typically determines the name's designatum, the latter functioning as both customary content and customary designatum, but which in the case of a thoroughly nondesignating name determines nothing. This would provide a reason for intensional ascent; one hits pay dirt by climbing above customary content. Kripke's theory would then involve Fregean intensional machinery that direct designation scrupulously avoids and Millianism altogether prohibits.

Indeed, it appears to involve industrial-strength intensional machinery of a sort that is spurned by direct-reference theory, and worse yet, by the very account itself. Further, the intensionality seems to get matters wrong. First, it seems to give us after all a proposition that Holmes_1 used cocaine, a proposition that Vulcan_1 influences Mercury, etc. – those things that are the case (or not) according to stories or believed by the theorist. Furthermore, depending on how the *ungerade* use of 'Holmes_1' is explained, it could turn out that if there were someone with many of the attributes described in the Sherlock Holmes stories, including various exploits much like those recounted, then there would be *true* propositions that Holmes_1 existed, that he used cocaine, and so on. It could even turn out that if by an extraordinary coincidence there was *in fact* some detective who was very Holmesesque, then even though Holmes_2 was purely fictional and not based in any way on this real person, there *are* nevertheless true propositions that Holmes_1 existed, used cocaine, and so on. The theory threatens to entail that the question of Holmes's authenticity (in the intended sense) would be settled affirmatively by the discovery of someone who was significantly Holmesesque, even if this person was otherwise unconnected to Conan Doyle. If the theory has consequences like these, then it directly contradicts the compelling passage of Kripke's quoted earlier, if not also itself. Kripke expresses misgivings about the theory, acknowledging that the required "quasi-intensional" use of a name from fiction needs explanation.[20]

[20] Cf. Gareth Evans, *The Varieties of Designation*, J. McDowell, ed. (Oxford: Oxford University Press, 1982), at pp. 349–52. The kind of intensionality required on Kripke's account is not merely pragmatic in nature. Taking account of the preceding note, the account may be steeped in intensionality. The danger of entailing such consequences as those noted is very real. The theory of fiction in Lewis, "Truth in Fiction," is similar to Kripke's in requiring something like an *ungerade* use for thoroughly nondesignating names from fiction. Lewis embraces the conclusion that "the sense of 'Sherlock Holmes' as we use it is such that, for any world *w* where the Holmes stories are told as known fact rather than fiction, the name denotes at *w* whichever inhabitant of *w* it is who there plays the role of Holmes" (p. 267 of the version in his *Philosophical Papers: Volume I*). A similar conclusion is also reached in Robert Stalnaker, "Assertion," P. Cole, ed., *Syntax and Semantics, 9: Semantics* (New York: Academic Press, 1978), pp. 315–32, at 329–31. These conclusions directly contradict Kripke's account of proper names as rigid designators. In the first of the Locke Lectures, Kripke argues that uniquely being Holmesesque is not sufficient to be Holmes. Further, Kripke also argues there that the phenomenon of fiction cannot yield considerations against this or that particular philosophico-semantic theory of names, since it is part of the fiction's pretense, for the theorist, that the theory's "criteria for naming, whatever they are, are satisfied." Why should this not extend to the thesis, from direct-reference theory, that names lack Kripke's hypothesized "quasi-intensional use"?Donnellan, "Speaking of Nothing," regards negative existentials as unlike other object-fictional sentences, though his solution differs

IV

Kripke's contention that names like 'Sherlock Holmes' are ambiguous is almost certainly mistaken. In particular, there is no obvious necessity to posit a use of the name by Conan Doyle and his readers that is nondesignating (in any sense) and somehow prior to its use as a name for the fictional character and upon which the latter use is parasitic.[21]

The alleged use of 'Sherlock Holmes' on which it is thoroughly nondesignating was supposed to be a pretend use, not a real one. In writing the Sherlock Holmes stories, Conan Doyle did not genuinely use the name at all, at least not as a name for a man. He merely pretended to. Of course, Conan Doyle wrote the name down as part of sentences

significantly from Kripke's and is designed to avoid intensionality. Donnellan provides a criterion whereby if α and β are distinct names from fiction, then (in effect) the corresponding true negative existentials, taken in the sense of $\ulcorner\alpha_1$ does not exist$\urcorner$ and $\ulcorner\beta_1$ does not exist$\urcorner$ as literally true statements about reality, express the same proposition if and only if α_2 and β_2 name the same fictional character. (I have taken enormous liberties in formulating Donnellan's criterion in terms of Kripke's apparatus, but I believe I do not do it any serious injustice.) This proposal fails to provide the proposition expressed. In fact, Donnellan concedes that "we cannot. . . . preserve a clear notion of what proposition is expressed for existence statements involving proper names" (p. 29; see note 9 above). This fails to solve the original problem, which is even more pressing for Donnellan. How can such sentences be said to "express the same proposition" when by his lights neither sentence clearly expresses any proposition at all? Cf. my "Nonexistence," *Noûs*, 32, 3 (1998), pp. 277–319, at 313–14 n. 29.

[21] I first presented my alternative account of negative existentials, fiction, and myth in "Nonexistence." Amie Thomasson, in *Fiction and Metaphysics* (Cambridge: Cambridge University Press, 1999), defends an account similar to mine on broadly similar grounds. See also F. Adams, G. Fuller, and R. Stecker, "The Semantics of Fictional Names," *Pacific Philosophical Quarterly*, 78 (1997), pp. 128–48; David Braun, "Empty Names," *Noûs*, 27 (1993), pp. 449–69, and "Empty Names, Fictional Names, Mythical Names," *Noûs* (forthcoming); Ben Caplan, "Empty Names: An Essay on the Semantics, Pragmatics, Metaphysics, and Epistemology of Empty Names and Other Directly Referential Expressions," UCLA doctoral dissertation (2000), and "Creatures of Fiction, Myth, and Imagination," *American Philosophical Quarterly*, 41, 4 (October 2004), pp. 331–7; Gregory Currie, *The Nature of Fiction* (Cambridge: Cambridge University Press, 1990); Anthony Everett, "Empty Names and 'Gappy' Propositions," *Philosophical Studies*, 116 (October 2003), pp. 1–36; Kit Fine, "The Problem of Non-Existence: I. Internalism," *Topoi*, 1 (1982), pp. 97–140; Stacie Friend, review of Amie Thomasson, *Fiction and Metaphysics*, in *Mind*, 2000, pp. 997–1000; Thomas G. Pavel, *Fictional Worlds* (Cambridge: Harvard University Press, 1986); Amie Thomasson, "Fiction, Modality and Dependent Abstracta," *Philosophical Studies*, 84 (1996), pp. 295–320; Nicholas Wolterstorff, *Works and Worlds of Art* (Oxford: Oxford University Press, 1980). Three collections of articles on the philosophy and logic of fiction are: *Poetics*, 8, 1/2 (April 1979); A. Everett and T. Hofweber, eds., *Empty Names, Fiction and the Puzzles of Non-Existence* (Stanford, CA: CSLI Publications, 2000); and P. McCormick, ed., *Reasons of Art* (Ottawa: University of Ottawa Press, 1985).

in the course of writing the Holmes stories. In that sense he used the name. This is like the use that stage or film actors make of sentences when reciting their lines during the performance of a play or the filming of a movie. It is not a use whereby the one speaking commits him/herself to the propositions expressed. Even when writing 'London' or 'Scotland Yard' in a Holmes story, Conan Doyle was not in any robust sense using these names to designate. As J. O. Urmson notes, when Jane Austen, in writing a novel, writes a sentence beginning with a fictional character's name,

> it is not that there is a reference to a fictional object, nor is there the use of a referring expression which fails to secure reference (as when one says "That man over there is tall" when there is no man over there). Jane Austen writes a sentence which has the form of an assertion beginning with a reference, but is in fact neither asserting nor referring; therefore she is not referring to any character, fictional or otherwise, nor does she fail to secure reference, except in the jejune sense in which if I sneeze or open a door I fail to secure reference. Nothing would have counted on this occasion as securing reference, and to suppose it could is to be under the impression that Miss Austen was writing history.... I do not say that one cannot refer to a fictional character, but that Miss Austen did not on the occasion under discussion.
>
> What I am saying is that making up fiction is not a case of stating, or asserting, or propounding a proposition and includes no acts such as referring ("Fiction," *American Philosophical Quarterly*, 13, 2 (April 1976), pp. 153–57 at p. 155).

The pretend use of 'Sherlock Holmes' by Conan Doyle does not have to be regarded as generating a use of the name on which it is nondesignating. *Pace* Kaplan, Kripke, Russell, and traditional philosophy, it *should* not be so regarded. A name semantically designates this or that individual only relative to a particular kind of use, a particular purpose for which the name was introduced. One might go so far as to say that a pretend use by itself does not even give rise to a real name at all, any more than it gives birth to a real detective. This may be somewhat overstated, but its spirit and flavor are not.[22] Even if one regards a name as something that exists independently of its introduction into language (as is my inclination), it is confused to think of a name as designating, or not designating, other than as doing so *on* a particular use. On this view, a common

[22] C. J. F. Williams, in *What Is Existence?* (Oxford: Oxford University Press, 1981), argues that 'Sherlock Holmes' is not a proper name (pp. 251–5). This is what Kaplan ought to have said, but he did not. See his "Words," *Proceedings of the Aristotelian Society*, 64 (1990), pp. 93–119, especially section II, "What are Names?" at pp. 110–19.

name like 'Adam Smith' designates different individuals on different uses. The problem with saying that 'Sherlock Holmes' is nondesignating on Conan Doyle's use is that in merely pretending that the name had a particular use, Conan Doyle did not yet attach a real use to the name on which it may be said to designate or not.

I heartily applaud Russell's eloquent plea for philosophical sobriety. But his attitude toward "unreal" objects is fundamentally confused. On the other hand, Kripke's account of fiction and myth is implausibly baroque and of dubious consistency.

The matter should be viewed instead as follows: Arthur Conan Doyle one fine day set about to tell a story. In the process he created a fictional character as the protagonist and other fictional characters, each playing a certain role in the story. These characters are not flesh-and-blood human beings. Rather they, like the story itself, are abstract artifacts, born of Conan Doyle's fertile imagination. The name 'Sherlock Holmes' was originally coined by Conan Doyle in writing the story (and subsequently understood by those who have read the Holmes stories) as the fictional name for the protagonist. That thing – in fact merely an abstract artifact – is, *according to the story*, a man by the name of 'Sherlock Holmes'. In telling the story, Conan Doyle pretends to use the name to designate its fictional designatum (and to use 'Scotland Yard' to designate Scotland Yard) – or rather, he pretends to be Dr. Watson using 'Sherlock Holmes', much like an actor portraying Dr. Watson on stage. But he does not really so use the name; 'Sherlock Holmes' so far does not really have any such use, or even any related use (ignoring unrelated uses it coincidentally might have had). At a later stage, use of the name is imported from the fiction into reality, to name *the very same thing* that it is the name of according to the story. That thing – now the real as well as the fictional bearer of the name – is according to the story a human being who is a brilliant detective, but in reality an artifactual abstract entity.

The use of 'Sherlock Holmes' represented by 'Holmes_2', as the name for what is in reality an abstract artifact, is the same use it has according to the Holmes stories, except that according to the stories, that use is one on which it designates a man. The alleged thoroughly nondesignating use of 'Sherlock Holmes' by Conan Doyle, as a pretend name for a man, is a myth. Contrary to Kaplan, Kripke, and the rest, there is no literal use of 'Sherlock Holmes' that corresponds to 'Holmes_1'. One might say (in the spirit of the Kripke–van Inwagen theory) that there is a mythical use represented by 'Holmes_1', an allegedly thoroughly nondesignating

use that pretends to name a brilliant detective who performed such-and-such exploits. This kind of use is fictitious in the same way that Sherlock Holmes himself is, no more a genuine use than a fictional detective is a genuine detective. Instead there is at first only the pretense of a use, including the pretense that the name designates a brilliant detective, a human being, on that use. Later the name is given a genuine use, on which it names the very same entity that it named according to the pretense, though the pretense that this entity is a human being has been dropped.

Literary scholars discussing the Holmes stories with all seriousness may utter the name 'Sherlock Holmes' as if to import its pretend use as the name of a man into genuine discourse – as when a Holmes "biographer" says, "Based on the evidence, Holmes was not completely asexual." Even then, the scholars are merely pretending to use the name as a name for a man. There is no flesh-and-blood man for the name to name, and the scholars know that.[23] If they are genuinely using the name, they are using it as a name for the fictional character. The only genuine, non-pretend use that we ever give the name – of which I feel confident – is as a name for the character. And that use, as a name for that very thing, is the very use it has in the story – though according to the story, that very thing is a human being and not an abstract entity. Conan Doyle may have used the name for a period even before the character was fully developed. Even so, this would not clearly be a genuine use of the name on which it was altogether nondesignating. There would soon exist a fictional character that *that* use of the name already designated.[24] Once the anticipated designatum arrived, to use the name exactly as before was to use it to designate that thing. At that point, to use the name in a way that it fails to designate would have been to give it a new use.

[23] What about a foggy-headed literary theorist who maintains, as a sophomoric antirealist or Meinongian philosophical view (or quasi-philosophical view), that Sherlock Holmes is in some sense no less flesh-and-blood than Conan Doyle? The more bizarre someone's philosophical perspective is, the more difficult it is to interpret his/her discourse correctly. Such a case might be assimilated to that of myths.

[24] On the view I am proposing, there is a sense in which a fictional character is prior to the fiction in which the character occurs. By contrast, Kripke believes that a fictional character does not come into existence until the final draft of the fiction is published. This severe restriction almost certainly does not accord with the way fiction writers see themselves or their characters. Even if it is correct, it does not follow that while writing a fiction, the author is using the name in such a way that it is thoroughly nondesignating. It is arguable that the name already designates the fledgling abstract artifact that does not yet exist. There is not already, nor will there ever be, any genuine use of the name as the name of a human being; that kind of use is make-believe.

Once the name 'Sherlock Holmes' has been imported into genuine discourse, Conan Doyle's sentences involving the name express singular propositions about his character. One might even identify the fiction with a sequence of propositions, about both fictional and nonfictional things (for example, London's Baker Street). To say this is not to say that Conan Doyle asserted those propositions. He did not – at least not in any sense of 'assert' that involves a commitment to one's assertions. He merely pretended to be Dr. Watson asserting those propositions. In so doing, Conan Doyle pretended (and his readers pretend) that the propositions are true propositions about a real man, not untrue propositions about an abstract artifact. That is exactly what it *is* to pretend to assert those propositions. To assert a proposition, in this sense, is in part to commit oneself to its truth; so to pretend to assert a proposition is to pretend to commit oneself to its truth. And the propositions in question entail that Holmes was not an abstract entity but a flesh-and-blood detective. Taken literally, they are untrue.[25]

Many have reacted to this proposal with a vague feeling – or a definite feeling – that I have conscripted fictional characters to perform a service for which they were not postulated and are not suited. Do I mean to say that *The Hound of the Baskervilles* consists entirely of a sequence of mostly false propositions about mostly abstract entities? Is it of the very essence of fiction to pretend that abstract entities are living, breathing people?

These misgivings stem from a misunderstanding of the nature of fiction and its population. The characters that populate fiction are created precisely to perform the service of being depicted as people by the fictions in which they occur. Do not fixate on the fact that fictional characters are abstract entities. Think instead of the various *roles* that a director might cast in a stage or screen production of a particular piece of fiction. Now think of the corresponding characters as the components of the fiction that *play* or *occupy* those roles in the fiction. It is no accident that one says of an actor in a dramatic production that he/she is playing a "part." The characters of a fiction – the occupants of roles in the fiction – are in some real sense *parts* of the fiction itself. Sometimes, as in historical fiction, what fictionally plays a particular role is a real person or thing. In other cases, what plays a particular role is the brainchild of the storyteller. In such cases, the role player is a *wholly* fictional character, or what

[25] See note 17. If my view is correct, then van Inwagen's use of the word 'ascribe' in saying that a fiction ascribes a particular property to a particular fictional character may be understood (apparently contrary to van Inwagen's intent) quite literally, in its standard English meaning.

I (following Kripke) have been calling simply a "fictional character." Whether a real person or wholly fictional, the character is that which according to the fiction takes part in certain events, performs certain actions, undergoes certain changes, says certain things, thinks certain thoughts. An actor performing in the role of Sherlock Holmes portrays Holmes_2; it is incorrect, indeed it is literally nonsense, to say that he portrays Holmes_1, if 'Holmes_1' is thoroughly nondesignating.

It is of the very essence of a fictional character to be depicted in the fiction as the person who takes part in such-and-such events, performs such-and-such actions, thinks such-and-such thoughts. Being so depicted is the character's raison d'etre. As Clark Gable was born to play Rhett Butler in Margaret Mitchell's *Gone with the Wind*, that character was born to be the romantic leading man of that fiction. Mario Puzo's character of Don Corleone is as well suited to be the charismatic patriarch of *The Godfather* as Marlon Brando was to portray the character on film. Except even more so. The character was also portrayed completely convincingly by Robert De Niro. But only that character, and no other, is appropriate to the patriarch role in Puzo's crime saga. Likewise, the butler in Kazuo Ishiguro's *The Remains of the Day* would have been completely inappropriate, in more ways than one, as the protagonist of Ian Fleming's James Bond novels. It is of the essence of Fleming's character precisely to be the character depicted in the dashing and debonair 007 role in the James Bond stories – and not merely in the sense that being depicted thus is both a necessary and a sufficient condition for being the character of Bond in any metaphysically possible world. Rather, this is the condition that defines the character; being the thing so depicted in those stories characterizes exactly *what* the character of James Bond *is*.

In a sense, my view is the exact opposite of the traditional view expressed in Russell's pronouncement that "it is of the very essence of fiction that only the thoughts, feelings, etc., in Shakespeare and his readers are real, and that there is not, in addition to them, an objective Hamlet." To Russell's pronouncement there is Hamlet's own fictional retort: "There are more things in heaven and earth, Horatio, Than are dreamt of in your philosophy." It is of the very essence of Shakespeare's *Hamlet* that there is indeed an object that is Hamlet. I am not urging that we countenance a person who is Hamlet_1 and who contemplated suicide according to the classic play but who does not exist. There is no sense in which there is any such person. The objective Hamlet is Hamlet_2 – what plays the title role in the Bard's drama – and hence not a human being at all but a part of fiction, merely depicted there as

anguished and suicidal. It is with the most robust sense of reality prescribed by the philosopher/lord that I should urge recognition of this fictionally troubled soul.[26]

It is an offer one shouldn't refuse lightly. Unlike Kripke's theory, a treatment of the sentences of the Sherlock Holmes stories on which they literally designate (although their author may not) the fictional character, and literally express things (mostly false) about that character, yields a straightforward account – what I believe is the correct account – of the meaningfulness and apparent truth of object-fictional sentences like 'Sherlock Holmes uses cocaine', and thereby also of the meaning and truth of metafictional sentences like 'According to the Holmes stories, Holmes used cocaine'. Following Kripke's lead in the possible-world semantics for modality, we say that 'Sherlock Holmes' is a rigid designator, designating the fictional character both *with respect to the real world* and *with respect to the fiction*. The object-fictional sentence is not true with respect to the real world, since abstract entities do not use hard drugs. But it is true with respect to the fiction – or true "in the world of the fiction" – by virtue of being entailed by the propositions, themselves about fictional characters, that comprise the fiction, taken together with supplementary propositions concerning such things as the ordinary physical-causal structure of the world, usual societal customs, and so on, that are assumed as the background against which the fiction unfolds.[27] When we speak within the fiction, we pretend that truth with respect to the fiction is truth simpliciter, hence that Holmes (= Holmes_2) was a human being, a brilliant detective who played the violin, and so on. Or what is virtually functionally equivalent, we use object-fictional sentences as shorthand for metafictional variants. The metafictional ⌜According to fiction *f*, ϕ⌝ is true with respect to the real world if and only if ϕ is

[26] In reading a piece of fiction, do we pretend that an abstract entity is a prince of Denmark (or a brilliant detective, and so on)? The question is legitimate. But it plays on the distinction between *de dicto* and *de re*. Taken *de dicto*, of course not; taken *de re*, exactly. That abstract entities are human beings is not something we pretend, but there are abstract entities that we pretend are human beings. Seen in the proper light, this is no stranger than pretending that Marlon Brando is Don Corleone. (It is not nearly as strange as Brando portraying a character in *The Freshman* who, in the story, is the real person on whom the character Marlon Brando portrayed in *The Godfather* was modelled.)

[27] Cf. John Heinz, "Reference and Inference in Fiction," *Poetics*, 8, 1/2 (April 1979), pp. 85–99. Where the fiction is inconsistent, the relevant notion of entailment may have to be nonstandard. Also, the notion may have to be restricted to a *trivial* sort of entailment – on pain of counting arcane and even as yet unproved mathematical theorems true with respect to fiction. Cf. Lewis, "Truth in Fiction," at pp. 274–8 of his *Philosophical Papers, I*.

true with respect to the mentioned fiction. In effect, the metafictional receives a Fregean treatment on which the object-fictional subordinate clause ϕ is in *ungerade* mode, designating a (typically false) proposition about a fictional character. In all our genuine discourse about Holmes, we use the name in the 'Holmes$_2$' way. One may feign using 'Sherlock Holmes' as the name of a man, but this is only a pretend use. To say that according to the stories, Holmes used cocaine is to say nothing; what is true according to the stories is that Holmes$_2$ used cocaine.[28]

Consider again sentence (~1), or better yet,

(3) Sherlock Holmes does not really exist; he is only a fictional character.

Taken literally, (3) expresses the near contradiction that Holmes$_2$ is a fictional character that does not exist. It was suggested earlier that the existence predicate may be given a Pickwickian interpretation on which it means something like: *an entity of the very sort depicted*. In many cases, however, Russell's analysis by means of (~1′$_2$) seems closer to the facts. In uttering (~1) or (3), the speaker may intend not merely to characterize Holmes, but to deny the *existence* of Holmes *as the eccentric detective*. It may have been this sort of consideration that led Kripke to posit an ambiguity, and in particular a use of the name in the alleged manner of 'Holmes$_1$', a pretend-designating nondesignating use on which the 'Holmes$_2$' use is parasitic (and which generates an intensional *ungerade* use). Kripke's posit is also off target. There is a reasonable alternative. We sometimes use

[28] Very capable philosophers have sometimes neglected to distinguish among different possible readings of an object-fictional sentence – or equivalently, between literal and extended (fictional) senses of 'true'. See, for example, Richard L. Cartwright in "Negative Existentials," *Journal of Philosophy*, 57 (1960), pp. 629–39; and Jaakko Hintikka, "*Cogito Ergo Sum*: Inference or Performance," *The Philosophical Review*, 71 (January 1962), pp. 3–32.

When we use an object-fictional sentence ϕ as shorthand for something metafictional, what is the longhand form? Perhaps ⌜There is a fiction according to which ϕ⌝, perhaps ⌜According to *that* fiction, ϕ⌝ with designation of a particular fiction, perhaps something else. Recognizing that we speak of fictional characters in these ways may to some extent obviate the need to posit a nonliteral, extended sense for all predicates. On the other hand, something like Kripke's theory of extended senses may lie behind the use of gendered pronouns ('he') to designate fictional people even in discourse about reality.

Perhaps the most difficult sentences to accommodate are those that assert cross-realm relations. Following Russell's analysis of thinking someone's yacht larger than it is, 'Bertrand Russell was cleverer than Sherlock Holmes' may be taken to mean that the cleverness that Russell had is greater than the cleverness that, according to the stories, Holmes$_2$ had. Cf. my *Reference and Essence* (Princeton: Princeton University Press, 1981; Amherst, NY: Prometheus Books, 2005), at pp. 116–35, and especially 147 n.

ordinary names, especially names of famous people, in various descriptive ways, as when it is said that so-and-so is a Napoleon, or another Nixon, a Hitler, no Jack Kennedy, or even (to segue into the fictional realm) a Romeo, an Uncle Tom, quixotic, Pickwickian, and so on. I submit that, especially in singular existential statements, we sometimes use the name of a fictional character in a similar way. We may use 'Sherlock Holmes', for example, to mean something like: *Holmes more or less as he is actually depicted in the stories*, or *Holmes replete with these attributes* (the principally salient attributes ascribed to Holmes in the stories), or best, *the person who is both Holmes and Holmesesque*. In uttering (~1), one means that the Holmes of fiction, Holmes as depicted, does not exist in reality, that there is in reality no such person – no *such* person, no person who is both Holmes and sufficiently like *that*, sufficiently as he is depicted.

Since this interpretation requires a reinterpretation of the name, it might be more correct to say that the speaker expresses this proposition than to say that (~1) or (3) themself does. This is not a use of 'Holmes' as a thoroughly nondesignating name, but as a kind of description that invokes the name of the fictional character. In short, the name is used à la Russell as a disguised improper definite description. It is very probably a nonliteral, Pickwickian use of the name. It is certainly a nonstandard use, one that is parasitic on the name's more fundamental use as a name for the fictional character, not the other way around. It need not trouble the direct-reference theorist. The disguised-description use is directly based upon, and makes its first appearance in the language only after, the standard use in the manner of 'Holmes$_2$' as (in Russell's words) a "genuine name in the strict logical sense." If an artificial expression is wanted as a synonym for this descriptive use, something clearly distinguished from both 'Holmes$_2$' (which I claim represents the standard, literal use of the name) and 'Holmes$_1$' (which represents a mythical use, no genuine use at all) is needed. Let us say that someone is a *Holmesesque-Holmes* if he is Holmes and sufficiently like he is depicted, in the sense that he has relevantly many of the noteworthy attributes that Holmes has according to the stories. Perhaps the most significant of these is the attribute of being a person (or at least person-like) and not an abstract artifact. Following Russell, to say that *the* Holmesesque-Holmes does not exist is to say that nothing is uniquely both Holmes and Holmesesque – equivalently (not synonymously), that Holmes is not Holmesesque. It is an empirical question whether Holmes – the character of which Conan Doyle wrote – was in reality like *that*, such-and-such a person, to any degree. The question of Holmes's existence *in this sense* is answered not by seeking whether

someone or other was Holmesesque but by investigating the literary activities of Conan Doyle.[29]

These considerations, and related ones, weigh heavily in favor of an account of names from fiction as unambiguous names for artifactual entities.[30] In its fundamental use that arises in connection with the fiction – its only literal use – 'Sherlock Holmes' univocally names a man-made artifact, the handiwork of Conan Doyle. Contra Russell and his sympathizers, names from fiction do not have a prior, more fundamental use. They do not yield true negative existentials with thoroughly nondesignating names.

The account suggested here is extendable to the debunking of myths. A mythical object is a hypothetical entity erroneously postulated by a theory. Like a fictional object, a mythical object is an abstract (nonphysical, nonmental) entity created by the theory's inventor. The principal difference between myth and fiction is that a myth is believed whereas with fiction there is typically only a pretense.[31] An accidental storyteller,

[29] The notion of something being sufficiently as Holmes is depicted may be to some extent interest-relative. Consequently, in some cases the truth value of an assertion made using ⌜α exists⌝, with α a name from fiction, may vary with operative interests. Some scholars tell us, without believing in vampires, that Bram Stoker's character of Count Dracula really existed. (This aspect of the theory I am suggesting raises a complex hornets' nest of difficult issues. Far from disproving the theory, however, some of these issues may tend to provide confirmation of sorts.)

Kripke argues that (3), properly interpreted, involves an equivocation whereby the name has its original nondesignating use and 'he' is a "pronoun of laziness" (Peter Geach) designating the fictional character – so that (3) means that the man Holmes_1 does not exist whereas the fictional character Holmes_2 is just that. Kripke also says that one should be able to assert what is meant in the first clause of (3) without mentioning Holmes_2 at all. This is precisely what I believe cannot be done. The original may even be paraphrased into the nearly inconsistent 'Sherlock Holmes does not really exist and is only a fictional character'. On my alternative hypothesis, the speaker may mean something like: *The Holmesesque-Holmes does not really exist; Holmes is only a fictional character.* This is equivalent to: Holmes is not really Holmesesque, but a fictional character. Besides avoiding the putative 'Holmes_1' use, my hypothesis preserves an anaphoric-like relation between the pronoun and antecedent. (Other possibilities arise if Kripke's theory of extended senses for predicates is applied to 'Holmesesque'.)

[30] In later work, and even in the same work cited in note 12, Kripke argued persuasively against positing ambiguities when an univocality hypothesis that equally well explains the phenomena is available. Cf. his "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, especially 19.

[31] Donnellan, "Speaking of Nothing" at pp. 6–8, says that myth is not analogous to fiction. I am convinced that he is mistaken, and that this myth about myths has led many other philosophers astray. When storytellers tell stories and theorists hypothesize, fictional and mythical creatures abound. (An interesting possibility: Perhaps the myth invented by Babinet no longer exists, now that no one believes it. Can a myth, once it is disproved,

Le Verrier attempted in all sincerity to use 'Vulcan' to designate a real planet. The attempt failed, but not for lack of a designatum. Here as before, there is ample reason to doubt that 'Vulcan$_1$' represents a genuine use of the original name. Le Verrier held a theory according to which there is such a use, and he intended and believed himself to be so using the name. Had the theory been correct, there would have been such a use for the name. However, the theory is false; it was all a mistake. Kripke says that in attempting to use the name, 19th-century astronomers failed to designate anything. But this verdict seems to ignore their unintended relationship to the mythical planet. One might just as well judge that the ancients who introduced 'Hesperus' as a name for the first star visible in the dusk sky, unaware that the "star" was in fact a planet, failed to name that planet. Nor had they inadvertently introduced two names, one for the planet and one thoroughly nondesignating. Plausibly, as the ancients unwittingly referred to a planet believing it to be a star, so Le Verrier may have unknowingly referred to Babinet's mythical planet, saying and believing so many false things about it (that it is a real planet,

continue to exist as merely an unbelieved theory? If not, then perhaps 'Vulcan' is nondesignating after all – though only by designating a nonexistent.)

Kripke extends his account in the natural way also to terms for objects in the world of appearance (for example, a distant speck or dot), and to species names and other biological-kind terms from fiction and myth, like 'unicorn' and 'dragon'. The theory should be extended also to general terms like 'witch', 'wizard', and so on. There is a mythical species designated by 'dragon', an abstract artifact, not a real species. Presumably, if *K* is the mythical species (or higher-level taxonomic kind) of dragons, then there is a corresponding concept or property of being a beast of kind *K*, thus providing semantic content for the predicate 'is a dragon'. Kripke believes there is a prior use of the term, in the sense of 'dragon$_1$', which has no semantic content. But as before, on this point I find no persuasive reason to follow his lead.

Are there dragons? There are myths and fictions according to which there are dragons, for example the legend of Puff. Puff is a fictional character – an abstract artifact and not a beast. Fictional dragons like Puff are not real dragons – though they may be said to be "dragons," if by saying that we mean that they are dragons in the story. (Cf. Kripke's hypothesized extended sense of 'plays the violin'.) Is it metaphysically possible for there to have been dragons in the literal (unextended) sense of the word? No; the mythical species *K* is not a real species, any more than Puff is a real beast, and the mythical species could not have been a species any more than Puff could have been a beast. It is essential to *K* that it not be a species. A fortiori there could not have been such beasts. The reasoning here is very different from that of Kripke's *Naming and Necessity*, at pp. 156–7, which emphasizes the alleged 'dragon$_1$' use (disputed here), on which 'There are dragons' allegedly expresses nothing (hence nothing that is possibly true). In "Mythical Objects," in J. Campbell, M. O'Rourke, and D. Shier, eds., *Meaning and Truth* (New York: Seven Bridges Press, 2002), pp. 105–23, I apply my account to Peter Geach's famous problem about Hob's and Nob's hypothesized witch, from "Intentional Identity," *Journal of Philosophy*, 74, 20 (1967).

that it affects Mercury's orbit, and so on). There may have been a period during which 'Vulcan' was misapplied to the mythical planet before such application became enshrined as the official, correct use. It does not follow that there is a prior, genuine use of the name on which it is thoroughly nondesignating. I know of no compelling reason to deny that Babinet introduced a single name 'Vulcan' ultimately with a univocal use as a name for his mythical planet.[32] One might say that 'Vulcan$_1$' represents a mythical use of the name. As with 'Holmes$_1$', this kind of use is no more a genuine use than a mythical planet is a genuine planet.

It is unclear whether there are significant limitations here, and if so, what they might be. Even Meinong's golden mountain and round square should probably be seen as real mythical objects. Meinong's golden mountain is an abstract entity that is neither golden nor a mountain but as real as Babinet's Vulcan. Real but neither round nor square, Meinong's round square is both round and square according to Meinong's erroneous theory. Perhaps we should also recognize such things as fabrications, figments of one's imagination, and flights of fancy as real abstract entities.

[32] In introducing 'Vulcan', Babinet presumably presupposed the existence of an intra-Mercurial planet to be so named, while making no provisions concerning what the name would designate if there is no such planet. In that case, he failed to endow the name 'Vulcan' with a new type of use on which it designates anything (or even nothing at all). Believing himself to refer by the name 'Vulcan' to a planet, he began referring instead to the mythical planet. Le Verrier thereby inadvertently established a new type of use for the name on which it designates Vulcan. (Thanks to David Braun for pressuring me to clarify this point.)In some cases of "reference fixing," the description employed may have what I call a *bad mock referential*, or *ugly*, use – that is, designation is fixed by an implicit description not codesignative with the description explicitly used. See my "The Good, the Bad, and the Ugly," in M. Reimer and A. Bezuidenhout, eds., *Descriptions and Beyond* (Oxford: Oxford University Press, 2004), pp. 230–60. Cf. Kripke on 'Hesperus', in *Naming and Necessity*, at p. 80 n. 34.

PART III

Existence and Non-Existence

9

What is Existence?

Nathan Salmon

I

I address here the following issue: What exactly is it that is expressed in a sentence of the form

(0) α exists

where α is a genuine singular term? There are several competing answers to this question. I shall defend one—or, at least, I shall defend an answer of a certain kind. Many accounts of individual existence attributions take their cue from the famous Kantian dictum, '*Existence is not a real predicate*.' I shall compare some rival accounts. (The comparison class is not exhaustive.) The account I shall defend results directly from the flat denial of the dictum.

Kant's thesis lies at the heart of his diagnosis of what goes wrong with the ontological argument for God:

(*P1*) *God* = the possible (or conceivable, etc.) individual that is actually divine.
(*P2*) Any possible individual that is actually divine actually exists.
(*C*) God actually exists.

The adjective 'divine' stands in here for the ontological arguer's favored notion: *perfect in every respect*, for Descartes; *than which nothing greater is conceivable*, for

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Anselm. The argument is evidently valid. Each of the premises is alleged to be analytic, making the conclusion allegedly analytic as well. Kant's complaint focuses attention on the alleged analyticity of the second premise. He notes that only genuine properties ('predicates') may serve as defining criteria for a concept. Insofar as divinity analytically entails the non-property of existence, Kant insists, divinity cannot legitimately be included as a defining condition for the concept of *God*, nor for any other concept.

Strictly, one should distinguish two (at least) related Kantian theses—one metaphysical, the other logical.[1] The metaphysical thesis is that existence is not a property of individual things. As a Kantian might prefer to phrase it, there is no such property as the putative property of individual existence. The logical thesis is that the English verb 'exist' is not of the logical type *extensional first-order monadic predicate*, i.e. it is not a predicate logically applicable to individual things. Typically, the Kantian claims that, properly understood, 'exist'—or better, 'there exists'—is instead an English term for the logician's unrestricted existential quantifier, '∃', definable as 'not everything is not ____'.

The answer that I favor to our question is precisely the opposite of these two theses extracted from the Kantian dictum: existence is straightforwardly and obviously a property of individuals, nothing more and nothing less. Moreover, the English verb 'exist' is a term for this property, and as such, it is an ordinary, extensional, first-order, monadic predicate.[2] Consequently, (0) simply ascribes the particular property of existence to the individual designated by α. Furthermore, with regard to those instances of (0) that are false (there are many), this is due to the unremarkable fact that, whereas α designates, the thing designated has nonexistence, the complement of the ascribed property. Not to put too fine a point on it, (0) is false exactly where the designatum of α is something that does not exist.

In saying that (0) is falsified in cases where α designates a designatum that does not exist, I am evidently using some form of existential quantification: α designates *something or other* that does not exist. The existential quantifier in question is not restricted to individuals that exist. It includes nonexistent individuals. Specific instances will be specified shortly—indeed, instances of individuals that the Kantian fully recognizes. (Kantians typically wrongly regard these instances as existent—since they are *things*.)

Kantians are appalled. Necessarily, if a thing has nonexistence then it does not exist; and if so, then there is nothing there to have (nor, for that matter, to lack) the putative property, or any other property. Therefore it is impossible for anything to have the putative property of nonexistence. Bertrand Russell explicitly embraced both of the Kantian theses. He held furthermore that, insofar as α is a genuine singular term, and

[1] Cf. Salmon 1987, in 2005, 20.

[2] i.e. 'exist' may correctly be used this way. There are alternative correct uses, including a use as an existential quantifier. As Russell noted, 'Cows exist' does not mean that all cows exist; rather it means that there exist cows.

not a disguised quantificational locution, (0) is neither true nor false but altogether meaningless:

> [The] actual things that there are in the world do not exist, or, at least, that is putting it too strongly, because that is utter nonsense. To say that they do not exist is strictly nonsense, but to say that they do exist is also strictly nonsense. (1918, 99)
> There is not an idea [of existence] that will apply to individuals. As regards the actual things there are in the world, there is nothing at all you can say about them that 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. You get into confusion through language, because it is a perfectly correct thing to say 'All the things in the world exist', and it is so easy to pass from this to 'This exists because it is a thing in the world'. 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 this is the characteristic of a mistake. (1918, 108)
> ... 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 ... to say of [someone] that he existed would be uttering nonsense, not a falsehood but nonsense ... it is not false, but it has no meaning at all. (1918, 121)

Expanding on these thoughts in later Russell wrote:

> 'Scott exists' is bad grammar. It can, at best, be interpreted as meaning, 'the person named 'Scott' exists', but 'the person named 'Scott'' is a description, not a name. Whenever a name is properly used as a name it is bad grammar to say 'that exists'. (1959, 85)

In response to all considerations that have been brought forth in favor of the logical thesis extracted from the Kantian dictum, I am sympathetic with what I call the *quack-quack reply*. According to the old adage, 'If it looks like a duck, and it walks like a duck, and it quacks like a duck, it's a duck.' The verb 'exist' satisfies every reasonable syntactic and pragmatic criterion for being an extensional first-order monadic predicate of English. For example, appending it to a singular term yields a grammatical English sentence, just as with any first-order monadic predicate. It also satisfies a reasonable semantic criterion: it can fill the blanks in the following schema for Leibniz's Law:

$$\text{If } x \quad = \quad y, \text{ then } x \text{ \_\_\_\_ iff } y \text{ \_\_\_\_}.$$

And so on with respect to any other reasonable test for first-order monadic predicatehood. If our quantifiers are both *actualist* and *presentist*—i.e. if our quantifiers range over all and only actually presently existing individuals[3]—the English verb

[3] I note that there do not exist any individuals beyond these for quantifiers to range over. It does not follow that quantifiers *must* be actualist or presentist. There might have existed things that do not actually

'exist' is fully definable by means of a formal expression that unquestionably belongs to the category of *extensional first-order monadic predicate*:

$$(\lambda x)(\exists y)[x = y].^{4}$$

Contrary to Russell, 'exist' is even false of particular things. For example, it is false of … Russell (sad to say). The verb *was* true of Russell, of course, but it ceased to be so the moment that great philosopher drew his last breath.[5] Although the verb 'exist' is presently true of the present author, and currently true of the current reader, all of us will suffer the same fate as Russell, eventually becoming a thing of which the verb is then false.

II

A variety of arguments have been offered in support of the metaphysical thesis extracted from the Kantian dictum—nearly all of them, I think, excessively weak and wide open to the quack-quack reply. One of the weakest arguments is surely Kant's (which is possibly due to Berkeley). In the *Critique of Pure Reason* (part I, second division, book II, chapter III, section 4) Kant argued that in uttering (0) 'we attach no new predicate to the concept' expressed by α, 'but only posit the subject in itself with all its predicates'. And why is this so (whatever it means)? Because, according to Kant,

> nothing can have been added to the concept, which expresses merely what is possible, by my thinking its object (through the expression 'It is') as given absolutely. In other words, the real contains no more than the merely possible. A hundred real thalers does not contain the least coin more than a hundred possible thalers. (Kant 1965, 505)

Kant's position appears to be that, since existence is not a property, and therefore not an aspect in which one thing might differ from another, there is therefore no difference between a hundred real dollars and a hundred merely possible dollars. Ironically, Kant goes on to state the obvious reply. As he puts it, 'my financial position is, however, affected very differently by a hundred real thalers than it is by … their possibility.' Exactly. Nevertheless, in a giant leap backward Kant stubbornly insists, 'the conceived hundred thalers are not themselves in the least increased through … acquiring existence outside my concept' (1965, 505).

Kant's response is, characteristically, excessively murky. In fact, one of the few things that is clear concerning his position is that is incorrect. In the first place, insofar as existence genuinely adds no real property to the possibility or concept of

exist but that possibilist quantifiers actually range over. Analogously, there have existed things, and there will yet exist things, that do not presently exist but that non-presentist quantifiers presently range over. The actualist existential quantifier expresses the concept *at least one* ***existing*** *thing*.

4 Cf. 'Existence,' Salmon 2005, 21.

5 Moreover, the verb *is* true of Russell *with respect to* his lifetime. Regrettably, it is not true of him with respect to the 21st cent.

God—insofar as a real god is no more and no less worthy of worship than a merely possible god—there cannot be any harm in defining 'God' by invoking the concept of divinity. So what if divinity is not a genuine property of individuals? But let us set this consideration aside. It is simply and flatly wrong that a real dollar is not worth one cent more than a merely possible dollar. If one merely possible dollar is subtracted from one real dollar, the remaining amount is exactly $1. Not much, but it is still not nothing. Nothing ventured, nothing lost.

What is true—and this is the most that can be said on behalf of the metaphysical Kantian thesis—is that a hundred existent dollars does not contain one cent more than a hundred dollars. A hundred existent dollars has greater monetary value than a hundred *merely possible* dollars; to be specific, exactly a hundred dollars worth of monetary value. But a hundred existent dollars has no more monetary value than a hundred dollars. An existent dollar is simply a dollar, no less and (what is potentially significant) no more. The existence of the dollar, *per se*, evidently does not add to its monetary value, any more than, for example, its history of previous ownership does. (Indeed the latter might, whereas the former cannot.) One might conclude from this that existence is not a feature that affects the value of a dollar, but it does not follow that existence is no feature at all.

In fact, even the weaker conclusion is incorrect. Among the things that affect the real value of a dollar is its existence. To illustrate, remove a particular dollar bill from your wallet. Let us call it 'Georgie'. Now light one corner of Georgie with a match. Now let the note burn into smoke and ash. If the experiment is properly performed, Georgie no longer exists. Now go out and spend Georgie on a Hershey bar. One will thereby obtain empirical confirmation that Georgie no longer has its former monetary value. Now it is not worth one dollar, not twenty-five cents, not one cent. The only significant change that has taken place in Georgie that can account for its sudden loss in value is that Georgie has been rendered nonexistent. In fact, Georgie is not only no longer existent; it is also no longer a dollar bill. It is now, as John Cleese would observe, an *ex*-dollar-bill.[6] Why is that? Because Georgie has lost a former feature that was essential both to its former worth and to its being what it formerly was, a dollar bill. That feature was its existence.

Saul Kripke rejects Russell's theory that (0) is meaningless but is sympathetic to the spirit of the metaphysical Kantian thesis. In the final lecture of his famous monograph, *Reference and Existence*, Kripke (1973) said,

> There may be some sense in which existence isn't a predicate, in which one can say that 'Napoleon exists' doesn't attribute a property to Napoleon. After all, you are not attributing a property to Napoleon when you say he exists; you are saying there is such a thing for properties to be attributed to. That in some rather obscure sense seems to me to be true, and it is perhaps what Kant had in mind.

[6] From Monty Python's famous 'dead parrot' sketch.

I agree with Kripke that this may be what Kant had in mind. But the 'rather obscure' observation seems to me to be simply false. Here again, the apparent argument for the Kantian conclusion invites the quack-quack reply. If *x* is something 'for properties to be attributed to' and *y* is as well, then there is at least this much that *x* and *y* have in common: being a candidate for having properties. What is this—*being a candidate for having properties*—that which *x*and *y* have in common, but a special property of *x* and *y*?

In fact, as I have argued at length elsewhere, far from being equivalent to existence, the having of properties (let alone merely being a candidate for having properties) is not even a sufficient condition for existence. (Otherwise put, existence is not a necessary condition for having properties.) Predication precedes existence. Ironically, Kripke's very example of Napoleon is as good an example as any. Napoleon does not exist. He once existed, of course—and as Russell noted, when he existed he saw to it that people thought about him—but Napoleon exists no longer.[7] Even in death Napoleon has a variety of properties, e.g. being mentioned by Kripke in 1973, and by Nathan Salmon in this very sentence. While he existed Napoleon saw to it that even after his demise he would still have the property of being thought about.[8]

[7] Russell (1919, 169–70) wrote the following: '[M]any logicians have been driven to the conclusion that there are unreal objects. . . . In such theories, it seems to me, there is a failure of that feeling for reality which ought to be preserved even in the most abstract studies. Logic, I should maintain, must no more admit a unicorn than zoology can; for logic is concerned with the real world just as truly as zoology, though with its more abstract and general features. To say that unicorns have an existence in heraldry, or in literature, or in imagination, is a most pitiful and paltry evasion. What exists in heraldry is not an animal, made of flesh and blood, moving and breathing of its own initiative. What exists is a picture, or a description in words. Similarly, to maintain that Hamlet, for example, exists in his own world, namely in the world of Shakespeare's imagination, just as truly as (say) Napoleon existed in the ordinary world, is to say something deliberately confusing, or else confused to a degree which is scarcely credible. There is only one world, the "real" world: Shakespeare's imagination is part of it, and the thoughts that he had in writing *Hamlet* are real. So are the thoughts that we have in reading the play. But it is of the very essence of fiction that only the thoughts, feelings, etc., in Shakespeare and his readers are real, and that there is not, in addition to them, an objective Hamlet. When you have taken account of all the feelings roused by Napoleon in writers and readers of history, you have not touched the actual man; but in the case of Hamlet you have come to the end of him. If no one thought about Hamlet, there would be nothing left of him; if no one had thought about Napoleon, he would have soon seen to it that some one did. The sense of reality is vital in logic, and whoever juggles with it by pretending that Hamlet has another kind of reality is doing a disservice to thought. A robust sense of reality is very necessary in framing a correct analysis of propositions about unicorns, golden mountains, round squares, and other such pseudo-object's Cf. Russell 1918, 87–8.

[8] It is futile to argue that since Napoleon no longer exists, he cannot now have any properties, and therefore he does not have the property of nonexistence. It matters not for the falsity of 'Napoleon is forgotten' whether Napoleon is deemed to have the property of not being forgotten, as long as he is not forgotten. Likewise, 'Napoleon exists' is false because of something to do with Napoleon. The denial that nonexistence is a current property of Napoleon is subject to the quack-quack reply. Cf. Salmon 2005, 43–6.

III

I subscribe to the *existence-as-predicate theory*, which Kant and his followers reject and which Kripke dismisses.[9] As we have already seen, if existence is a property, then although necessarily every individual that exists has the property, particular individuals do actually lack it—Napoleon and Russell, for example. As we have also seen, notwithstanding the solemnity with which Kant's pronouncements are sometimes received, a dollar's existence makes all the difference in the world regarding its monetary value. (Kant denied just this in arguing for his dictum.)

On the existence-as-predicate theory, a sentence of the form (0) is not semantically distinguished or unusual in any way. It is like any typical monadic-predication sentence $\ulcorner \Pi(\alpha) \urcorner$: It expresses a proposition composed of the customary content of the subject term α together with that of the monadic predicate Π—in this case, the property or concept of existence. (More accurately, the semantic content of 'exist' with respect to a time t is existence-at-t.[10] Where Π is an extensional first-order monadic predicate, an (open or closed) sentence $\ulcorner \Pi(\alpha) \urcorner$ is true if and only if α customarily designates something that has the property P expressed by Π, and it is false if and only if α customarily designates something that has the complementary property, *non-P*. This is exactly why 'Kripke exists' is true whereas 'Napoleon exists' is false. Kripke has existence; Napoleon has nonexistence. There is nothing abnormal or out of the ordinary here. In exactly the same way, 'Kripke lives in New Jersey' is true and 'Napoleon lives in New Jersey' false, because Kripke has the property of living in New Jersey while Napoleon has the property of not living anywhere, including in New Jersey. This kind of consideration in itself provides strong reason to doubt the Kantian dictum. The burden of proof is on the side of Kant and his followers. An enormous burden it is, especially given the intuitive appeal of the quack-quack reply.

There is, however, at least one forceful consideration against the existence-as-predicate theory. Consider the particular sentence,

(1) The present king of France exists.

This appears to have the logical form of an atomic monadic predication involving a definite description as subject. As such, it appears to be a false instance of (0). However, the falsity of (1) is not secured in the ordinary manner, by virtue of the putative predicate being false of the customary (or default) designatum of the subject term. For in this case the subject term has no customary designatum. There is no present king of France to have the property of nonexistence (or any other property), and it is precisely on *this* basis—not the ordinary basis—that (1) is false. But if the subject term occurring in an ordinary monadic predication has no designatum as occurring in that position, according to what I have said, if 'exist' really is an extensional first-order monadic predicate then the sentence as a whole should be

[9] It is even more obvious that there is a concept of existence for individual things. Cf. Salmon 2005, 21–2.

[10] Cf. Salmon 2003.

neither true nor false; it should lack truth-value. Since (1) has truth-value, the description 'the present king of France', although it customarily designates nothing, must designate something *as occurring in (1)*—indeed it must there designate something of which the verb 'exists', as it occurs in (1), is false. Otherwise (1) should be neither true nor false.[11] In short, 'exist' is a non-extensional operator.

Let us follow this line of thought. This alternative to Russell's Kantian tack sees Napoleon's existence as a property all right, but not as a property of Napoleon. What, then, shall the description designate as occurring in (1)? And what property shall the word 'exist' falsely predicate of the designatum?

IV

Frege held that (0) asserts something about the very term α itself, *to wit*, that it designates. He wrote:

> We must here keep well apart two wholly different cases that are easily confused, because we speak of existence in both cases. In one case the question is whether a proper name designates, names, something; in the other whether a concept takes objects under itself. If we use the words 'there is a—' we have the latter case. Now a proper name that designates nothing has no logical justification, since in logic we are concerned with truth in the strictest sense of the word; it may on the other hand still be used in fiction and fable (Frege 1895, 104)

Elsewhere Frege made similar remarks about singular existentials and their negations: 'People certainly say that Odysseus is not an historical person, and mean by this contradictory expression that the name "Odysseus" designates nothing, has no designatum (*Bedeutung*)' (1906, 191).[12] Earlier Frege observed:

> If 'Sachse exists' is supposed to mean 'The word 'Sachse' is not an empty sound, but designates something', then it is true that the condition 'Sachse exists' must be satisfied [in order for 'There are men' to be inferred from 'Sachse is a man']. But this is not a new premise, but the presupposition of all our words—a presupposition that goes without saying. (pre-1884, 60)[13]

Frege's suggestion appears to be that the sentence 'Kripke exists' attributes the property of designating to Kripke's name and nothing to Kripke himself. In general, (0) is analyzed thus:

(0′) $(\exists x)[\text{`}\alpha\text{'}\ \text{designates}_{\text{English}}\, x]$.

[11] The astute reader will have noticed that this 'forceful consideration' against the existence-as-predicate theory is essentially the traditional problem of true, singular, negative existentials, but with a Fregean twist.

[12] Except that I here render '*Bedeutung*' as 'designatum'.

[13] Frege also suggests here that there may be an alternative reading for 'Sachse exists', on which it is tantamount to 'Sachse = Sachse', which Frege says is self-evident. He might well have said the same about '$(\exists ?x)$[Sachse $= x$]'.

Let us call this *the semantic-ascent theory of existence*. This is very different from—indeed it is diametrically opposed to—Russell's theory that (0) is meaningless. On the semantic-ascent theory, (0) says something fairly ordinary about a term—in some cases something true, in other cases something false.

The semantic-ascent theory of existence is (like most theories) a myth. To its credit, it does succeed in capturing information that is indeed conveyed in the uttering of (0). But to invoke a distinction I have emphasized in previous work, this concerns what is *pragmatically imparted* in (0), and not necessarily what is *semantically encoded* or *contained*.[14] Semantic ascent, while capturing pragmatically imparted information, does not attain the right semantic content for (0) or even the right modal intension, i.e. the corresponding function from possible worlds to truth-values. Indeed, that the semantic-ascent interpretation of (0) by means of (0′) is incorrect is easily established by a variety of considerations. The semantic-ascent theory is analogous to Frege's early account of identity in Begriffsschrift (1879). In his later masterpiece, '*Über Sinn und Bedeutung*' (1892), Frege objects to the semantic-ascent theory of identity on the grounds that it semantically mischaracterizes the sentence 'Hesperus is Phosphorus', which expresses an astronomical proposition about a particular heavenly body, as instead expressing a particular kind of semantic proposition about natural language, something that is true (at least in part) as a result of linguistic convention, stipulation, decision, or usage.[15] Curiously, even as late as 1906 Frege evidently failed to see that this objection applies with equal force against the semantic-ascent theory of existence. That theory equally mischaracterizes the fact that Venus exists as (at least in part) yet another result of human activity.

Frege's most effective apologist and defender, Alonzo Church, raised a crushing objection to semantic-ascent analyses in general.[16] Translating (1) into French, one obtains:

Le roi present de France existe.

Translating the proposed analysis into French, one obtains:

'The present king of France' *désigne quelque chose en anglais.*

These two translations, while both true, clearly mean different things in French. So too, therefore, do what they translate.

We have just seen that the description does not designate itself in (1). Yet by the sort of consideration raised in § III, the description as occurring in (1) must designate something, something of which 'exist', as occurring in (1), is false. What else is there, besides itself, for the description to designate in (1)?

There is its semantic content, the individual concept *the present king of France*. A theory of singular existence statements still Fregean in spirit but vastly superior to the

[14] Salmon 1991, 58–60, and elsewhere, esp. 78–9, 84–5, 100, 114–5, 127–8.

[15] Cf. Salmon 1991, 50–4.

[16] See Churchs (1950 97–9). For a defence of the Church–Langford translation argument, see salmon 1997 repr. in Salmon 2005, 344–364.

semantic-ascent theory takes the verb 'exist' as used in (0) to be an *ungerade* (indirect, 'oblique') device, so that (0) concerns not the term α but its English content.[17] This is analogous to the semantic-ascent theory of existence except that one climbs further up to the level of intension. On the *ungerade* theory of existence, (0) is analyzed thus:

(0″) $(\exists x)\Delta(\hat{}\alpha\hat{}, x)$,

where 'Δ' is a dyadic predicate for the relation between a Fregean sense and that of which it is a concept (in Church's sense) and the caret '$\hat{}$' is an *indirect-quotation* mark, i.e. a device for content-quotation (in the home language, in this case a standard notation for first-order logic with 'Δ' and indirect-quotation).[18] On this theory, to utter 'Kripke exists' is not to say that the name 'Kripke' designates something, but that the concept ^Kripke^ *determines* (i.e., is a *concept of*) something. The *ungerade* theory of existence is not refuted by the usual objections to semantic-ascent theories. Unlike the semantic-ascent theory of existence, the *ungerade* theory even obtains the correct modal intension for (0).

V

The sort of consideration described in § III provides considerable intuitive support for the *ungerade* theory as against the existence-as-predicate theory. But the consideration is erroneous. To illustrate this, let us introduce the name 'Lou' according to the stipulation that it is to name the present king of France, if there presently is a king of France, and is to designate nothing otherwise. Consider now the analog of (1):

(2) Lou exists.

As with (1), the subject term of (2) has no customary designatum, and it would seem that it is precisely for this reason (not the usual reason) that (2) is false. Since (2) evidently has truth-value, the name 'Lou' must designate something as it occurs in (2) of which 'exists', as it occurs in (2), is false. And there is nothing else for the name to designate but its sense.[19]

According to the anti-Fregean theory of direct reference, which I have defended at some considerable length, there is no sense for the name to designate.[20] Any nondesignating name has no semantic content. If this is correct, the name remains

[17] Church cites the particular sentence 'The present king of France does not exist' as an example of a true sentence containing an *ungerade* occurrence of a singular term ('name'), in 1956, 27n.

[18] Cf. Salmon 2003, 69, on Fregean indirect-quotation. The idea comes from Kaplan 1969, 120–1. In English, the word 'that' attached to a subordinate clause (as in ⌜Jones believes that φ⌝ or ⌜It is necessary that φ⌝) typically functions in the manner of indirect-quotation marks.

[19] The astute reader will have noticed that this argument is a minor variant of a standard argument against direct reference, usually made in connection with true, singular, negative existentials. See n. 11.

[20] Kripke ironically proposes a variant of the *ungerade* theory of existence in the final lecture of Kripke 1973. There he suggests that the negation of (2) is normally to be read as expressing that *there is no true proposition that Lou exists*. According to Kripke, this is correct not because there is a such a proposition though it is untrue, but because there is no such proposition at all. The word 'that' is an *ungerade* operator; see n. 18.

nondesignating as it occurs in (2) even if the English verb 'exist' is an *ungerade* operator. Many arguments have been made against the Fregean theory of senses, several of which are very well known. It is not to my purpose to rehearse those arguments, but to focus attention on a less widely used form of argument, which Kripke has exploited against the semantic-ascent theory of identity (analogous to the semantic-ascent theory of existence) and also against a very radical version of direct reference—Keith Donnellan's theory of the semantically referential use of definite descriptions. Kripke's argument-strategy has considerable force when applied against the *ungerade* theory of existence.[21] Ironically, the same argument-strategy applies with equal force in defense of the very theory that Kripke rejects and that I embrace—the anti-Kantian yet eminently plausible hypothesis that existence is after all nothing more than a property of individual things, and the English verb 'exist' is nothing more than a term for this property.

How does Kripke's proposed argument-strategy provide a defense of the existence-as-predicate theory? He explains the argument-strategy in the following words:

> I propose the following test for any alleged counterexample to a linguistic proposal: If someone alleges that a certain linguistic phenomenon in English is a counterexample to a given analysis, consider a hypothetical language which (as much as possible) is like English except that the analysis is *stipulated* to be correct. Imagine such a hypothetical language introduced into a community and spoken by it. *If the phenomenon in question would still arise in a community that spoke such a hypothetical language (which may not be English), then the fact that it arises in English cannot disprove the hypothesis that the analysis is correct for English.* An example . . . : Some have alleged that identity cannot be the relation that holds between, and only between, each thing and itself, for if so, the nontriviality of identity statements would be inexplicable. If it is conceded, however, that such a relation makes sense, and if it can be shown that a hypothetical language involving such a relation would generate the same problems, it will follow that the existence of these problems do not refute the hypothesis that 'identical to' stands for this same relation in English. (1979, 16)

Suppose the *ungerade* theory is correct as regards the English verb 'exist'. Let us now expand English into a slightly enriched language—call it 'Schmenglish'—by stipulating an artificial intransitive verb, 'schmexist', as an artificial term for the property of individual existence. The term may be taken as defined as a Schmenglish synonym of the formal first-order predicate '$(\lambda x)(\exists y)[x = y]$'. Unlike the natural-language verb 'exist', our new term is, by stipulation, not an *ungerade* operator but an ordinary, extensional, first-order, monadic predicate, a term for the existence of an individual.

Consider now the Schmenglish analog of (2):

(3) Lou schmexists.

[21] Cf. also Salmon 2005, 23–4.

It *feels* as if (3) is false, precisely because 'Lou' has no customary designatum, and not for the more ordinary reason that what 'Lou' designates has the complementary property. But if (3) has truth-value, the name 'Lou', although it customarily designates nothing, would have to designate something as it occurs in (3), something of which 'schmexists', as it occurs in (3), is false.

There's the rub. For by stipulation there is nothing in (3) to induce the name to shift to a non-customary mode. On the contrary, it is stipulated, in effect, that in (3) the name remains in its customary mode, wherein it designates nothing at all. The stipulated verb 'schmexist' is false of Napoleon and Russell; it is not false of the designatum of the occurrence in (3) of 'Lou'. There is no such designatum for it to be false of.

For this very reason, it is far from clear that (3) is genuinely false. It is, by stipulation, a monadic atomic predication in which the occurrence of the subject term designates nothing whatever. It is therefore most plausibly regarded as not expressing a proposition (at least not a structurally complete proposition),[22] and therefore as neither true nor false.

The feature of (3) that is most significant philosophically is that, as far as can be determined, in all relevant respects (logically, semantically, even to a considerable extent syntactically) it is a replica of (2). Both *seem* false. Yet it is known by stipulation that (3), a logico-semantic replica of (2), expresses no content that can be either true or false. The correct conclusion to draw from this is that, despite appearances, there are no genuinely persuasive grounds for deeming (2) false in English. It might well instead be neither true nor false. In Kripke's terminology, the existence of the problems with (2)—the fact that (2) *feels* false, not only despite, but indeed *in virtue of*, the fact that 'Lou' does not designate—and the existence of cognate problems like that of seemingly true, singular, negative existentials, do not refute the hypothesis that English verb 'exist' straightforwardly stands for a particular property of individuals. On the contrary, the mere possibility of (3) is in itself very strong evidence that (2) is not in fact false, its standard negation not in fact true. The overwhelming preponderance of evidence, in fact, is that (2) and its negation are both neither true nor false.

The correct conclusion is that it is dubious whether there exist false instances of (0) wherein the subject term α does not designate. This result is in perfect accord with the existence-as-predicate theory.

It is tempting to reply that even if (2) is not false, still sentences like 'Harry Potter exists', and even 'Harry Potter schmexists', are surely false. For Harry Potter is a wholly fictional character, and to say this is simply to say that Harry Potter does *not* exist. The response is erroneous. As I have argued in 'Nonexistence,' Harry Potter, since he is wholly fictional, is not a real person—let alone a real wizard. But the fictional

[22] Cf. my discussion of *structurally challenged propositions* in Salmon 1998, 277–319; repr. in Salmon 2005, 86–7.

character exists; it is a real *thing* (and is a real cash cow for his creator, author J. K. Rowling).[23]

VI

There is a potential asymmetry between (1) and (2). The former, by observation, invokes a definite description in grammatical-subject position. The latter, by stipulation, invokes a genuine singular term. The definite description is improper. As a consequence, the term 'Lou' does not designate. If, with Frege and contrary to Russell, definite descriptions are catalogued as singular terms, the two sentences are extensionally on a par. In this case, (1) is no more false than (2). (This is, in fact, a serious difficulty for Frege, who would have conceded that both are false.) On the other hand, if, with Russell and contrary to Frege, definite descriptions are instead deemed quantificational constructions of a certain kind, (1) may be genuinely false—precisely as Russell held—while (2) is not. Against this option, it should be acknowledged that the negation of (1),

(1′) The present king of France does not exist,

is, at best, somewhat odd. Much more natural is 'There is no king of France at present'—or even any of Russell's paraphrases for what he called *the secondary-occurrence* reading of (1′).

There is a remaining difficulty for the existence-as-predicate theory. We understand (1) and (2), and we are strongly inclined to deem both false, on the ground that there is at present no king of France. If (1) is instead *not* false, and on exactly that ground, and if for the same reason (2) expresses no content that can be either true or false, what is the source of the strong temptation to deem these sentences false?

The issue is complex. One immediate reason for our inclinations is that most of us, even including many philosophers of language, do not routinely distinguish sharply between a sentence being false and it being merely untrue. Once the distinction is posed, confidence that these sentences are not merely untrue but altogether false is shaken, or should be. But the verdict of falsity might persist, if somewhat less robustly, even in the face of the distinction. Why?

I submit that a judgment of falsity is typically grounded, at least partly, in an intuition of the truth of the negation. We might infer that φ is not merely untrue but false from a prior judgment that $\ulcorner\sim\varphi\urcorner$ is assertible, therefore true. In the cases at hand, we deem (1) and (2) false partly on the basis of an intuition that, with France no longer a monarchy, the negative existentials

(1′) The present king of France does not exist

[23] This view of fictional characters stands in contrast to that of Russell, as expressed in n. 7. It may be conceded that if no one thought about Hamlet he would not exist. But Hamlet is thought about. This makes for an 'objective Hamlet.'

and

(2′) Lou does not exist

are both assertible and therefore true.

The inference in this case is hasty, and almost certainly unjustified. Again, this might be established through Kripke's stipulated-language strategy. The Schmenglish negative existential,

(3′) Lou does not schmexist,

feels every bit as assertible as does (2′), and vice versa. But it is stipulated that (3) does not express anything that can be either true or false. How, then, can (3′) be true? If it is not true, why does (3′) *feel* correct? For that matter, why do (1′) and (2′)?

Insofar as (1′), (2′), and (3′) are true, the negation 'not' occurring therein almost certainly expresses *exclusion* rather than *choice* negation—i.e. an intensional form of negation that yields a truth when appropriately attached to any untrue sentence, whether that operand sentence is false or not, as long as the operand sentence expresses something. This is the form of negation that is more fully expressed by the classical (bivalent) logician's phrase 'it is not the case that'. There is no present king of France. Consequently, it is not the case that the present king of France exists, and it is equally not the case that Lou exists.[24] We should hesitate to express these facts by uttering (1′) or (2′) themselves, however, precisely because the negation therein may legitimately be read instead in the sense of choice negation, which yields a truth only when appropriately attached to a false sentence. Reading the 'not' as expressing choice negation likely renders (1′) and (2′) neither true nor false, for the very ordinary reason that the terms occurring in grammatical-subject position lack a designatum.

VII

Contrary to Kantians, existence is an ordinary property of individuals, one that existing entities possess but Russell, Napoleon, and many others lack. Does this legitimize the ontological argument for God?

Certainly not. The ontological argument goes wrong but not because of anything unique or unusual about the property of existence. On the contrary, the argument goes wrong precisely because existence is an ordinary property. To illustrate, I hereby introduce the word 'exidollar' according to the following definition:

exidollar $=_{def}$ a possible dollar that actually exists.

This is a definition of precisely the sort that Kant dismisses as illegitimate. But the definition is simply a stipulation concerning how the new word 'exidollar' is to

[24] The fact that (2′) is true if 'not' is read as expressing exclusion negation raises a cluster of thorny issues, on which I have spoken elsewhere. Cf. Salmon 2005, 84–90, concerning the content of (2′).

be used. Certainly there can be no legitimate prohibition against making such a stipulation. In particular, the definition does not amount to counterfeiting currency. Including the property of existence in the definition of an *F* is not a way of defining possible *F*'s into actual existence any more than including the property of being a silk purse in the definition of a *silk-pursey sow's-ear* makes sow's ears into silk purses. According to the definition, any possible dollar that already exists is already an exidollar, and any merely possible dollar is not an exidollar. The monetary value of an exidollar is exactly $1; the monetary value of a possible dollar that is not an exidollar is exactly nothing.

What follows analytically from a definition is not categorical but hypothetical, or rather what follows is universal-conditional: *If* anything satisfies the defining criteria for being an *F* (or for being *the F*), then it is an *F* (the *F*). Existence is like any other property in this respect. Consequently, premise (*P1*) of the ontological argument is not an analytic truth. The truth that validly follows from the ontological arguer's definition of 'God' is a weaker variant:

(*P1′*) If exactly one possible individual is actually divine, then God = the possible individual that is actually divine.

The atheist and the agnostic have no legitimate complaint with this premise. It is analytic, an innocuous consequence of the ontological arguer's announced use of the term 'God'. However, putting (*P1′*) into its rightful place in the ontological argument renders the argument invalid. The strongest conclusion that validly follows from the corrected set of premises is the following:

(*C′*) If exactly one possible individual is actually divine, then God actually exists.

This conclusion is also analytic.[25] It does not entail God's existence, but it is at least *compatible* with God's existence. Unfortunately for the theist, it is equally compatible with atheism. Indeed, (*C′*) is a straightforward consequence of the atheist's contention that no possible individual is actually divine. The ontological arguer has some more work to do. If only the antecedent of (*C′*) can be established, the ontological arguer's task will be accomplished. The ontological arguer might take some encouragement in the knowledge that, *pace* Kant and his followers, existence is a property of individuals, and might be employed as such in the remaining project

[25] The atheist will see the consequent of (*C′*) as exactly analogous to (1), or alternatively (depending on how the definition is taken) to (2). As such, the atheist might deem the consequent truth-valueless. Still, anyone who deems the antecedent false may also deem the conditional *ipso facto* true. Thus, by logic and the proposed definition, the conditional is true whether its antecedent is true (as the theist contends) or false (as the atheist contends).

of establishing that one possible individual is actually divine. If so, disappointment surely awaits. Existence is an ordinary property, not a magical one.

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4

The Philosopher's Stone and Other Mythical Objects

Nathan Salmon

I

The medieval distinction of *de dicto* and *de re* may be tested by anaphoric links to a descriptive phrase. Consider:

Quine wishes he owned a sloop, but it is a lemon.
Ralph believes a female spy has stolen his documents; she also tampered with the computer.

These sentences strongly favour a *de re* reading. Appropriately understood, each evidently entails the *de re* reading of its first conjunct, even if the first conjunct itself is read (somewhat perversely) *de dicto*. If, as alleged, it is a lemon, then there must be an *it* that is a lemon, and that *it* must be a sloop that Quine wants. Similarly, if she tampered with the computer, then there must be a *she* who is a spy and whom Ralph suspects of the theft. The *de dicto*/*de re* distinction comes under severe strain, however, when confronted with Peter Geach's delightfully ingenious Hob/Nob sentence:[1]

(1) Hob thinks a witch has blighted Bob's mare, and Nob wonders whether she (the same witch) killed Cob's sow.

This puzzling sentence seems to resist both a *de re* and a *de dicto* reading. If there is a *she* whom Nob wonders about, then that *she*, it would appear, must be a witch whom Hob suspects of mare blighting. This suggests the straightforward *de re* reading:

(1_{dr}) A witch x is thus: (*i*) Hob thinks x has blighted Bob's mare; and (*ii*) Nob wonders whether x killed Cob's sow.

[1] See Geach (1967); reprinted in Geach (1972: 146–53). Though the puzzle has generated a considerable literature, its general importance to the philosophy of logic and language remains insufficiently appreciated. (As will emerge, I believe Geach's moniker for the puzzle, as one of 'intentional identity', is a misnomer.)

But the social anthropologist who sincerely utters (1) intuitively does not seem committed in this way to the reality of witches. Barring the existence of witches, it seems that though (1) may be true, there is no actual witch about whom Hob suspects and Nob wonders. There is a natural reading of (1) that carries existential commitment to witches, viz., (1_{dr}). The point is that the intended meaning does not.

A tempting response to Geach's puzzle construes (1) along the lines of

(1_{dd}) (*i*) Hob thinks: a witch has blighted Bob's mare; and (*ii*) Nob wonders whether: the witch that (Hob thinks) blighted Bob's mare killed Cob's sow.

Yet this will not do; (1) may be neutral concerning whether Nob has a true belief about, let alone shares, Hob's suspicion. Nob's wondering need not take the form 'Did the same witch that (Hob thinks) blighted Bob's mare also kill Cob's sow?'. It may be that Hob's thought takes the form 'Maggoty Meg blighted Bob's mare' while Nob's takes the form 'Did Maggoty Meg kill Cob's sow?'. If so, (1) would be true, but no fully *de dicto* reading forthcoming.

Worse, Hob's and Nob's thoughts need not involve the same manner of specification. It may be that Hob's thought takes the form 'Maggoty Meg has blighted Bob's mare' while Nob's wondering takes the form 'Did the Wicked Witch of the West kill Cob's sow?'. This appears to preclude a neo-Fregean analysis along the lines of the following:

(*F*) ($\exists\alpha$)[α **co-represents** for both Hob and Nob & Hob **thinks** ⌜α is a witch who has blighted Bob's mare⌝ & Nob **thinks** ⌜α is a witch⌝ & Nob **wonders** ⌜Did α kill Cob's sow?⌝].[2]

Geach (1967: 148–9) argues that since (1) does not commit its author to the existence of witches, it must have some purely *de dicto* reading or other. He suggests an alternative neo-Fregean analysis, evidently along the lines of the following:

(*G*) ($\exists\alpha$)($\exists\beta$)[α is a witch-representation & β is a witch-representation & α and β **co-represent** for both Hob and Nob & Hob **thinks** ⌜α has blighted Bob's mare⌝ & Nob **wonders** ⌜Did β kill Cob's sow?⌝].[3]

This proposal faces certain serious difficulties, some of which are also problems for (*F*): The relevant notion of a *witch-representation* must be explained in such a way as to allow that an individual representation α (e.g., an individual concept) may be a witch-representation without representing anything at all. More important, the relevant notion of *co-representation* needs to be explained so as to allow that a pair of individual representations α and β may co-represent for two thinkers without representing anything at all for either thinker. Geach does not explicitly employ the

[2] Here expressions in boldface are quasi-technical. Cf. David Kaplan (1969: 225–31). Contrary to Daniel C. Dennett (1968), the intelligibility (indeed the fact) of Hob's and Nob's thoughts having a common focus, somehow on the same unreal witch, does not require that they agree on every possible issue regarding the witch in question—which would in any case entail their agreeing on every possible issue.

[3] Geach (1976: 314–18).

notion of co-representation. I include it on his behalf because it, or something like it, is crucial to the proposed analysis. Any analysis, if it is correct, must capture the idea that Hob's and Nob's thoughts have a common focus. Though there is no witch, Hob and Nob are, in some sense, thinking about the *same* witch. It is on this point that *de dicto* analyses generally fail. Even something as strong as (1_{dd})—already too strong—misses this essential feature of (1). On the other hand, however the notion of vacuously co-representing witch-representations is ultimately explained, by contrast with (*G*), (1) apparently commits its author no more to co-representing witch-representations than to witches. More generally, any analysis along the lines of (*F*) or (*G*) cannot forever avoid facing the well-known difficulties with neo-Fregean analyses generally (e.g., the Twin Earth considerations).[4]

An alternative approach accepts the imposingly apparent *de re* character of (1) at face value, and construes it along the lines of the following:

(2) Someone *x* is thus: (*i*) Hob thinks *x* is a witch who has blighted Bob's mare; (*ii*) Nob also thinks *x* is a witch; and (*iii*) Nob wonders whether *x* killed Cob's sow.

This happily avoids existential commitment to witches. But it does not provide a solution. Hob's and Nob's thoughts need not concern any real person. Maggoty Meg is not a real person, and there may be no one whom either Hob or Nob believe to be the wicked strega herself.

Some proposed solutions to Geach's puzzle make the unpalatable claim that Hob's and Nob's musings concern a Meinongian object—a particular witch who is both indeterminate and nonexistent.[5] Many proposed solutions instead reinterpret *de re*

[4] Stephen Neale (1990: 221) proposes analyzing the relevant reading of (1) along the lines of: (*i*) Hob thinks: a witch has blighted Bob's mare; and (*ii*) Nob wonders whether: the *such-and-such* witch killed Cob's sow, where 'the *such-and-such* witch' is fleshed out by the context, e.g., as 'the local witch'. But (1) evidently does not attribute to Nob the particular thought 'Did *the local witch* kill Cob's sow?', nor any similarly descriptive thought. Worse, Neale's proposal fails to capture the crucial feature of (1) that Nob's wondering allegedly regards the very witch that Hob suspects. Michael McKinsey (1986) argues that the only readings of (1) that do not commit its author to the existence of a witch (or to there being some real person whom Hob and Nob relationally suspect of witchcraft) are given by (1_{dd}) (which he regards as ambiguous). Dennett (1968) apparently holds that the only such readings of (1) are either those given by (1_{dd}) or else something similar to the less specific (*F*). *Pace* Geach, Dennett, McKinsey, and Neale, (1) is evidently relational yet free of commitment to witches (or to anyone who is a suspect). (Contrary to Dennett, the speaker's basis or justification for uttering (1) is mostly irrelevant.)

[5] Cf. Esa Saarinen (1978). A variant of this approach imputes thoughts to Hob and Nob concerning a particular possible and fully determinate but nonexistent witch. This proposal cannot be summarily dismissed on the ground of an alleged ontological commitment to merely possibles. The proposed analysis may be understood instead as follows: There *might have existed* (even if there does not exist) a witch such that *actually*: (*i*) Hob thinks she has blighted Bob's mare; and (*ii*) Nob wonders whether she killed Cob's sow. Whereas this is in some sense committed to merely possible witches, it avoids commitment to their actual existence. The more serious difficulty is that neither Hob nor Nob (assuming they are real) is connected to any particular possible witch, to the exclusion of other possible witches, in such a manner as to have relational thoughts about her. (They cannot be. Witches do not exist.) Cf. Kripke (1980: 158): '. . . one cannot say of any possible person that he *would have been* Sherlock Holmes, had he existed. Several distinct possible people, and even actual ones such as Darwin or Jack the Ripper, might have performed the exploits of Holmes, but there is none of whom we can say that he would have *been* Holmes had he performed these exploits. For if so, which one?'

attributions of attitude so that they do not make genuine reference to the individuals apparently mentioned therein by name or pronoun. These responses inevitably make equally unpalatable claims involving *de re* constructions—for example, that Nob's wondering literally concerns the very same witch as Hob's belief yet neither concerns anything whatsoever, or that *de re* constructions mention or generalize over speech-act tokens and/or connections among speech-act tokens.[6] Consider the claim that Hob and Nob have thoughts that are about the same thing, which they think is a witch, yet those very same thoughts are not about anything. By any minimally reasonable criterion for existential commitment, that claim is committed to there

[6] The Hob/Nob sentence (1) is logically consistent with neither Hob nor Nob articulating his musings, explicitly or implicitly. Tyler Burge's (1983) analysis seems to be roughly the following:

> Hob believes ⌜$(\exists x)$(x is a witch who has blighted Bob's mare)⌝ &∴ Hob believes ⌜(the$_{13}$ x) (x is a witch who has blighted Bob's mare) exists⌝ & Nob wonders ⌜y_{13} killed Cob's sow⌝.

Burge stipulates that the recurring subscript 'marks the anaphoric or quasi-anaphoric connection between the terms' (Burge, 1983: 97), where 'a more explicit way of capturing the point of the subscripts' would explicitly generalize over communication chains including both Hob's application of 'the$_{13}$' and Nob's application of 'y_{13}' (Burge, 1983: 98).

Burge's apparatus is not explained sufficiently for this to qualify as a proposed solution to the puzzle. Aside from questions raised by the connective adjoining the first two conjuncts (how does a single statement contain an argument?), the analysis is inadequate on its most natural interpretations. An immediate problem is that (1), as intended, does not entail that Hob notionally thinks only one witch has blighted Bob's mare; the argument of the first two conjuncts is invalid. More problematic, if the special quotation marks indicate ordinary quotation (as seems to conform with Burge's intended interpretation), the analysis miscasts relational constructions as reporting dispositions toward sentences (e.g., purported utterances or implicit utterances) rather than the content of the attitudes thereby expressed and their relation to objects. Assuming instead (apparently contrary to Burge's intent) that the occurrence of 'y_{13}' is in bindable position, the variable remains free even assuming that the definite-descriptions operator 'the$_{13}$' is variable binding. Burge's stipulation suggests the variable is to have a value assigned to it *via* Hob's alleged description 'the witch who has blighted Bob's mare', thus recasting the third conjunct into 'Nob wonders whether she—the witch who has blighted Bob's mare—killed Cob's sow'. (Otherwise, the 'y_{13}' evidently remains both free and value-less, leaving (1) without propositional content, hence untrue.) This, however, is evidently ambiguous between a reading on which the value-fixing is affected on the part of the author of (1)—call it *primary occurrence*—and a *secondary-occurrence* reading on which the value-fixing is allegedly affected on the part of Nob. (The terminology is intended to recall Russell's distinction. The ambiguity corresponds even more closely to two competing interpretations of David Kaplan's rigidifying operator '*dthat*'.) On the secondary-occurrence reading, the value-fixing description plays a representational role on Nob's behalf. On the primary-occurrence reading, the value-fixing is shielded from the shift-from-customary-mode function of the quotation marks, leaving the pronoun to carry the weight of representing for Nob. Like (1_{dr}), the analysans on the secondary-occurrence reading commits not only Hob but also Nob to the existence of a witch who has blighted Bob's mare. The more likely primary-occurrence reading commits (1)'s author to the existence of such a witch. Neither is correct.

A further problem with the proposal is that the truth of (1) does not require that Nob make any pronominal application that is anaphoric on an application by Hob. The two might never communicate. To compensate, Burge therefore offers something like the following as an alternative analysis (Burge, 1983: 96):

> The community believes ⌜$(\exists x)$(x is a witch wreaking havoc)⌝ &∴ the community believes ⌜(the$_{13}$ x)(x is a witch who is wreaking havoc) exists⌝ & Hob thinks ⌜y_{13} has blighted Bob's mare⌝ & Nob wonders ⌜z_{13} killed Cob's sow⌝.

This is subject to some of the same difficulties as the previous analysis and more besides, including some of the same defects as Neale's proposal (see note 4)—as well as some of the defects of the Fregean analyses that Burge eschews. By contrast, for example, (1) makes no claim regarding community-held beliefs, let alone regarding a specific alleged community belief that there is only one witch wreaking havoc.

being something that both Hob and Nob think a witch, notwithstanding the explicit denial of that commitment. It would be more sensible to deny that (1) can be literally true on the relevant reading, given that there are no actual witches.[7] The problem with this denial is that its proponent is apparently in denial. As intended, (1) seems capable of being true (assuming Hob and Nob are real) even in the absence of witches. Numerous postmodern solutions jump through technical hoops to allow a pronoun ('she') to be a variable bound by a quantifier within a belief context ('a witch') despite standing outside the belief context, hence also outside the quantifier's scope, and despite standing within an entirely separate belief context. These 'solutions' do not satisfy the inquiring mind as much as boggle it. It is one thing to construct an elaborate system on which (1) may be deemed true without 'There is a witch'. It is quite another to provide a satisfactory explanation of the content of Nob's attitude, one for which the constructed system is appropriate. How can Nob wonder about a witch, and a particular witch at that—the very one Hob suspects—when there is no witch and, therefore, no particular witch about whom he is wondering? This is the puzzle in a nutshell. It combines elements of intensionality puzzles with puzzles concerning nonexistence and puzzles concerning identity. It has been deemed likely intractable.[8]

II

In earlier work I proposed the sketch of a solution, offering related possible analyses or readings of (1). Here I clarify and modify my previous proposal, taking account of problems that have since come to my attention. In this I have been aided by the able and formidable criticism of others, most especially David Braun (2013) and David Friedell (2013).[9]

The solution I urge takes seriously the idea that false theories that have been mistakenly believed—what I call *myths*—give rise to fabricated but genuine entities. These entities include such oddities as: Vulcan, the hypothetical planet proposed by Babinet and which Le Verrier believed caused perturbations in Mercury's solar orbit; the ether, once thought to be the physical medium through which light waves propagate; phlogiston, once thought to be the element (material substance) that causes combustion; the Loch Ness Monster; Santa Claus; and Meinong's Golden

[7] The account in Joseph Almog (1998: 68, 75–6) and *passim*, extended to propositional-attitude attributions, apparently depicts (1) as modally equivalent on its intended reading to 'Hob thinks Maggoty Meg has blighted Bob's mare, and Nob wonders whether she killed Cob's sow', and depicts the latter as expressing a necessary falsehood in virtue of the failure of 'Maggoty Meg' to designate. Contrary to Almog, (1) expresses a proposition that involves a concept expressed by 'witch'. Further, (1) does not involve specific designation of Maggoty Meg, and indeed (1) could be true even if Hob and Nob have no thoughts about her.

[8] See Michael Clark (1975: 124).

[9] Their objections notwithstanding, I remain firmly convinced that minor modification of my previous account yields the correct solution to Geach's puzzle.

Mountain. Mythical objects are neither material objects nor mental objects ('ideas'). They come into being with the belief in the myth. Indeed, they are inadvertently created by the mistaken theory's inventor. But they do not exist in physical space, and are, in that sense, abstract entities. They are an unavoidable by-product of human fallibility.

Le Verrier's Vulcan is a mythical planet. This is not to say, as one might be tempted to take it, that Vulcan is a planet but one of a rather funny sort, e.g., a Meinongian object that exists in myth but not in reality. On the contrary, Vulcan exists in reality, as robustly as the planet Mercury. But a mythical planet is no more a planet than a toy duck is a duck or a magician is someone who performs feats of magic. A mythical object is an imposter, a pretender, a prop. Vulcan is not a real planet, though it is a very real object—not concrete, not in physical space, but real. One might say that Mercury is also a 'mythical object', in that it too figures in the Vulcan myth, wrongly depicted as being gravitationally influenced by Vulcan. If we choose to speak this way, then it must be said that some 'mythical planets' are real planets, though not really as depicted in the myth. Vulcan, by contrast with the 'mythical' Mercury, is a *wholly mythical* object, not a real planet but an abstract entity inadvertently fabricated by the inventor of the myth. I shall continue to use the simple word 'mythical' as a shorthand for the notion of something wholly mythical. Strictly speaking my moniker 'mythical object' is a misnomer. A 'mythical object' is a real object but a mythical *F* (e.g., a mythical beast), i.e., a real thing that is or has been mistakenly believed to be an *F*.

Responses to Geach's puzzle that disregard mythical objects fail miserably as solutions. A correct and complete solution must acknowledge and highlight the crucial role played by mythical witches. However, correct characterization of that role is elusive.

The existence of fictional objects, in something close to this sense, has been persuasively urged by Peter van Inwagen and Saul Kripke as an ontological commitment of our ordinary discourse about fiction. Their account, however, is significantly different from the one I propose. Kripke contends that a mythical-object name like 'Vulcan' is ambiguous between two uses, one of which is parasitic on the other. It would be less deceptive to replace the ambiguous name with two univocal names, 'Vulcan_1' and 'Vulcan_2'. According to Kripke's theory, the name on its primary use, 'Vulcan_1', was introduced into the language, *sans* subscript, by Babinet as a name for an intra-Mercurial planet. Le Verrier used the name in this way in theorizing about Mercury's perihelion. On this use, the name names nothing; 'Vulcan_1' is entirely vacuous. Giving the name this use, we may say such things as that Le Verrier believed that Vulcan_1 affected Mercury's perihelion. Le Verrier's theory is a myth concerning Vulcan_1. The name on its secondary use, 'Vulcan_2', is introduced into the language (again *sans* subscript) at a later stage, when the myth has finally been exposed, as a name for the mythical planet erroneously postulated, and thereby inadvertently created, by Babinet. Perhaps it would be better to say that a new *use* of the name

'Vulcan' is introduced into the language. 'Vulcan_2' is fully referential. Using the name in this way, we say such things as that Vulcan_2 was a mythical intra-Mercurial planet hypothesized by Babinet. The difference between Vulcan_1 and Vulcan_2 could not be more stark. The mistaken astronomical theory believed by Babinet and Le Verrier concerns Vulcan_1, which does not exist. Vulcan_2, which does exist, arises from the mistaken theory itself. Vulcan_2 is recognized through reflection not on events in the far-off astronomical heavens but on the more local story of man's intellectual triumphs and defeats, particularly on the history of science.

Kripke's account is vulnerable to a familiar family of thorny problems: the classical problem of true negative existentials and the more general problem of the content and truth-value of sentences involving vacuous names. Vulcan_1 does not exist. This sentence is true, and seems to say about something (viz., Vulcan_1) that it fails to exist. Yet the sentence entails that there is nothing for it to attribute nonexistence to. Furthermore, on Kripke's account, Le Verrier believed that Vulcan_1 has an impact on Mercury's perihelion. What can the content of Le Verrier's belief be if there is no such thing as Vulcan_1? Furthermore, is the belief content simply false? If so, then it may be said that Vulcan_1 has no impact on Mercury's perihelion. Yet this claim too seems to attribute something to Vulcan_1, and thus seems equally wrong, and for exactly the same reason, with the claim that Vulcan_1 does have such an impact. Kripke is aware of these problems but offers no viable solution.

I submit that Kripke's alleged primary use of a mythical-object name is itself a myth. To be sure, Babinet believed himself to be naming a real planet in introducing a use of 'Vulcan' into the language. And other users like Le Verrier believed themselves to be referring to a real planet. But this linguistic theory of the name 'Vulcan' is mistaken, and is in this respect exactly like the astronomical theory that Vulcan is a real planet. The two theories complement each other, and fall together hand in hand. The situation should be viewed instead as follows. Babinet invented the theory—erroneous, as it turns out—that there is an intra-Mercurial planet. In doing this, he inadvertently created Vulcan. Indeed, Babinet even introduced a name for this mythical planet. The name was intended for a real planet, and Babinet believed the name thus referred to a real planet (*de dicto*, not *de re*). But here again, he was simply mistaken. Other astronomers, most notably Le Verrier, became convinced of Babinet's theory, both as it concerns Vulcan (that it is a very real intra-Mercurial planet) and as it concerns 'Vulcan' (that it names the intra-Mercurial planet). Babinet and Le Verrier both believed, correctly, that the name 'Vulcan', on the relevant use, refers to Vulcan. But they also both believed, mistakenly, that Vulcan is a real planet. They might have expressed the latter belief by means of the French version of the English sentence 'Vulcan is a planet', or other shared beliefs by means of sentences like 'Vulcan's orbit lies closer to the Sun than Mercury's'. These beliefs are mistakes, and the sentences (whether English or French) are false.

Importantly, there is no relevant use of the name 'Vulcan' by Babinet and Le Verrier that is vacuous. So used, the name refers to Vulcan, the mythical planet.

Le Verrier did *not* believe that Vulcan_1 is an intra-Mercurial planet—or, to put the point less misleadingly, there is no real use marked by the subscript on 'Vulcan' on which the string of words 'Vulcan_1 is an intra-Mercurial planet' expresses anything for Le Verrier to have believed, disbelieved, or suspended judgement about. To put the matter in terms of Kripke's account, what Le Verrier believed was that Vulcan_2 is a real intra-Mercurial planet. Le Verrier's belief concerns the mythical planet, a very real object that had been inadvertently created, then named 'Vulcan', by Babinet. Their theory about Vulcan was completely wrong. Vulcan is in fact an abstract object, one that is depicted in myth as a massive physical object.

A common reaction is to charge my proposal with miscasting mythical objects as the objects with which myths are concerned. On the contrary, it is argued, if they exist at all, mythical objects enter the intellectual landscape only at a later stage, not in the myth itself but in the subsequent historical account of the myth. A robust sense of reality demands that the myth itself be not about these abstract objects but about *nothing*, or at most about representations of nothing. No one expresses this sentiment more forcefully than Russell:

> [Many] logicians have been driven to the conclusion that there are unreal objects . . . In such theories, it seems to me, there is a failure of that feeling for reality which ought to be preserved even in the most abstract studies. Logic, I should maintain, must no more admit a unicorn than zoology can; for logic is concerned with the real world just as truly as zoology, though with its more abstract and general features. To say that unicorns have an existence in heraldry, or in literature, or in imagination, is a most pitiful and paltry evasion. What exists in heraldry is not an animal, made of flesh and blood, moving and breathing of its own initiative. What exists is a picture, or a description in words. . . . A robust sense of reality is very necessary in framing a correct analysis of propositions about unicorns . . . and other such pseudo-objects (Russell, 1919/2009: 169–70).

I heartily applaud Russell's eloquent plea for philosophical sobriety. But his attitude toward 'unreal' objects is fundamentally confused. To repeat, a mythical planet is not a massive physical object but an abstract entity, the product of creative astronomizing. Likewise, a mythical unicorn or a mythical winged horse is not a living creature but a fabricated entity, the likely product of blurred or fuzzy vision, just as mermaids are the likely product a deprived and overactive imagination under the influence of liquor—creatures not really made of flesh and blood and fur or scales, not really moving and breathing of their own initiative, but depicted as such in myth, legend, hallucination, or drunken stupor.

It is frequently objected even by those who countenance mythical objects that the Vulcan theory, for example, is merely the theory that there is an intra-Mercurial planet, not the bizarre hypothesis that the relevant abstract entity is that planet. Babinet and Le Verrier, it is observed, did not believe that an abstract entity is a massive heavenly object. Quite right, but only if the sentence is meant *de dicto*. Understood *de re*—as the claim that, even if there is such an abstract entity as the

mythical object that is Vulcan, Babinet and Le Verrier did not believe it to be an intra-Mercurial planet—it turns mythical objects into a philosophical black box. What role are these abstract entities supposed to play, and how exactly are their myth-believers supposed to be related to them in virtue of believing the myth? In fact, this issue provides yet another reason to prefer my account over Kripke's. On my account, in sharp contrast, the role of mythical objects is straightforward: They are the things depicted as such-and-such in myth, the fabrications erroneously believed by wayward believers to be planets or the medium of light-wave propagation or ghosts, the objects the mistaken theory is about when the theory is not about any real planet or any real medium or any real ghost. It is not merely that being depicted as such-and-such is an essential property of a mythical object, a feature the object could not exist without. Rather, being so depicted is the metaphysical function of the mythical object; that is *what* it is, its *raison d'être*. To countenance the existence of Vulcan as a mythical planet while at the same time denying that Babinet and Le Verrier had beliefs about this mythical object, is in a very real sense to miss the point of recognizing Vulcan's existence. It is precisely the astronomers' false beliefs about the mythical planet that makes it a mythical planet; if no one had believed it to be a planet, it would not *be* a mythical planet. Come to that, it would not even exist.

Another important point: I am not *postulating* mythical objects. For example, I am not postulating Vulcan. Even if I wanted to, Babinet beat me to it—though he postulated Vulcan as a real planet, not a mythical one. Mythical objects would exist even if I and everyone else had never countenanced or recognized them, or admitted them into our ontology, etc. Rather, I see myself as uncovering some evidence for their independent and continued existence, in something like the manner of the paleontologist who infers dinosaurs from their fossil remains, rather than the theoretical physicist who postulates a new category of physical entity in order to make better sense of things (even if what I am actually doing is in important respects more like the latter).

Perhaps the most important evidence in favour of this theory of mythical objects is its logical entailment by our thoughts and beliefs concerning myths. We are sometimes led to say and think things like 'An intra-Mercurial planet, Vulcan, was hypothesized by Babinet and believed by Le Verrier to affect Mercury's perihelion, but there has never been a hypothetical planet whose orbit was supposed to lie between Mercury and Venus' and 'Some hypothetical species have been hypothesized as linking the evolution of birds from dinosaurs, but no hypothetical species have been postulated to link the evolution of mammals from birds'. The distinctions drawn cannot be made without a commitment to mythical objects, i.e., without attributing existence, in some manner, to mythical objects.[10] No less significant,

[10] Luke Manning suggests a better example involving a mythical natural kind: 'Some hypothetical substances have been hypothesized as explaining oxidation, but no hypothetical substances have been postulated to explain the Doppler effect'.

beliefs are imputed about the mentioned mythical objects, to the effect that they are not mythical. Being wrongly believed not to be mythical is just what it is to be mythical. Furthermore, beliefs are imputed to distinct believers concerning the very same mythical object.

Further evidence—in fact, evidence of precisely the same sort—is provided by Geach's puzzle. In my previous discussion I proposed solving Geach's puzzle by construing (1) on its principal reading, or at least on one of its principal readings, as fully *de re*, not in the manner of (2) but along the lines of:

(3*a*) **A** mythical **witch** *x* is thus: (*i*) **Hob thinks** *x* **has blighted Bob's mare**; **and** (*ii*) **Nob wonders whether** ***x*** **killed Cob's sow**.[11]

I also proposed the following as a more plausible rendering of (1):

(3*b*) **A** real or mythical **witch** *x* is thus: (*i*) **Hob thinks** *x* **has blighted Bob's mare**; **and** (*ii*) **Nob wonders whether** ***x*** **killed Cob's sow**.

Each has the distinct advantage over (2) that it does not require that both Hob and Nob believe someone to be the witch in question. In fact, each allows that there is no one in particular whom either Hob or Nob believes to be a witch. Each does require something not unrelated to this, but no more than is actually required by (1): that there be something that both Hob and Nob think about—some*thing*, not some*one*, not a witch or a person, certainly not an indeterminate Meinongian object, but a very real entity that Hob thinks has blighted Bob's mare and about which Nob wonders whether she (really: whether *it*) killed Cob's sow.[12] In addition (3*b*) has the distinct advantage over (3*a*) that it is true, as it would appear that (1) is, with respect to worlds in which Hob and Nob think about a real witch (even if, as I am inclined to believe, any such world is not only non-actual but metaphysically impossible). In effect, (3*b*) substitutes existential commitment to *real or mythical witches* for the stronger existential commitment to real witches intrinsic to (1_{dr}).

I also proposed a third alternative that equally commits the author to the existence of a real or mythical witch. A natural variant of my third proposal is the following:

(4*a*) (*i*) **A** real or mythical **witch** *x* is thus: **Hob thinks** *x* **has blighted Bob's mare**; **and** (*ii*) **Nob wonders whether she** [**the same** real or mythical **witch** that Hob thinks has blighted Bob's mare] **killed Cob's sow**.

There is a problem that I should have noticed with proposed analyses along the lines of (4*a*). Suppose there are two distinct mythical witches, each of whom Hob thinks has blighted Bob's mare. (Hob thinks that Bob's mare overcame the earlier blighting,

[11] Here and in subsequent formulations boldface expressions are formal analogues of expressions that appear explicitly in (1).

[12] David Braun (2013) points out that the content of (3*a*), and likewise that of (3*b*), does not logically entail that there is something that both Hob and Nob believe to be a witch. However, it does entail that there is a real or mythical witch about whom both Hob and Nob think.

only to be blighted a second time by another witch.) Suppose further that Nob wonders concerning one of these mythical witches but not concerning the other. (It does not matter which witch.) With respect to such a scenario (1) is true, whereas (4*a*) is not for lack of a designatum in the right-hand conjunct. The occurrence of 'she' in the original sentence (1) is evidently what Gareth Evans called an *E-type pronoun*, i.e., a pronoun-occurrence anaphoric upon a quantifier-occurrence within whose scope the pronoun occurrence does not stand. As such—and diametrically contrary to what Evans and most of his critics have supposed—'she' in (1) is not an occurrence of a closed singular term but instead a variable-occurrence bound by a quantifier (indeed by 'a witch'). Insofar as this is so, (4*a*) is to be replaced with the following:

(4*b*) (*i*) **A** real or mythical **witch** *x* is thus: **Hob thinks** *x* **has blighted Bob's mare**; **and** (*ii*) a real or mythical **witch** *y* is thus: (*a*) Hob thinks *y* has blighted Bob's mare and (*b*) **Nob wonders whether** *y* **killed Cob's sow**.

The final occurrence of '*y*' in (4*b*) would be the formal counterpart of an *E*-type rendering of the 'she' in (1). It is bound but not by the quantifier occurrence in the left-hand conjunct (4*b.i*).[13]

There is a more significant problem with all such analyses, however, one that Braun forcefully exposes. The original sentence (1) nowhere employs the phrase 'mythical witch'. As Braun puts it, each of these proposed analyses mentions mythical witches while (1) does not. He concludes that (1) is better formalized by (1_{dr}). The Hob-Nob sentence is committed to real witches on its relevant literal reading, and is therefore false.

On this point I am duly impressed, but I am also duly hesitant. Braun's arguments are forceful, and I am inclined to concede that, taken literally, (1) probably entails witchery.[14] However, there are weighty considerations on the other side. First and foremost there is the tenacious intuition that the social anthropologist who sincerely utters (1) does not thereby inadvertently undertake a commitment to witches. Indeed, the following expansion of (1) feels perfectly consistent:

(1+) Hob thinks a witch has blighted Bob's mare, and Nob wonders whether she (the same witch) killed Cob's sow; whereas in reality (contrary to Hob and Nob), there are no witches.

[13] Cf. Salmon (2006); preprinted in Salmon (2005: 399–406). The reason for the repetition of the left-hand conjunct is revealed when (1) is reformulated as a piece of discourse by replacing 'and' with a period:

> Hob thinks a witch has blighted Bob's mare. Nob wonders whether she (the same witch) killed Cob's sow.

Here the pronoun stands outside the scope of the occurrence of 'a witch' in the preceding sentence. The 'quantifier-occurrence' that binds the pronoun does not occur in surface form.

[14] Is the Geach problem less forceful if the parenthetical 'the same witch' is replaced with 'the same supposed witch'? If it is, what does that show?

By contrast, (1_{dr}) clearly cannot be consistently augmented in the same manner: 'A witch *x* is thus . . . ; yet there are no witches.' This strongly suggests that someone uttering (1) would typically mean, and would typically be interpreted as expressing, something free of existential commitment to witches.

Can the stubborn intuition that (1) has a witch-free reading be maintained and supported in the face of Braun's observations? Here is one way that is at least reasonably plausible. We distinguish first between a primary and a secondary use of the word 'witch'. A *witch in the strict sense*—a $witch_1$—is a woman who knows how to engage in supernatural witchcraft. A *witch in the extended sense*—a $witch_2$—is something that is supposed to be, or is represented as being, a $witch_1$. We then postulate a third reading, a kind of synthesis of the first two. A *witch in the broadest sense*—a $witch_3$—is something that either is a $witch_1$ or a $witch_2$. Under this multiple-ambiguity hypothesis, (3*b*) may be recast as follows:

(3*c*) **A $witch_3$** *x* is thus: (*i*) **Hob thinks** *x* **has blighted Bob's mare**; **and** (*ii*) **Nob wonders whether** *x* **killed Cob's sow**.

Braun considers and rejects related ambiguity hypotheses. (He wrongly takes me to deny that the English word 'witch' is ambiguous.) Specifically, Braun objects that on any ambiguity hypothesis 'There are witches' has a true reading, and furthermore 'Every witch is a witch' has false readings. I agree that these are consequences. I disagree that they are counter-evidence, or anything like it. There are indeed $witches_2$, and hence also $witches_3$; none of them is a $witch_1$.

It is not excessively implausible, independently of Geach's puzzle, that the English word 'witch' is multiply ambiguous in the manner proposed. Braun objects further that if 'witch' were ambiguous, the ambiguity should have been obvious to semantic theorists. What is obvious to a lexicographer might be less so to a semantic theorist, and still less so to a lay competent speaker. Especially terms for certain dubious kinds of entities seem to display an ambiguity of exactly the sort postulated. A magician in the strict sense is one skilled in feats of supernatural magic. *Forbes* describes the contemporary illusionist, David Copperfield, as the most commercially successful magician in history. Presumably *Forbes* does not endorse the reality of the supernatural. Copperfield is a magician only in an extended sense,[15] but more commercially successful than any other in history. No one, not even Copperfield, is the single most commercially successful magician *in the strict sense*. Similar examples abound. A faith healer in the strict sense is one who cures the sick or disabled through the power of religious faith; a faith healer in an extended sense is one who represents him/herself as a faith healer in the strict sense. A séance in the strict sense is a meeting at which the congregants communicate with the dead; a séance in an extended sense is a meeting at which congregants attempt or pretend to hold a

[15] For confirmation, see: <http://www.youtube.com/watch?v=KvwlJe9NS94>.

séance in the strict sense. A fortune teller in the strict sense is one who accurately foretells significant information about a person's future; a fortune teller in an extended sense is one who represents him/herself as a fortune teller in the strict sense.[16] Unlike Copperfield, Maggoty Meg is a mythical person. Still, the social anthropologist speaker-refers to Maggoty Meg by 'a witch' and 'the same witch' in uttering (1), and it is in virtue of her—the same mythical witch to which the anthropologist refers—that what the anthropologist means by (1) is true. Add to this data the facts that (1+) seems perfectly consistent, and that if 'witch' is ambiguous in something like the manner proposed, then there exists a satisfying semantic solution to Geach's puzzle. The ambiguity hypothesis should not be hastily dismissed.

I do not make the same ambiguity claim concerning terms for uncontroversial, assured kinds. If there are analogous versions of Geach's puzzle concerning uncontroversial kinds, then the preceding observations are a point of disanalogy. Braun's objection seems somehow more forceful with uncontroversial kinds than it does with the particular kind invoked in Geach's actual puzzle, viz., *a witch*$_1$. Geach's puzzle might get some purchase from the fact that the English term for *a witch*$_1$ can apparently mean *a witch*$_3$.

Even if the ambiguity hypothesis is incorrect, a reasonably satisfying pragmatic (non-semantic) solution remains available. For even if (1_{dr}) is ultimately the correct analysis, the social anthropologist who utters (1) typically means, and thereby asserts (perhaps unknowingly), what (3*c*) semantically expresses. This is also how the anthropologist would typically be understood. These pragmatic phenomena would be a crucial component of the complete solution to Geach's puzzle. Without it there is no solution.[17]

[16] It is worth noting in this connection that *Merriam-Webster.com* defines 'witch' as 'one that is credited with usually malignant supernatural powers; *especially*: a woman practicing usually black witchcraft often with the aid of a devil or familiar', <http://www.merriam-webster.com/dictionary/witch?show=0&t=1299896910>. This is not far from: 'a witch$_3$; *especially*: a witch$_1$'. Is there a tacit understanding that if a word has two closely related definitions, then their disjunction might give yet a third meaning? Braun writes: 'Perhaps some speakers have used "witch" to mean *mythical witch*, and perhaps enough have done this so that "witch" is lexically ambiguous' (Braun, 2013: 161). For Braun's purposes this may be one concession too many.

[17] Braun (2013) objects that those who share the intuition that (1) is true in the envisioned circumstances typically do not endorse my theory of mythical objects, and do not 'think about mythical objects' in evaluating (1). Insofar as this observation is correct, it is largely irrelevant. One who correctly evaluates the sentence 'There are exactly two moons of Mars' need not endorse the reality of natural numbers, and might even deny that there is such a thing as the number two, yet the sentence yields 'Something *n* is thus: *n* is two and there are exactly *n* moons of Mars', the content of which in turn entails that there is such a thing as two. (Cf. Salmon, 2008: 177–82.) Even a sophisticated and ontologically timid philosopher might unknowingly undertake a commitment to there being entities of a certain kind (numbers, fictional characters, mythical objects, etc.). One need not countenance mythical witches—certainly one need not know my account or use my phrase 'mythical witch'—in order to believe a proposition *p* that has the logical consequence that something or other is if not a real witch then a supposed witch, and where *p* is true in virtue of a particular mythical witch.

Significantly, one who accepts Kripke's account may not avail him/herself of this solution to Geach's puzzle. On Kripke's account it may be observed that

(*i*) Hob thinks: Maggoty-Meg$_1$ has blighted Bob's mare; and (*ii*) Nob wonders whether: Maggoty-Meg$_1$ killed Cob's sow.

The Hob/Nob sentence (1) is not obtainable by existential generalization on 'Maggoty-Meg$_1$', since by Kripke's lights, this name is supposed to be vacuous and to occur in nonextensional ('referentially opaque', *ungerade*) position. Nor on Kripke's account can 'Maggoty-Meg$_2$' be correctly substituted for 'Maggoty-Meg$_1$'; Hob's and Nob's theories are supposed to concern the nonexistent witch Maggoty-Meg$_1$ and not the mythical witch Maggoty-Meg$_2$. Kripke might instead accept the following, as a later-stage observation about the Maggoty-Meg$_1$ theory:

Maggoty-Meg$_2$ is the mythical witch corresponding to Maggoty-Meg$_1$.

Here the relevant notion of *correspondence* places 'Maggoty-Meg$_2$' in extensional position. While 'Maggoty-Meg$_2$' is thus open to existential generalization, 'Maggoty-Meg$_1$' supposedly remains in a nonextensional position where it is not subject to quantification. It is impossible to deduce (1) from any of this. Geach's puzzle does not support Kripke's account. On the contrary, the puzzle poses a serious threat to that account, with its denial that Hob's and Nob's thoughts are, respectively, a suspicion and a wondering regarding Maggoty-Meg$_2$.

On my alternative account, we may instead observe that

Maggoty Meg is a witch$_3$. Hob thinks Maggoty Meg has blighted Bob's mare. Nob wonders whether Maggoty Meg killed Cob's sow.

We then adjoin and generalize to obtain (3*c*).

In the end, what makes (3*c*) a plausible analysis is that it (or some variant) spells out in more precise language what (1) seems to say to begin with. Babinet and Le Verrier provide a real-life case in which the thoughts of different thinkers converge on a single mythical object: Babinet thought he had seen an intra-Mercurial planet, and Le Verrier believed that it (the same supposed planet) impacted Mercury's perihelion. The primary lesson of Geach's puzzle is that when theoretical mistakes are made mythical creatures are conceived, and in acknowledging that misbelievers are sometimes related as Nob to Hob, or as Le Verrier to Babinet, we commit ourselves to their illegitimate progeny.[18]

[18] I am grateful to David Braun, David Friedell, Luke Manning, and Teresa Robertson for their reactions.

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10

On What Exists

Nathan Salmón

One of W. V. Quine's most famous contributions to philosophy is his criterion, first proposed in 1939, for a theory's being committed to the existence of entities of a specific kind.[1] Here Quine's criterion of theoretical ontological commitment is assessed. I shall propose revisions. My objective is not to force the orthodox Quinean to concede. That is an impossible task. Rather, it is to persuade the agnostic and, far more important, to get matters right. With some notable exceptions, Quine's criterion is generally accepted as correct, or at least largely correct.[2] Yet it is subject to a variety of interpretations, all of which save one yield incorrect verdicts. Indeed, the interpretation that yields correct verdicts is evidently not what Quine and his followers have meant. Instead they have misapplied the criterion, unfairly imputing ontological commitments to theories that lack those commitments. I argue that insofar as Quine's criterion is interpreted so that it yields only correct verdicts, it is trivial and of questionable utility. Moreover, the correct criterion invokes a notion that Quine spent most of his life combating: analyticity. This yields a dilemma for Quinean philosophy: either his criterion of ontological commitment is incorrect, or else Quine is committed to a traditional philosophical notion that he emphatically rejects as disreputable. In his insightful article on ontological commitment Richard Cartwright pointed to a similar

[1] Quine proposed his criterion in several venues over many years. Quine (1939), (1943), (1947), (1948), (1951), (1951). Much of this material is reprinted in Quine (1961a [1953]). See also Quine (1951c), reprinted in Quine's (1966: 126–34); Quine (1966b: 64–9) (slated to appear in the ill-fated *Journal of Unified Science*, 1940); Quine (1969: 91–113); Quine (1970: 89–103).

[2] I criticize Quine's criterion in my (1987); reprinted in my (2005a: 9–49). I argue there that Quine's criterion incorrectly imputes an inflated ontology to certain ontologically frugal theories. It will be argued below that one version of the criterion also incorrectly imputes a sparse ontology to ontologically extravagant theories.

Some critics complain that Quine's criterion incorrectly imputes an ontology including classes to certain "ontologically innocent" theories that are not formalizeable in a classical first-order language (without resorting to a special predicate $\in$ for set membership). Others, notably George Boolos, reply that the problem sentences are formalizeable in a non-classical first-order language, e.g., employing plural quantification, with the result that Quine's criterion delivers the right verdict. I shall not engage this controversy here, except to state that in my judgement the reply on behalf of the criterion is essentially correct. The language mentioned in the criterion need not be classical in this respect.

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Quinean predicament.[3] I argue that the predicament is rather more problematic than depicted in Cartwright's critique.

10.1 First Formulation

What exactly is a criterion of theoretical ontological commitment? It might be proposed that a criterion of ontological commitment should enable one, at least ideally, to determine whether a fully specified theory is ontologically committed to there being entities of this or that kind. The criterion, on this understanding, has a certain epistemological function. It is a kind of test by which one can correctly answer the question of what a theory's ontology is. I believe a criterion of ontological commitment is better construed in a more metaphysical vein: as a specification of what it *is* for a theory to be committed to there existing things of a given kind. Of course, it is desirable that a criterion that successfully meets this objective might also be employed to determine a given theory's commitments. This instrumental value is subordinate to the primary metaphysical objective of specifying what ontological commitment amounts to.[4]

One aspect of Quine's criterion is often misunderstood. According to that criterion, ontological commitment is not a matter of designation *simpliciter*; it is a matter of variable binding. Quine is explicit that a theory might designate something even by name without committing to that thing's existence. In "On What There Is," he writes:

> But, this is, essentially, the *only* way we can involve ourselves in ontological commitments: by our use of bound variables. The use of alleged names is no criterion, for we can repudiate their namehood at the drop of a hat unless the assumption of a corresponding entity can be spotted in the things we affirm in terms of bound variables. Names are, in fact, altogether immaterial to the ontological issue, for I have shown, in connection with "Pegasus" and "pegasize", that names can be converted to descriptions, and Russell has shown that descriptions can be eliminated.
>
> (Quine 1961a: 12)

It would be a mistake to see Quine, as some have done, as intending that his criterion be applied only after all names in a formulation of a theory have been replaced by definite descriptions and eliminated in accordance with Russell's theory of descriptions. Quine explicitly says that the presence of a name in a formulation of the theory is 'altogether immaterial to the ontological issue', and that the name could simply be deemed instead an abbreviated definite description and thence eliminated *unless the theory is committed to the object through idioms of quantification*. The theory

[3] Cartwright (1954: 316–25); reprinted in Cartwright (1987: 11–12).

[4] Some might put the point by saying that a criterion of ontological commitment specifies what theoretical ontological commitment "consists in." I do not. The phrase 'consists in' is a red flag in contemporary philosophical discourse, typically indicative of a crucial lack of clarity. Philosophers have yet to specify what consisting in amounts to. (Some of my readers have noted that I have not specified what amounting to amounts to. It is on my "To Do" list.)

formulated by '$\forall x\,(x \neq$ Stephen Hawking)' designates Hawking while avoiding ontological commitment to him, indeed while undertaking commitment precisely to his nonexistence.[5] According to Quine, 'Hawking' may be "converted" into 'some unique hawkingizer', then Russelled away leaving behind '$\sim \exists y \forall x\,(x$ hawkingizes $\leftrightarrow x = y)$', which is not committed to Hawking. By contrast, the commitment to Hawking by '$\exists x\,(x =$ Hawking)' remains intact even if the name is Russelled away. The name's presence is thus no obstacle to the criterion's immediate application.

Insofar as the language might include non-descriptive individual constants that fail to designate any element of the universe of discourse, Quine's criterion requires a *free logic*—a logic for a language in which some true sentences invoke non-designating singular terms.[6] Free logic modifies the classical inference rules governing quantification. Even the sentence 'Hawking is a theoretical physicist', of itself and properly interpreted, bears no ontological commitment to Hawking, nor to theoretical physicists in general. By Quine's criterion, ontological commitment to Hawking is not undertaken until the theory that Hawking is a physicist is expanded to include something entailing that if Hawking is a physicist then something is Hawking. Though the point is largely ignored in the literature, it should be recognized on Quine's behalf that even positive complex pronouncements involving a designating name can lack ontological commitment to the name's bearer. One who suspends judgement concerning whether there is any such person as Hawking can accept the disjunction 'Either Hawking first predicted Bekenstein-Hawking black-hole radiation, or else Bekenstein did' without undertaking ontological commitment to Hawking. In fact, one can consistently accept this disjunction while being confident that only one of the names, 'Hawking' and 'Bekenstein', actually designates while having no opinion which one. Ontological commitment is carried not through mere naming per se but through existential quantification, as expressed in Standard English by such locutions as 'there are such-and-such's', or 'some things are such-and-such's.'

Quine wishes to allow for such ontological disagreements as suggested in Hamlet's famous line, 'There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy.' But Quine will suffer no excess. One condition of adequacy for a criterion of ontological commitment is that it must be possible for a theory to be ontologically committed to entities of a certain kind even though the theory explicitly denies that such entities exist. A primary rationale for Quine's criterion—perhaps the principal rationale—is to expose a certain disingenuousness he perceives in Meinong's defiant declaration, 'There are objects of which it is true that there are no

[5] The present chapter was written prior to Hawking's death.

[6] David Kaplan and others have argued compellingly—contrary to Frege, Russell, and numerous others, including Quine—that the contents of proper names are inexpressible by definite descriptions (including the likes of 'the hawkingizer'). See Kaplan (1973: appendix X, pp. 503–5); and my (2005b: section 3, especially at pp. 32–40).

such objects,'[7] and even in 'There are objects that do not exist.' Such pronouncements seem inconsistent.

Quine's resolution is appealing: being and existence are one and the same. One who says 'There are such-and-such's,' with its Standard English meaning (and with assertive intent, etc.), or things that entail it (e.g., 'Some things are such-and-such'), is ontologically committed thereby, whatever else he/she may say, to such-and-such's. Just as the theorist who designates a particular F is not *ipso facto* committed to F's, so also there can be ontological commitment to F's even on the part of the theorist who proclaims that there do not exist any F's. When David Lewis says that there are talking donkeys although they do not actually exist, according to Quine's criterion—and according to good and common sense—Lewis is ontologically committed to talking donkeys, and worse yet, he is inconsistent about it. The philosopher who proclaims 'There are F's but no F's exist,' says Quine, is 'one of those philosophers who have united in ruining the good old word 'exist'".[8] Whatever those philosophers mean in saying that such-and-such 'exists', they cannot consistently mean that such-and-such *exists*.

Quine's proposal, in a nutshell, is that a theory couched in an interpreted language that expresses the concepts of *everything* and *something* through quantifiers and the binding of variables is committed to there being things of a given kind if and only if some things or other of that kind must be elements of the universe (domain) of discourse over which the variables range for the theory, so couched, to be true.[9] In particular, a theory is not ontologically committed to the objects individually designated in the theory unless those individuals must belong to the language's universe of discourse for the theory to be true. Furthermore, a theory is ontologically committed to entities of a given kind as long as its truth, as couched in the suitably regimented language, requires the presence of entities of that kind in the universe of discourse, even if the theory explicitly states that no such entities exist. Quine's most careful formulation is given as follows:

> In general, *entities of a given sort are assumed by a theory if and only if some of them must be counted among the values of the variables in order that the statements affirmed in the theory be true.*[10]

A principal philosophical thrust of Quine's proposed criterion is that the issue of what ontology a theory requires is not as much metaphysical as it is semantic. It does not matter whether the theory explicitly rejects entities of a given kind. What matters is whether the universe of discourse of the theory, suitably formulated, must include such entities for the theory to be true. Certainly the road to Quine's criterion is paved

[7] Meinong (1960: 83). Meinong freely concedes that the formulation is paradoxical. That is the very point of the example.

[8] Quine (1961a: 3).

[9] It is not assumed that this universe of discourse is a set.

[10] Quine (1961b: 103).

with the best of intentions. A theory that accepts 'This and that have a single colour' is ontologically committed to colours even if it also accepts 'There are no such entities as colours.' It is important to expose philosophers' misuse of philosophical language, the more decisively the better.

Writers as different in viewpoint as Alonzo Church and Saul Kripke have made remarks that would seem, at least initially, to support the idea that Quine's criterion is not only correct but trivial. Church writes, 'Quine's proposal seems to me straightforward and in a sense obvious.'[11] In a similar vein Kripke says:

> Can there be a serious question whether someone who says 'there are men' or 'there exist such things as men' thereby commits himself to the view that *there are men* or that *there exist such things as men?* After all 'there exist men' is true if and only if *there exist men*; what further question can there be? . . .
>
> What indeed can the question whether 'there are rabbits' makes any "ontological commitment" to rabbits mean? Wasn't the term 'ontological commitment *defined* by such examples as 'there are rabbits?'[12]

Kripke's rhetorical questions support the contention that those who proclaim, 'There are rabbits, but none exist,' contradict themselves. Those who contradict themselves are committed to entities of every kind, including rabbits. Quine's criterion is aimed at providing a philosophical foundation for this verdict fair and just.[13]

Frequently Quine abbreviates his criterion by saying that a theory is ontologically committed to whatever the theory *quantifies over*. For example, the theory that there is life on Mars, suitably formalized, is said to quantify over Martians. This manner of speaking has helped to engender a common serious confusion. Some of Quine's remarks might have encouraged this confusion. He says, for example, that his criterion helps us:

> to judge what we care to consider there to be. We can face the question squarely as a question what to admit to the universe of values of our variables of quantification.[14]

This remark strongly suggests that theories with different ontologies are *ipso facto* couched in languages that employ different universes of discourse, and that the range

[11] Church (1958: 1009). [12] Kripke (1976: 379).

[13] There is a significant problem with the motive behind Quine's criterion. In abstraction from details that vary among cases, there is no more reason to regard as deviant the use of 'exist' than the use of 'there are'. One who accepts 'There are F's but no F's exist' could mean by the second conjunct that that there are no F's and mean something nonstandard by first conjunct—for example, that there *might have* been F's. (Cf. David Lewis.) The same problem arises in the case of one who accepts a formalized sentence, e.g., '$\exists x\, \mathrm{F}x\, \&\ \sim \exists x\, [\mathrm{F}x\, \&\, \exists y\, (x = y)]$'. Classically '$\exists y\, (x = y)$' is a theorem. The accepted sentence, normally understood, is therefore classically inconsistent. Lacking further information, there is no telling which, if any, expressions are used non-standardly in the interlocutor's idiolect. Quine's thesis that correct translation is underdetermined by speakers' behaviour only exacerbates the problem. Strictly speaking, Quine's criterion must be restricted to theories framed in a suitable language in which variables and existential quantification receive their objectual (non-substitutional) interpretation.

[14] Quine (1960: 243).

of the variables of one who believes there is life on Mars includes Martians, whereas the range of the variable of one who disbelieves there is life on Mars excludes Martians. This judgement is incorrect. It has the absurd consequence that if anyone sincerely accepts 'There is life on Mars', then there is indeed life on Mars, since there are then Martians that belong to the theorist's universe of discourse. It also has the absurd consequence that one who sincerely utters 'There is no life on Mars' is also correct even if there is life on Mars—in fact, quite independently of whether there is life on Mars—since the theorist's universe of discourse then excludes Martians, making the sentence true as interpreted.

Quantifying over entities of kind *K*, as Quine uses this phrase, cannot be the same as employing a universe of discourse that includes such entities—if only because a theory might 'quantify over' entities of kind *K* when there is nothing of that kind, and equally the theory that there are no such entities might be wrong. Instead both the Martian theory and the No-Martian theory should be regarded, at least as far as their disagreement is concerned, as couched in the same suitably regimented language *employing the very same universe of discourse*—indeed, a universe that includes whatever Martians there are. The sense in which the Martian theorist 'quantifies over' Martians is not that Martians belong to the theory's universe of discourse, but that at least one Martian must belong to the theory's universe of discourse *for a suitable formulation of the theory to be true*.

In a graduate seminar at UCLA in April 1972, extrapolating from an April 1958 argument of Church's in an unpublished gem, 'The Ontological Status of Women and Abstract Entities' (*aka* 'Misogyny and Ontological Commitment'), Kripke raised a related problem for Quine's criterion.[15] Church exposes the folly of supposing that *ceteris paribus* nominalism is to be preferred over Platonism. Church proposes an analogy with *ontological misogyny*, a theory whose core axiom is '$\sim \exists x$ (x is a woman)'. This theory forswears the claim that Jane Fonda won an Academy Award; indeed it denies that she exists. Instead it postulates a class of new non-relational properties of men, and asserts that the late Henry Fonda is *Academy-Award-daughtered*. Despite its impoverished ontology (or its parsimonious ontology, as the ontological misogynist would have it), ontological misogyny can evidently accommodate all available empirical results by ascribing corresponding properties to men. The theory is more frugal ontologically than the conventional wisdom—severely so—but let no one conclude that it is in any significant respect therefore the better theory. Analogously, even if it can be made consistent with all observational results, nominalism is no more legitimate on that ground alone than sheer bigotry towards universals.

Modifying Church's example, Kripke considers a language *L* with an unrestricted universe of discourse over which the variables of *L* range and a reduced variant *L′*,

[15] A transcription of Church's talk is available online. I reproduce Kripke's observations from notes I took as an undergraduate. The reader is cautioned that I cannot be certain I am recounting Kripke's objection accurately. (Kripke's remarks were general and did not present any particular example.)

identical in both syntax and semantics except that the universe of discourse of L' excludes one particular individual, say Stephen Hawking. Suppose that the letter '*h*' is an individual constant that designates Hawking in L and hence also in L'. Though unusual, L' is surely a possible language.[16] L' might have been devised by a Hawking detractor who decided he does not 'care to consider there to be Hawking' and 'facing squarely the question what to admit to the universe of values of his variables of quantification' chose to modify L so as to exclude Hawking. In general sentences with variable-binding operators evidently express different things in L and L'. Kripke points out that despite its impoverished universe of discourse, L' can capture whatever might be expressed in L by making greater use of the constant '*h*'. He provides the following simple translation scheme to this effect:

> A quantifier-free sentence of L translates homophonically into L'.
>
> A universal generalization $\ulcorner \forall \alpha\ \phi_\alpha \urcorner$ of L translates into L' as the conjunction $\ulcorner \forall \alpha\ \phi_\alpha\ \& \phi_h \urcorner$.
>
> An existential generalization $\ulcorner \exists \alpha\ \phi_\alpha \urcorner$ of L translates into L' as the disjunction $\ulcorner \exists \alpha\ \phi_\alpha \vee \phi_h \urcorner$.
>
> The translation into L' of any sentence of L containing quantifiers is obtained by replacing each part that is a universal or existential generalization by its translation.[17]

Kripke's $L \rightarrow L'$ translation scheme appears to expose an inadequacy of Quine's criterion. Recall that according to that criterion, ontological commitment is carried not by outright designation but through its bound variables in a suitably regimented formulation of the theory. Consider then a true existential sentence of L like:

S: $\exists x$ (x wrote *A Brief History of Time*).

According to Quine's criterion, S is committed in L to there being an author of the work in question. Consider now the translation of S into L':

S': $\exists x$ (x wrote *A Brief History of Time*) $\vee$ (h wrote *A Brief History of Time*).

Both S' and the negative existential '$\sim \exists x$ (x wrote *A Brief History of Time*)' are true as interpreted in L'—making for a *modus tollendo ponens* inference to the right-hand disjunct of S', which is true in L' and which translates homophonically between L and L'. Even more jarring, the negative existential '$\sim \exists x\,(x = h)$', although straightforwardly false in L, is true as interpreted in L'. According to Quine's criterion S' and its true right-hand disjunct each evidently evades commitment in L' to there existing any author of *A Brief History of Time*. Indeed, the envisioned history of contemporary physics, as formulated in L', is evidently committed to there being no such author.

[16] The constant '*h*' designates something external to the universe over which the variables range. L' thus requires a free logic. See note 6.

[17] Something similar must be done for any variable-binding operators present. (Many such operators are reducible to the familiar quantifiers.)

Something is amiss. A correct translation of the envisioned history into L' preserves the history's commitments. In particular, the sentence S', if it is a direct translation of S, must preserve the latter's commitment to there being an author of *A Brief History of Time*. Kripke observes that Quine's criterion thus evidently delivers the wrong verdict concerning the history's ontological commitments in L'. Furthermore, S' evidently undertakes a commitment to there being an author of *A Brief History of Time* not by including Hawking in the range of the variables, but, directly contrary to Quine, through its use of the individual constant 'h' to designate Hawking.

10.2 First Reformulation

Kripke's thought experiment deviates from Church's: The universe of discourse of the ontological misogynist's language includes women, contrary to the ontological misogynist. In accepting the sentence '$\sim\ \exists x\,(x$ is a woman)' the ontological misogynist accepts a falsehood. The fact that his universe must exclude women for his theory to be true does not have the consequence that his universe excludes women; rather, it has the consequence that his theory is not true. Nor can the ontological misogynist make his theory true by modifying the language in which he formulates it. Analogously, one cannot legislate Hawking's nonexistence simply by excluding him from one's universe of discourse. The truth of '$\sim\exists x\,(x = h)$' in L' is irrelevant to the question of whether Hawking exists. The Hawking denier accepts '$\sim\exists x\,(x = h)$' even as interpreted in L.

Rather than pointing out an inadequacy in Quine's criterion, the preceding considerations draw attention to a significant fact: ontological commitment is a kind of *commitment*. There can be things one *ought* to do that one is not committed to doing. Perhaps one who ought to believe in things of a certain kind, or who secretly does so, might avoid the issue, and evade commitment, through logical tomfoolery. (We shall return to this matter in the closing section.)

On the other hand, an important point can be extracted by making one very significant improvement on Kripke's example. Suppose that, *salva pace* Kant, L' is augmented to include a predicate '*Exists*' whose semantic extension is the universal class of all and only existing things. Let us call this augmented language '$L+$'. We now consider a more nuanced scheme for translation of L into $L+$:

A universal generalization $\ulcorner\forall\alpha\ \phi_\alpha\urcorner$ of L translates into $L+$ as the conjunction $\ulcorner\forall\alpha\ \phi_\alpha$ & $[Exists(h) \rightarrow \phi_h]\urcorner$.

An existential generalization $\ulcorner\exists\alpha\ \phi_\alpha\urcorner$ of L translates into $L+$ as the conjunction $\ulcorner\exists\alpha\ \phi_\alpha \vee$ $[Exists(h)\ \&\ \phi_h]\urcorner$.

Although it is not logically true if the underlying logic is a free logic, the $L+$ sentence '$Exists(h)$' is in fact true. (See footnote 5.) Any theory couched in $L+$ that logically entails '$Exists(h)$' is thereby ontologically committed to Hawking despite the fact that '$\exists x\,(x\ =\ h)$' is false in $L+$. This feature points to a critical but

routinely overlooked feature of Quine's criterion: the criterion must be restricted in its application to languages with an *ontologically inclusive* universe of discourse. That is, the language's universe must include everything that exists (or perhaps every existing thing with regard to the universe's logical type).[18] The criterion is therefore not directly applicable to a theory couched in either L' or $L+$. Instead, the theory must first be translated into a regimented language that is not only logically suitable by having idioms of quantification that quantify over a universe of discourse, but also ontologically suitable by having an ontologically inclusive universe of discourse.

In a certain sense, this observation reverses the order of analysis. Quine's intent was that his criterion should in some sense fix what it is for something to exist according to a theory, whereas in fact, for the criterion to be successful the very language in which the theory is formulated must conform to a prior notion of *everything that exists*. Contrary to Quine's remark quoted above, deciding what to believe in is not the same thing as deciding what to admit into the universe over which one's variables range. The latter issue is independent, and is in a certain sense pre-decided as regards the criterion's application: the universe of discourse shall include everything that exists. The ontological issue is whether to hold that everything that exists includes Martians, or classes, or Cartesian egos, or mermaids, or Hawking.

The following wording, although not Quine's, provides a more exact formulation of his criterion:

> *OC*1: A theory T, couched in an interpreted language L_T employing objectual variables that range over exactly everything that exists, is ontologically committed in L_T to entities of kind K if and only if in order for the sentences of T to be true in L_T it must be that at least one entity or other of kind K is an element of the universe over which the objectual variables of L_T range.

According to *OC*1, ontological commitment—that which is expressed by the Standard English sentential matrix 'T is ontologically committed to Ks'—is a binary relation between an interpreted theory T (formulated in a particular kind of language) and a kind K. According to *OC*1, a given theory typically bears the ontological-commitment relation to a multiplicity of kinds simultaneously (*table, chair, material object, integer, even integer, prime integer, even prime integer*, etc.).[19] As a limiting case, a theory may be said according to *OC*1 to be ontologically committed to a particular individual x if *and only if* the theory bears the ontological-commitment relation to the particular

[18] There is controversy whether any language could have variables that range over absolutely everything there is. (Those on the negative side of the controversy face a well-known difficulty. What is it, exactly, that allegedly no language's variables can range over?) The universe of a language need not be a set.

[19] Presumably according to *OC*1, if a given theory T is ontologically committed to entities of kind K, then where K' is any kind that is a sub-kind of K as a matter of logic, T is also ontologically committed to entities of kind K'. As a limiting case, on *OC*1 every theory with any ontological commitment bears the ontological-commitment relation to *entities that there are*.

kind *thing that is x*—a kind of which *x* is necessarily the only instance.[20] In particular, it is neither necessary nor sufficient that the theory designates *x* by means of a singular term.

One severe limitation of *OC*1 is that its application is restricted to theories couched in languages with objectual variables of a certain stripe. There are languages without variables—at least possible languages—and in some of these one can formulate ontologically committed theories. Consider for example the theory whose only axiom is the sentence 'Mermaids exist', with its normal Standard English meaning. This theory is ontologically committed to mermaids, but *OC*1 is inapplicable if the axiom's language (a fragment of Standard English) does not include variables. Our mermaid theory must be reformulated using inclusive, objectual variables before *OC*1 can be applied. Quine judges the restriction to languages with variables to be of little moment. He writes:

> The quantificational form is a convenient standard form in which to couch any theory. If we prefer another language form . . . we can still bring our criterion of ontological commitment to bear in so far as we are content to accept appropriate systematic correlations between idioms of the aberrant language and the familiar language of quantification. . . .
>
> It is not with ordinary language, it is rather with one or another present or proposed refinement of scientific language, that we are concerned when we expound the laws of logical inference or [other scientific] analyses . . . And it is only in this spirit, in reference to one or another real or imagined logical schematization of one or another part or all of science, that we can with full propriety inquire into ontological presuppositions. . . .
>
> In a loose way we often speak of ontological presuppositions at the level of ordinary language, but this makes sense just in so far as we have in mind some likeliest, most obvious way of schematizing the discourse in question along quantificational lines.[21]

These dismissive remarks are dubious in the extreme. The familiar form of discourse—our mother tongue—is ordinary language, not quantification theory. Interestingly, Quine concedes this elsewhere:

> Now I grant that the meaning of quantification is covered by the logical rules; but the meaning which those rules determine is still that which ordinary usage accords to the idioms 'there is an entity such that', 'an entity exists such that', etc. Such conformity was the logistician's objective when he codified quantification; existential quantification was designed for the role of those common idioms. It is in just this usual sense of 'there is' that we mean to inquire whether there is [for example] such an entity as roundness.[22]

[20] A theory that bears the ontological-commitment relation to a given kind *K* is not thereby ontologically committed to *K* itself. Rather, the theory is thereby committed to (there existing) things of kind *K*. For a theory to be ontologically committed to *K* itself is for it to bear the ontological-commitment relation to the kind *thing that is (identical with) K*.

[21] Quine (1961b: 105–7).

Any regimented notation must be understood ultimately in terms of the everyday vernacular.[23] This in itself poses no problem for *OC*1 as long the theory couched in ordinary language can be formalized before applying the criterion. This is a genuine problem, however, for the philosopher who believes there is a deep difficulty—or worse yet, indeterminacy—about whether sentences of distinct language-forms are correct and literal, i.e., meaning-preserving, translations of one another. Those benighted philosophers are seriously hampered in the quest to discover a criterion for ontological commitment.

10.3 Some Misformulations

Quine's criterion invokes the overtly semantic idea of a universe of discourse. As Quine is quick to observe, this is an idea from extensional semantics (theory of reference), not from intensional semantics (theory of meaning). Quine's confinement to extensional semantics is to be expected, given his strictures against intensional semantic ideas.

On the other hand, *OC*1 does not employ the idea of a universe of discourse in a purely extensional manner. It is a serious problem for Quine that the concept of ontological commitment is not extensional. Church was evidently the first to make this important observation. Church relegated the point to a footnote, but it is devastating:

> I remark in passing that ontological commitment is an intensional notion, in the sense that ontological commitment must be a class concept rather than a class. For example, ontological commitment to unicorns is evidently not the same as ontological commitment to purple cows, even if by chance the two classes are both empty and therefore identical.
>
> (Church 1958: 1013–14*n*)[24]

One theory is committed to centaurs and not mermaids, another to mermaids and not centaurs; yet the extensions of the predicates 'is a centaur' and of 'is a mermaid' are the same. The same point can be made without resorting to the unreal. To modify an example of Quine's own, consider two theories, T_c and T_r, framed in the same language, having the following axioms, respectively:

T_c: $\exists x$ (x is a creature with a heart)
T_r: $\exists x$ (x is a creature with a kidney)

The two theories differ in their ontological commitments, but not extensionally.

[22] Quine (1966b: 65). [23] *Cf.* Kripke (1976: 379–80).

[24] By his assertion that 'ontological commitment must be a class concept rather than a class', Church means that a syntactic string of the form '*T* is ontologically committed to ___' is an *ungerade* (indirect, oblique) context, so that a general term that fills the blank thereby designates not the class that is its default extension but the concept that it ordinarily expresses as its semantic content. Church presents a clear formulation of his Fregean account in his (1956: 8 n. 20). A kind may be identified with a class concept.

To capture the concept of ontological commitment one must break free of Quine's discrimination against the non-extensional. Whether aware of it or not, Quine did just that. As observed, *OC*1 treats ontological commitment as a binary relation between a theory (i.e., a set of interpreted sentences) and a kind. (See footnote 20.) A kind, unlike a class, is non-extensional; different kinds can converge on the same class. This is Church's point. It might be hoped that this feature can be avoided by taking ontological commitment to be a binary relation between a theory and a class instead of a kind, or alternatively, as a non-distributive relation between a theory and a plurality of *things*. But the example of differing commitments to cordates and renates dashes this hope.

There is in fact a second crucially non-extensional aspect to ontological commitment. On reflection, it should not be surprising that the concept of ontological commitment is non-extensional. The general concept of commitment is prescriptive rather than purely descriptive.[25] As Cartwright notes, a striking anti-Quinean feature of *OC*1 is that the relation cited in the analysans is a modal relation: *it must be that* something of kind K belongs to T's universe of discourse in order that T be true.[26] Quine's criterion thus invokes a second nonextensional notion: necessity. Not only, as Church notes, is the object of ontological commitment an intensional entity; the ontological-commitment relation itself is a modal relation—appropriate for the purpose at hand but problematic for empiricism and deeply anti-Quinean.

The modal aspect of *OC*1 is crucial. This is illustrated through the contrast with its non-modal counterpart:

> *OC*1′: A theory T, couched in an interpreted language L_T employing objectual variables that range over exactly everything that exists, is ontologically committed in L_T to entities of a kind K if and only if, at least one entity of kind K is (happens to be) an element of the universe over which the objectual variables of L_T range if the sentences of T are true in L_T.[27]

Perhaps the most immediate difficulty with this non-modal criterion is that it attributes to any untrue theory ontological commitment to entities of every conceivable kind. By this reckoning, anyone who falls into error (and who among us is untainted in this regard?) is committed therewith to mermaids, vampires, and fire-breathing dragons. The criterion is only mildly kinder to true theories. When Descartes cautiously and temporarily suspended judgement concerning every proposition whatsoever, save that he thought and therefore existed, according to *OC*1′ even then he was committed to tables, hands, pieces of wax, irrational numbers, and even to Martians if there are any. The de-modalized analysans is excessively weak.

[25] More accurately, the notion of ontological commitment is *proscriptive*. One is under no rational obligation to acknowledge one's commitments, but one is rationally prohibited from disavowing them. A promise is a commitment and not merely a prediction concerning one's own conduct. (I am curious whether Quine's professed inability to apprehend non-extensional concepts led to problems in his interpersonal relationships.)

[26] *Op. cit.*, in Cartwright (1987: 4–5).

[27] *Cf.* Quine (1961c: 131).

The situation is not improved by strengthening the right-hand side as follows:

*OC*1″ A theory T, couched in an interpreted language L_T employing objectual variables that range over exactly everything that exists, is ontologically committed in L_T to entities of a kind K if and only if at least one entity of kind K is (happens to be) an element of the universe over which the objectual variables of L_T range.

On *OC*1″ the ontological commitment of a theory is dependent on the language in which the theory makes its claims, but altogether independent of the theoretical pronouncements themselves. According to *OC*1″ the only way for a theory to be ontologically over-committed is for its variables to range over things beyond everything that there is. But there are no such things for variables to range over. Therefore, according to *OC*1″ a properly formulated theory *cannot* be ontologically over-committed. A theorist may countenance centaurs, mermaids, fire-breathing dragons, or talking donkeys without becoming ontologically committed to these unreal entities. Let theories T_1 and T_2, each couched in the same language L, differ in that T_1 includes the sentence '$\exists x$ (x is a Martian)' while T_2 includes the sentence '$\sim \exists x$ (x is a Martian)'. Then according to *OC*1″, T_1 is committed to there being life on Mars if and only if T_2 is. More to the point, since the variables of L have unrestricted range according to *OC*1″, if there is life on Mars even T_2 is committed to Martians, whereas if there is no life on Mars even T_1 is not committed to Martians. According to *OC*1″ all theories, properly formulated, have exactly the same ontological commitment—indeed, commitment to exactly the *right* ontology.

Cartwright pointed out that 'to inquire into the ontological commitments of a theory is not to ask *what there is* but only to ask what the theory *says* there is.'[28] As a criterion of ontological commitment *OC*1″ is insufficiently discriminating, precisely because it is utterly insensitive to what a theory states. By contrast, Quine's actual criterion is formulated in a manner that makes it dependent on the specific pronouncements of the theory in question.

A concept of necessity thus plays a crucial role in *OC*1—indeed, some concept of necessity that directly pertains to what the theory in question says. Such is the 'must' in what must exist in order that the theory's pronouncements be true. The exact type of necessity must be specified if *OC*1 is to qualify as an employable criterion for theoretical ontological commitment, let alone if it is to be assessed. Until the type of necessity is specified, Quine's proposal must be regarded as a promissory note.

On the other hand, the relevant concept of necessity evidently cannot be understood as metaphysical necessity. It also evidently cannot be apriority, nor can it be physical necessity, nor natural necessity. Virtually no properly semantic feature of a natural language like Standard English is either metaphysically necessary or knowable a priori or physically necessary or nomologically necessary. If the Standard English sentence 'Something is an even prime integer' is true then the Standard English

[28] Cartwright (1987: 2).

universe of discourse includes at least one even prime integer. But this is neither metaphysically necessary nor a priori. The Standard English semantic contents of words like 'even' and 'prime' are contingent a posteriori features, not a consequence of any laws of nature.

Validity of an argument may be characterized thus: for the premises to be true, the conclusion must be true. The locution:

For the sentences in Γ to be true, it must be that ϕ

strongly suggests the idea of logical consequence. This sort of modality—logical necessity—may be analysed model-theoretically: ϕ is true in every model (i.e., true under every universe of discourse together with an admissible 'interpretation' of the non-logical vocabulary) in which the elements of Γ are true. Unfortunately, this explanation seems quite inapplicable in our present case. The sentence '$\exists x$ (x is a Martian)' is ontologically committed to Martians, yet there are models for the sentence whose universe consists entirely of natural numbers.

It is *epistemically* necessary for those able to read this essay that if 'There is life on Mars' is true in Standard English then the Standard English universe of discourse includes at least one Martian. This is because we know Standard English. But epistemic necessity is excessively weak for the purposes of *OC*1. It is equally epistemically necessary for us that the Standard English universe of discourse includes the number two, yet the nominalist sentence 'There are no numbers' is not thereby ontologically committed to two.

10.4 A Dilemma for Quinean Theory

The kind of necessity expressed by the 'must' in *OC*1 is indeed the necessity of law, but not of laws of nature or of metaphysics. What are relevant are the laws of *pure semantics*.[29] To explain, on a Fregean theory of definite descriptions it is a theorem of the pure semantics of Standard English that 'the sole author of *Waverley*' designates whoever uniquely wrote *Waverley*.[30] Combining this alleged meta-theorem with the historical fact that Walter Scott uniquely wrote *Waverley*, we may deduce that 'the sole author of *Waverley*' designates Scott in Standard English. This result is a truth of the semantics of Standard English. But it is a truth of *applied semantics*, not a theorem of pure semantics, because its derivation invokes a non-semantic fact. Likewise, it is a theorem of the pure semantics of Standard English that 'Snow is white' is true in

[29] Cartwright evidently draws nearly the same conclusion (1987:10). Here I combine Cartwright's insights with a Carnapian distinction. (See note 32 below.) Mark Richard suggested a similar improvement of Cartwright's proposed criterion (1998: 259–60). For relevant background see my (1993).

Truth as a consequence solely of pure semantics is evidently also the modality involved in Kripke's distinction between rigidity *de jure* and *de facto*, in his (1980: 21n).

[30] Even on a Russellian theory, the phrase is said to 'denote' the sole author of *Waverley*. Given Russell's views, the fact that the phrase 'denotes' whoever uniquely wrote *Waverley*, if anyone did, might be described as a truth of pure *pseudo-semantics*.

Standard English if and only if snow is white, whereas the fact that 'Snow is white' is indeed true in Standard English is a fact of applied semantics.

I submit that Quine's criterion for theoretical ontological commitment, properly interpreted, is to be understood as invoking a particular, special modality: *a truth of pure semantics*.[31] The criterion invokes this notion as follows:

> *OC*2: A theory T, couched in an interpreted language L_T employing objectual variables that range over exactly everything that exists, is ontologically committed in L_T to entities of kind K if and only if the sentences of T are such that it is a truth of pure semantics that if all those sentences are true in L_T then at least one entity or other of kind K is an element of the universe over which the objectual variables of L_T range.

This criterion of ontological commitment invokes two separate sources of non-extensionality: the notion of a *kind* as distinct from its extension; and the modality, *truth of pure semantics*. Both notions are essential. In particular, without the restriction to pure semantics, the criterion does not discriminate between T_c and T_r from the preceding section; as a matter of applied semantics, one is true if and only if the other is.

Quine is thus committed to accepting at least one kind of modality. It is easy to miss the significance of this. Quine's most famous contribution to philosophy has been his critique of the traditional concept of analyticity. Quine rejects analyticity on the ground (among others) that the traditional concept of a sentence that is 'true solely by virtue of meaning' has not been adequately explained. Yet traditional analyticity is more precisely definable in terms of the very modality invoked in his criterion for ontological commitment:

> ϕ is *analytic in* L $=_{def}$ that ϕ is true in L (a semantic fact) is itself a meta-truth of the pure semantics of L, i.e., that ϕ is true in L is a logical consequence of (the semantic contents of) the axioms of the pure semantics of L.

I do not mean that this definition provides a Quinean surrogate for the traditional conception of analyticity (as with Quine's notion of *stimulus-analyticity*). I mean that the traditional phrase 'true solely *by virtue* of its meaning' is a misnomer for a sentence that is true *as a logical consequence of* its meaning. That is, a sentence is *analytic* (in a language) if the fact that it is true (in that language) is itself a meta-truth of pure semantics.[32] The basic idea is not that the pure semantics provides

[31] I assume throughout that any logical consequence of truths of pure semantics itself qualifies as a truth of pure semantics.

[32] I defend this analysis in my (1993), cited in note 29 above. In his (1942: 11–12), Rudolf Carnap distinguishes between *pure* and *descriptive semantics*. In his terminology, 'pure semantics' pertains only to artificial languages, 'descriptive semantics' to historically spoken languages. The distinction I have in mind is analogous rather to the colloquial distinction between pure and applied mathematics. It makes perfect sense to speak of the pure semantics of an historically spoken language, e.g., German.

the fact or state of affairs that *makes* an analytic sentence true. We shall suppose throughout that 'bachelor' expresses in Standard English the concept *man who is eligible for marriage but has never married*. (A different example may be substituted.) Then the proposition expressed in Standard English by 'Bachelors are unmarried' does not 'correspond to', and is not 'made true by' any fact about language. The sentence describes extra-linguistic reality, the mundane fact that all marriage-eligible but never married men are unmarried. The core idea is that pure semantics, with no assistance from non-semantic facts, *logically entails* that the sentence is true.[33] For example, it is straightforwardly a meta-truth of the pure semantics of Standard English that 'Bachelors are unmarried' is true if and only if bachelors are unmarried. This is just to say that it is a meta-truth of the pure semantics of Standard English that 'Bachelors are unmarried' is true if and only if marriage-eligible but never married men are unmarried. Since the right-hand side of this biconditional is a truth of logic, it is a truth of the pure semantics of Standard English that 'Bachelors are unmarried' is true in Standard English. By contrast, 'Many bachelors are happier than many husbands' is true in Standard English partly as a consequence of a sociological fact.

My conclusion poses a dilemma for Quinean theory: his criterion of theoretical ontological commitment is correct only insofar as it invokes the crucial concept in terms of which the traditional concept of analyticity is properly analysed. Put another way, Quine's criterion of ontological commitment is philosophically reputable only to the extent that analyticity is. Either Quine's attack on analyticity is philosophically wrongheaded, or his criterion of ontological commitment is.

Our present criterion *OC*2 has the consequence that any theory whose axiomatic basis is analytically *false* (for example, the theory that there is a married bachelor) is on that ground alone ontologically committed to things of every kind whatsoever. This result does not seem immediately objectionable. Any theory whose axiomatic basis is analytically false is maximally committed, as much as any syntactically

Carnap also proposes as a criterion of adequacy of a definition of analyticity-in-a-language ('L-truth'), in effect, that it must honour the following relationship: ϕ is $analytic_L$ iff the pure semantics of L (in the sense used here) delivers $\ulcorner$'ϕ' is $\text{true}_L\urcorner$ as a theorem (Carnap 1942: 83–4). This relationship is very close to the definition of analyticity proposed here. Carnap explicitly declines to cite the relationship as defining analyticity, however, on the ground that the condition on the right-hand side of the biconditional is not merely meta-theoretic ($\ulcorner$'ϕ' is $\text{true}_L\urcorner$) but meta-metatheoretic ('$\vdash \ulcorner$'ϕ' is $\text{true}_L\urcorner$'), whereas Carnap believes that analyticity must be definable in the metalanguage. Against this it should be noted that the traditional conception of a sentence that is true in the object language *solely by virtue of* its meaning is arguably a meta-meta-concept. It should also be noted that the definition proposed here does not invoke the notion of logical validity to define logical validity. Rather it presupposes logical validity among meta-propositions to define analyticity-in-the-object-language of sentences. (Thanks to Michael Rescorla for discussion.)

[33] In his critique Quine misunderstands the relevant notion of truth *solely by virtue of meaning* as that of a sentence made true by no non-semantic state of affairs. Carnap and the other logical positivists whom Quine sought to debunk committed the same error, which is traceable to David Hume's distinction between *relations of ideas* and *matters of fact*. Pre-Quinean empiricists erred in insisting that 'Bachelors are unmarried' fails to describe a genuine extra-linguistic fact. Quine is correct that 'Bachelors are unmarried' is as much about a 'matter of fact' as is 'Some bachelors are happy'. It is a mistake, however, to conclude that the former is therefore like the latter in being *a posteriori*.

inconsistent theory is. Arguably, it is a further consequence that every theory is ontologically committed to the ontological commitments of logic, whatever those might be. If so, then so be it. The commitments of logic, ontological or otherwise, are utterly unavoidable.

On *OC*2 a theory's ontological commitments are closed under analytical super-kinds but not under sub-kinds. A theory that is committed to creatures that talk is committed to creatures, but it is not *ipso facto* committed to any particular talker. The theory that there are bachelors is ontologically committed to men, but not *ipso facto* to any particular bachelor.

One interesting application of this interpretation proves the criterion's mettle. The idealist George Berkeley professed to believe in tables, chairs, mountains, and trees, yet emphatically denied the existence of matter. Tables and chairs, said Berkeley, are made up of 'ideas', i.e., of visual sensations and the like. This raises an interesting and non-trivial question: is Berkeley's bizarre theory ontologically committed to material objects? That he denied the existence of matter does not settle the issue. He also accepted as true sentences like 'There are tables' and 'There are chairs'. Formalizing in the usual manner of '$\exists x$ (x is a table)', according to *OC*2 even if Berkeley's theory is ontologically committed to tables and chairs, the question of whether the theory is ontologically committed to material objects turns on a further, semantic question: Is the Standard English sentence 'Tables are material objects' analytic? If it is not—as Berkeley would have believed (and as I believe)—then even though his theory is committed to tables and chairs, it is not thereby committed to material objects.[34]

10.5 Extensional vs. Intensional Semantics

It might be thought that Quine can reconcile his criterion with his attack on analyticity by distinguishing, as Quine in fact does, two notions of truth of pure semantics: *truth by pure extensional semantics* and *truth by pure intensional semantics*—or as Quine would put it, *truth solely of the theory of reference* and *truth solely of the theory of meaning*. Quine rejects intensional semantics as disreputable but accepts extensional semantics. His criterion of theoretical ontological commitment, although non-extensional—and properly so—evidently makes do with the notion of a truth of pure extensional semantics. This is essentially Cartwright's assessment.[35] It may be argued that, unlike Quine's criterion of ontological commitment, in order to accommodate 'Bachelors are unmarried' (which is not syntactically valid) the definition of analyticity, must invoke truth by intensional semantics—e.g., that 'bachelor' expresses the concept *marriage-eligible but never married man* in Standard English.

The notion of truth solely by pure extensional semantics is not itself extensional. Indeed, it is one source of the modality that is built into ontological commitment.

[34] Richard (1998: 260 n. 29) suggests that even if Berkeley believed in (and referred to) material objects, he was not ontologically committed to material objects.

[35] Cartwright (1987: 11).

Truth solely by pure semantics is, like other modalities (e.g., metaphysical necessity), an attribute not of truth-values but of propositions, in this case of meta-propositions. Anything that is true solely by pure extensional semantics is true. Other true meta-propositions are not true solely by pure extensional semantics (e.g., that 'Snow is white' is true in Standard English). Given Quine's rejection of intensional notions, he cannot simply avail himself of truth solely by pure extensional semantics without further ado.

Furthermore, the envisioned reconciliation does not succeed. Consider for example the theory whose sole axioms are the following three:

Smith exists; Smith is a man; Smith is married

with 'exists', 'man', and 'married', receiving their Standard English meanings. This theory is committed to the existence of at least one entity to which Smith is married. A viable criterion of theoretical ontological commitment needs to accommodate this.

In one sense the notion of analyticity requires no more intensional semantics than Quine's criterion of ontological commitment requires. As illustrated in the preceding section, it is meta-true solely by the pure extensional semantics of Standard English that 'Bachelors are unmarried' is true if bachelors are unmarried. But this, we are assuming, just is the meta-proposition that 'Bachelors are unmarried' is true if marriage-eligible but never married men are unmarried. It thus immediately follows from a truth of the pure *extensional* semantics of Standard English that 'Bachelors are unmarried' is true. Nothing about the Standard English *content* of 'bachelor' (as opposed to its extension) is invoked in the derivation. This last point can be illustrated, following Church, through translation. We begin with the meta-sentence:

(1) 'Bachelors are unmarried' is true_{Eng} if bachelors are unmarried.

This is the right-to-left half of a *T*-sentence. As such, it expresses a truth of the pure extensional semantics of Standard English. The content of (1) can be equally well expressed without using the word 'bachelor' (except to mention it). Assuming that 'bachelor' and 'marriage-eligible but never married man' are strictly synonymous, (1) may be reformulated as:

(2) 'Bachelors are unmarried' is true_{Eng} if marriage-eligible but never married men are unmarried.

Since they express the same thing, (2) expresses a truth of the pure extensional semantics of Standard English no less than (1) does; no truth of intensional semantics proper is invoked by (2) any more than by (1). It is a trivial logical consequence of (2) that 'Bachelors are unmarried' is true in Standard English. Thus it is an immediate consequence of the truth of pure extensional semantics expressed by (1) that 'Bachelors are unmarried' is true in Standard English. It follows by the proposed definition that 'Bachelors are unmarried' is analytic in Standard English.[36]

[36] More specifically, that 'Bachelors are unmarried' is true in Standard English is a meta-truth of pure *extensional* Standard English semantics. The derivation of the Standard English truth of 'Bachelors are unmarried' from the meta-proposition expressed by (1) does not invoke any truth or inference rule of

Contrary to what might be expected from the terminology the distinction between extensional and intensional semantics is not mutually exclusive. Any separation is only temporary; the two cannot be divorced. The extensional semantics of a language that has non-extensional operators invokes ideas from intensional semantics. The Tarski-style definition of truth for a language with modal operators, for example, proceeds along the same lines as the classical definition of truth except relativizing extensional semantic notions to possible worlds. Relativization of extensional semantic notions to possible worlds is precisely a version of intensional semantics. Even more blatant, the extensional semantic evaluation of the Standard English sentence 'Chris believes that the Earth is round' involves essential reference to the Standard English semantic content of 'The Earth is round', the proposition that the Earth is round.

These observations point to yet another fly in the ointment. Quine's criterion, as he applied it, is unjust; he and his followers have been too quick to condemn the innocent. Consider the metaphysical theory

$A1$: $\Diamond\exists x$ (x is a donkey that talks)
$A2$: $\sim\exists x\Diamond$ (x is a donkey that talks)

This theory clearly avoids ontological commitment to entities that might have been talking donkeys. Indeed, the theory is committed to there being no such entities. While it explicitly states that there *might have* been talking donkeys, it consistently denies that there are any entities that themselves might have been talking donkeys. On classical modal semantics, the truth of axiom $A1$ requires that the variable 'x' include in its range at least one possible entity that is a talking donkey in at least one possible world. Quine himself would have rejected the theory given above as unintelligible, in that one of its axioms quantifies across a modal operator. But this example does not beg the question. Whatever Quine might have said about the matter, the metaphysical theory is perfectly consistent (formally analogous theories are even true), and therefore free of any commitment to there being entities that might have been talking donkeys.

An exactly analogous situation arises in temporal semantics. There are also examples of the same sort involving propositional attitude in lieu of modality and temporality. Care must be taken, for example, to avoid imputing an inflated ontology to the social anthropologist who holds the following theory:

Hob thinks that $\exists x$ (x is a witch & x has blighted Bob's mare).
$\sim\exists x$ [Hob thinks that (x is a witch & x has blighted Bob's mare)].[37]

intensional semantics proper; rather, the inference is directly from one truth of pure extensional Standard English semantics to another. (Thanks to Felipe M. Hernandez for pressing me to address this issue.)

[37] The example is due to Peter Geach.

These considerations suggest a straightforward repair:

> *OC*3: A theory T, couched in an interpreted language L_T employing objectual variables that range *with respect to the actual world at the present time* over exactly everything that *actually presently* exists, is ontologically committed in L_T to entities of kind K if and only if the sentences of T are such that it is a meta-truth of pure semantics that if all those sentences are true in L_T then at least one entity or other of kind K is an element of the universe over which the variables of L_T range *with respect to the actual world at the present time*.

Again, this formulation invokes semantic ideas that Quine rejected; but again, the immediate objective is not to satisfy any particular philosopher, whether that philosopher's demands be reasonable or not. The objective, rather, is to provide a correct, and preferably employable, criterion for theoretical ontological commitment. The present candidate appears promising, and has the distinct virtue over *OC*2 that it recognizes *A*1's lack of commitment to entities that might have been talking donkeys.[38]

The criterion under consideration may be extended into one for general theoretical commitment:

> *C*3: A theory T, couched in an interpreted language L_T, *is committed in* L_T *to* p's being the case if and only if the sentences of T are such that it is a meta-truth of pure semantics that if all those sentences are true in L_T then p is the case in the actual world at the present time.

Subsuming *OC*3 under *C*3 we may say that a theory T is ontologically committed to entities of kind K if and only if T is committed according to *C*3 to there being entities of kind K. The prior restriction to languages with variables and variable-binders is removed.

10.6 Ontological Commitment as a Species of Theoretical Commitment

Church deems it a shortcoming of Quine's criterion that its actual application does not provide a theory's ontological commitments immediately and directly. Instead one must first demonstrate in a metalanguage that the truth of the theory requires that the universe over which the variables range shall include entities of a given kind.[39] Church submits a more direct criterion. However, Church's proposal provides merely

[38] Our present candidate cannot be put forward as a necessary or eternal truth, in view of its indexical reference to a particular possible world and time. It can be offered instead as a sentence that is true in every possible context in which it might be uttered. If *OC*3 is true in every possible context, then there is a necessary and eternal counterpart.

[39] Church (1958: 1013–14). Church evidently construes Quine's proposal epistemologically, as a test for determining a theory's ontology.

a sufficient condition, and this only for a theory of a particular form—*to wit*, among the theory's theorems (or perhaps among its axioms) is an existentially quantified sentence. Church's criterion must be formulated in a metalanguage of which the theory's language is itself a fragment. Moreover Church's 'criterion' is actually infinitely many criteria, a different criterion for each open sentence of the object language. For example, Church asserts:

> 'There is at least one entity *x* such that *x* is a donkey and *x* talks' (interpreted as a sentence of a fragment of the language of this very sentence) is ontologically committed to entities *x* such that *x* is a donkey and *x* talks.

Similarly for each object-language open formula in place of '*x* is a donkey and *x* talks'. (The parenthetical phrase is not Church's. I have included it on his behalf.)

I am not persuaded that the feature Church deems a shortcoming of Quine's proposal is genuinely problematic, or that Church's criterion is superior to *OC*3 in this regard. I am also unpersuaded that Quine's criterion is superior to Church's alternative criterion. Church's is immune to counterexample. Quine's can also be made so. By contrast with Church's alternative, *OC*3 is content to state a theory's ontological commitments in a disjoint metalanguage. It allows that the theory's ontology might not be an actual theorem of the theory, in fact perhaps that the ontology is not even expressible in the language of the theory itself. Quine deems this significant. He writes:

> It is instructive to observe that the ontology of a theory may embrace objects of some kind *K* even where *K* is not definable in the terms of the theory (Quine 1961c: 132).

However, this feature of Quine's criterion is not a significant advantage. If a theory bears the ontological-commitment relation to a kind *K* for which there is a term in the metalanguage, then a term for *K* can simply be added to the object language.

Doing so affords a possible improvement. Conspicuously absent from *OC*3 is the natural idea of theoretical commitment as logical consequence. Some might prefer to have a criterion of ontological commitment that looks explicitly at theoretical consequences expressible by means of existential quantification in the language of the theory. To this end I would offer a new criterion, which invokes the idea of a general term (e.g., the common noun 'tiger') *designating* a kind. A general term τ of a language *L* designates a kind *K* in *L* only if for every world *w* and time *t*, τ applies in *L* with respect to *w* and *t* to an individual *i* if and only if *i* is an instance of *K* in *w* at *t*.[40] I submit the following as an alternative to *OC*3, where Π_τ is the predicate corresponding to τ (e.g., 'is a tiger'):

[40] This condition is necessary and insufficient. *Cf.* my (2005b: 52–4, 69–75, 385); and (2012). The worlds in question need not be genuinely *possible* worlds. Thus, even if it is impossible for there to be any mermaids, and it is equally impossible for there to be any centaurs, there is an impossible world in which there are individuals of one of these mythical kinds and none of the other.

*OC*4: For any theory T couched in an interpreted language L_T with a variable-binding existential quantifier $\exists$ (and employing the standard syntactic formation rules), and employing objectual variables that range with respect to the actual world at the present time over exactly everything that actually presently exists, for any general term τ of L_T and for any kind K such that it is a truth of pure semantics that *t designates* K in L_T, T is ontologically committed in L_T to entities of kind K if and only if $A_T \vDash \ulcorner \exists\alpha\ \Pi_\tau \alpha \urcorner$, where A_T is the set of T's axioms.

This criterion is applicable to any theory that has been formalized in an appropriate quantificational language.

What is the relationship between the two criteria *OC*3 and *OC*4? Assume the following: (i) there is a theory T, couched in an interpreted language L_T with a variable-binding existential quantifier $\exists$ and objectual variables, and axiomatized in L_T by A_T; and (ii) there is a general term τ of which it is true by pure semantics for L_T that τ designates a particular kind K in L_T. Then T is ontologically committed to entities of kind K according to *OC*3 if and only if it is equally thus committed according to *OC*4.[41]

*OC*4 is extendable into an alternative criterion for general theoretical commitment:

*C*4: For any theory T couched in an interpreted language L_T employing objectual variables, for any sentence ϕ of L_T, and for any proposition p such that it is a truth of pure semantics that ϕ expresses p as its semantic content, T is committed in L_T to p's being the case if and only if $A_T \vDash \phi$, where A_T is the set of T's axioms.

As an alternative to *OC*4 we may say that a theory T is ontologically committed to entities of kind K if and only if T is committed according to *C*4 to there being entities of kind K.

Our proposal has significant limitations. Arithmetic has ontological commitments but it is not axiomatizable. Goldbach's conjecture is false if and only if arithmetic is ontologically committed to even integers greater than two that are not the sum of two primes. It is presently unknown whether arithmetic is committed to such numbers. If Goldbach's Conjecture is false, then at least it is discoverable that arithmetic is so committed. However, Church's theorem taken together with the Church-Turing thesis have the consequence that if *C*4 is mathematically certain, then there is no effective decision procedure—no automatic recipe—for determining of any given proposition

[41] The pure semantics of L_T may be thought of as a direct specification of the *intended model* for L_T, in which truth coincides exactly with the absolute notion of truth in L_T (with respect to the actual world and the present time). Trivially, if T is ontologically committed according to *OC*4 to entities of kind K, then this is equally so according to *OC*3. Suppose conversely that it is meta-true by pure semantics that if T is true in L_T then at least one element of the universe over which the variables of L_T range is an instance of K. In that case, the axioms of T analytically entail $\ulcorner \exists\alpha\ \Pi_\tau \alpha \urcorner$ in L_T. An *admissible model theory* (one that represents the space of genuine logical possibilities) must validate all the analytically valid entailments of L_T. Then $A_T \vDash \ulcorner \exists\alpha\ \Pi_\tau \alpha \urcorner$. Hence if T is ontologically committed according to *OC*3 to entities of kind K, then this is equally so according to *OC*4.

p whether an axiomatized theory is committed to it. Nevertheless *C*4 might correctly capture what theoretical commitment is, and *OC*4 what ontological commitment is, for axiomatized theories.

10.7 Existential Commitment

I have been holding in abeyance a crucial fact that conflicts with one of the central motivations for Quine's criterion: such Standard English constructions as 'some', 'a', and 'there is' are rather more flexible, and often broader in their application, than the Standard English verb 'exist' and its cognates ('there exist', etc.). This is indicated by sentences like the following:

> There have been forty-four US presidents, most of whom no longer exist.
>
> This petrified bone is a fossil of a particular organism that no longer exists.
>
> This was caused by something that no longer exists.
>
> Their actions will bring about something that does not yet exist.
>
> There are languages that once existed but do not anymore.
>
> Someone who does not yet even exist will discover what you have done.
>
> There is a particular possible individual who does not exist but who would have existed had these gametes united to develop into a zygote.[42]
>
> There are true propositions whose components are jointly incompossible, yet no such proposition can exist.[43]

By Quine's lights, each of the displayed sentences is committed to the existence of a certain kind of entity whose existence the sentence denies. Yet each sentence may be interpreted so that it could be true. This is a prima facie difficulty for both *OC*3 and *OC*4.

There is no inconsistency if a distinction is drawn—anti-Kantian, anti-Fregean, anti-Russellian, anti-Quinean—between a generic notion of metaphysical *being* and a metaphysically special notion of *existence* as a special case of being. Unrestricted 'there is' or '∃' may then be conscripted for the former (begging the reader's pardon for the misnomer, 'existential quantifier') while a special and restricted predicate is introduced for the latter, as was done in section 10.2 above.[44] What Quine sees as 'ruining the good old word "exist"' would be recognized instead as recognition of the word's special metaphysical status. Indeed Quine might be seen as joining with his predecessors in ruining the good old idiom 'there is' of quantification, by imposing a

[42] In Francis Coppola's masterpiece, *The Godfather*, Marlon Brando, portraying the mobster patriarch Don Corleone says, 'Some day—and that day may never come—I'll call upon you to do a service for me.'

[43] I make this claim in Salmón (1987). Possible entities are *incompossible* if it is impossible for them to exist jointly.

[44] I argue contrary to Kant that existence is a 'real predicate', in Salmón (1987) and in Salmón (2014).

restriction. This is not to say that the universe of discourse—the universe of things that are said to *be*—cannot be restricted to existing things, or even that such a restriction is not indeed the default interpretation. It is to recognize that alternative interpretations of the quantifiers are permissible, even if the Standard English verb 'exist' is a univocal and non-indexical term for a specific and metaphysically honorific (and therefore non-universal) property.[45]

There is no pressing difficulty with the proposed distinction, but it does raise a question: does the metaphysically generic notion of being have some generic *ontological* status broader than full-fledged existence? It is tempting from the present perspective to view Quine's criterion as blurring together two different kinds of theoretical ontological commitment: (i) general commitment to there *being* entities of a given kind; and (ii) as a special case, *existential commitment*, i.e., a more specific commitment to there *existing* entities of the kind in question. This gives rise to a form of neo-Meinongianism. Each of the sentences displayed above evidently bears general ontological commitment while disowning an existential commitment to things of a specific kind.

In fact, each of those sentences is then bearing the ontological-commitment relation to the kind *entity that does not exist*. A criterion of theoretical ontological commitment might then be seen as having the same purpose it always had: to clarify what it is for a theory to require, in order that it be true, that there *be* things of a given kind. A theory T is furthermore *existentially committed* to entities of a given kind K when, but only when, it is ontologically committed to entities that both exist and are instances of K—where *entity that exists and is an instance of K* is an analytical sub-kind of K, and thence to which a theory may bear the ontological-commitment relation. This is encapsulated in the following definition:

> A theory T is *existentially committed* to entities of kind $K =_{def}$ T is ontologically committed to entities that exist and are of K.

Thus *OC*3 and *OC*4 may be seen as yielding alternative criteria of existential commitment.

It emerges on reflection that Meinongianism is not a very happy path. The *being* expressed in each of the sentences displayed above—the *there-is*-ness—need not be regarded as an ontological status, as opposed to some other sort of metaphysical status. The issue is at least partly terminological. The sort of being in question is not a weak or pale kind of existence. Nevertheless at least some of the sentences displayed above can be translated into sentences that employ variables ranging with respect to a world w and a time t over exactly everything that exists in w at t, thereby avoiding commitment to entities that do not exist. For example, the first displayed sentence can be recast as the following, where 'Σ' is the existence-restricted (so-called *actualist* and *presentist*)

[45] These sentences in the metalanguage employ a universe of discourse that extends beyond the things that exist.

existential quantifier 'there exists an entity such that',[46] 'Π' is its dual 'every existing entity is such that', '*H*' represents the tense operator 'at some past time' (or 'it has been the case that . . .'), and '*HA*' is its dual 'at every past time':

$H\Sigma x_1$ [x_1 be a U.S. president & $H\Sigma x_2$ [$x_1 \neq x_2$ & x_2 be a U.S. president] & . . . &
$H\Sigma x_{44}$ [$x_1 \neq x_{44}$ & $x_2 \neq x_{44}$ & . . . $x_{43} \neq x_{44}$ & x_{44} be a U.S. president]] . . .]
& $HA\Pi y_1$ [y_1 be a U.S. president $\rightarrow$ $HA\Pi y_2$ [y_2 be a U.S. president $\rightarrow$ . . .
$\rightarrow$ $HA\Pi y_{45}$ [y_{45} be a U.S. president $\rightarrow$ $y_1 = y_2 \vee y_1 = y_3 \vee \ldots \vee y_{44} = y_{45}$]] . . .]
& $H\Sigma y$ [y be a U.S. president & *Today* $\sim \Sigma x\,(x = y)$].

We may rest content for the time being—perhaps until a better understanding is achieved—to deny ontological status to being, and to require simply that the variables range over exactly everything that exists—no less and, at least as important, no more. (See footnote 9 above.) Our current criteria of ontological commitment are then restored to their original status as criteria of a theory's commitment to there *existing* entities of a given kind, there being no difference between ontological and existential commitment.

Here then is our final rendering of the criterion:

> *OC5*: A theory T, couched in an interpreted language L_T employing objectual variables such that it is a truth of pure semantics that the objectual variables range with respect to a world and a time only over things that exist in that world at that time, is ontologically committed in L_T to entities of kind K with respect to a world w and a time t if and only if the sentences of T are such that it is a meta-truth of pure semantics that if all those sentences are true in L_T then at least one entity or other of kind K is an element of the universe over which the objectual variables of L_T range with respect to w at t.[47]

[46] A quantifier is *actualist* if the universe over which it quantifies with respect to a possible world is restricted to things that exist in that world. A quantifier is *presentist* if the universe over which it quantifies with respect to a time is restricted to things that exist at that time. A quantifier is *existence-restricted* if it is actualist and presentist. Where the universe over which variables range with respect to a world and a time is exactly everything that exists in that world at that time, existence-restricted quantifiers may be replaced with the standard quantifiers.

If an existence-restricted existential quantifier, Σ (read: 'there exists an entity . . . such that'), is taken as primitive, the existence predicate is definable in terms of it:

$Exists =_{def} \lambda x[\Sigma y\,(x = y)]$.

If instead (and more naturally) the existence predicate is taken as primitive, the existence-restricted universal and existential quantifiers, Π and Σ, are definable in terms of it:

$\Pi\alpha\phi_\alpha =_{def} \forall\alpha$ [α exists $\rightarrow$ ϕ_α]
$\Sigma\alpha\phi_\alpha =_{def} \exists\alpha$ [α exists & ϕ_α]

[47] An example due to C. Anthony Anderson brought to my attention that an additional restriction is required. The truth of pure semantics that at least one entity of kind K is an element of the relevant universe if the theory is true must not depend on the meta-proposition that the universe over which the objectual variables range with respect to a world and a time includes *all* those things that exist in that world at that time, as opposed to including *only* such things, i.e., as opposed to being *restricted* to such things.

The requirement that the universe of discourse with respect to a circumstance be restricted to things that exist in that circumstance has significant consequences. A theory that includes a sentence like 'There are forty-four present-or-former US presidents' must be translated into a language whose variables range over only things that presently exist before applying *OC*5. To do this, it must first be determined whether the theory holds that there *presently exist* forty-three former US presidents. More significantly, special care must be taken when assessing a theory formulated by employing a universe that includes nonexistent things. The theory must first be translated, if possible, into a language whose universe of discourse with respect to the actual world at the present time is not only ontologically inclusive but ontologically proper, i.e., consisting of exactly what actually exists now. *OC*5 must then be applied to the translation. If a theory's formulation is not translatable into a language with an ontologically proper universe, strictly speaking *OC*5 then issues no verdict concerning the theory's ontology. Contrary to Quine, a theory whose formulation employs a universe that extends beyond what exists is not *ipso facto* committed to nonexistent things.

Oversimplifying, the basic idea underlying *OC*5 is straightforward: for a theory T to be ontologically committed to entities of kind K is exactly for the conditional $\ulcorner A_T \rightarrow \exists\alpha\Pi_\tau\alpha\urcorner$ to be analytic in a language in which A_T is a conjunction of the axioms of T, the universe of discourse is ontologically proper, and Π_τ is the monadic predicate constructed from the general term τ, which designates K. (See footnote 41.) On reflection, it should be none too surprising that a criterion for a theory's commitment to there existing some entities or other of a given kind should presuppose an unrestricted notion of everything that *exists*. If the criterion is trivial, then at least it is not incorrect.

Its potential usefulness is another matter. To settle a theory's ontology it is not pertinent to determine what kinds of entities belong to the theory's universe of discourse. There are women in the universe of ontological misogyny; there are no mermaids in the universe of mermaid theory. That is precisely why both of these theories are wrong. Rather one must determine what kinds of entities *have to* be among everything that exists if the theory in question is to be true. When fully spelled out, at bottom the criterion (without invoking intensional semantics proper)[48] fixes a theory's ontological commitment to be to whatever kinds the theory analytically

Otherwise the ontological commitments of the semantic meta-theory itself (e.g., to sets, to sequences, to expressions, etc.) will be incorrectly imposed on the object theory. The needed additional restriction may be captured thus:

> *OC*5′: A theory T, couched in an interpreted language L_T with objectual variables such that it is a truth of pure semantics that the objectual variables range with respect to a world and a time over exactly everything that exists in that world at that time, is ontologically committed in L_T to entities of kind K with respect to a world w and a time t if and only if the sentences of T are such that, *for every language L'_T that results by replacing the universe of L_T with respect to a world and a time by a sub-universe of that universe*, it is a truth of pure semantics that if all those sentences are true in L'_T then at least one entity or other of kind K is an element of the universe over which the objectual variables of L'_T range with respect to w at t.

[48] Contrary to Richard (1998). See note 36 above.

entails there exist entities of. Perhaps this is not an utterly useless intellectual tool, but neither is it a magic wand.

We saw in section 10.1 that Quine's criterion self-consciously declines to impute ontological commitment merely on the basis of designating, and that this is indeed a virtue in light of the apparent absence of ontological commitment to Stephen Hawking in a sentence like 'Either Hawking first predicted Bekenstein-Hawking black-hole radiation, or else Bekenstein did.' Quine is correct that a theory's ontological commitments are evidently not carried merely by what the theory names; rather, such commitments depend directly and entirely on what the theory analytically entails exists. We also saw that Quine's criterion of ontological commitment therefore requires free-logical versions of universal instantiation and existential generalization. The premise that if Hawking is a theoretical physicist then there is such a thing as Hawking, although obvious and trivial, is not true solely by logic. Rather it is true by the nature of being a physicist, as distinct from (for example) being admired or being mentioned. The formally analogous premise that if Isaac Newton is admired then there is something admired, is not true by logic–at least not for all notions of metaphysical being—and the premise that if Isaac Newton is admired then there is Newton is not even true. Newton no longer exists; he is admired nevertheless. For some more generous notions of being, it is a matter of logic that if Newton is admired, then 'there is' something that is admired. Not so with arbitrary formulae that invoke singular terms. Even for the more generous notions of being, the disjunction 'Either Hawking wrote *A Brief History of Time* or Bekenstein first predicted Bekenstein-Hawking black-hole radiation' does not free-logically entail 'There is something such that either it wrote *A Brief History of Time* or Bekenstein first predicted Bekenstein-Hawking black-hole radiation.'

On the other hand, we also saw from Kripke's argument in connection with a universe of discourse lacking Hawking that ontological commitment seems sometimes to be carried through naming rather than through existential quantification. How are these conflicting facts to be reconciled?

What kind of language a theory is couched in is one issue, what it is committed to another. To determine the ontological commitments of a theory, it is often helpful to recast the theory in an ontologically perspicuous language. A useful translation procedure for the purpose of assessing the ontology of the envisioned history of contemporary physics as couched in L' runs in exactly the opposite direction from Kripke's:

A quantifier-free sentence of L' translates homophonically into L.

A universal generalization $\ulcorner \forall \alpha \, \phi_\alpha \urcorner$ of L' translates into L as a restricted universal generalization $\ulcorner \forall \alpha \, (\alpha \neq h \rightarrow \phi_\alpha) \urcorner$.

An existential generalization $\ulcorner \exists \alpha \, \phi_\alpha \urcorner$ of L' translates into L as a restricted existential generalization $\ulcorner \exists \alpha \, (\alpha \neq h \, \& \, \phi_\alpha) \urcorner$.

The translation into L of any sentence of L' containing quantifiers is obtained by replacing each part that is a universal or existential generalization by its translation.

Where ϕ is a sentence of L and ϕ' is a sentence of L' such that one translates the other by either Kripke's $L \rightarrow L'$ scheme or this $L' \rightarrow L$ scheme, it is meta-true solely by the pure semantics of both L and L' that ϕ is true in L if and only if ϕ' is true in L'. But the $L' \rightarrow L$ scheme is superior to Kripke's scheme in at least two important respects.[49]

First, it is apparent that at least one of the schemes takes liberties, failing to preserve semantic content. The result of translating the translation back again into the original language, although classically equivalent to the original sentence, apparently means something different in the original language. For example, the translation of S', as a sentence of L', back into L is '$\exists x\,(x \neq h \,\&\, x$ wrote *A Brief History of Time*$) \vee (h$ wrote *A Brief History of Time*$)$', which is classically equivalent, but not free-logically equivalent, to the sentence S of L from which S' was obtained. Between the two schemes it is considerably more plausible that the $L' \rightarrow L$ scheme is genuinely content-preserving. The $L' \rightarrow L$ scheme provides a usable decoder that specifies for speakers of L how sentences like '$\sim \exists x\,(x$ wrote *A Brief History of Time*$)$' and '$\sim \exists x\,(x = h)$', both false in L but true in L', are to be understood as interpreted in L'. Kripke's $L \rightarrow L'$ scheme does not do the same in reverse. A sentence of L and its translation under Kripke's scheme into L' evidently differ in logical form. Moreover, the content of a universal generalization is not a conjunctive proposition; the content of an existential generalization is not a disjunctive proposition. If it is stipulated that the variables range in L over exactly the entities that exist, then the negative existential '$\sim \exists x\,(x = h)$' may be regarded as expressing in L that Hawking does not exist, whereas in L' this same sentence expresses the truism that Hawking is not someone else.

Second, insofar as the $L' \rightarrow L$ scheme is content-preserving, it provides exactly what is needed in order to apply *OC*5 to determine the ontology of a theory couched in L'. Kripke's $L \rightarrow L'$ translation scheme produces a sentence whose truth conditions in L' are the same as those of '$\exists x\,(x = h)$' in L. Despite this, Hawking's existence is not genuinely expressible in L'. In particular, the simple reflexive identity '$h = h$', which translates homophonically, does not free-logically entail '$\exists x\,(x = h)$', and therefore does not provide a means to express in L' that Hawking exists. Even if the envisioned history of contemporary physics is ontologically committed to Hawking, its 'translation' *via* Kripke's scheme is not. Indeed, since no sentence of L' translates into a sentence of L that entails '$\exists x\,(x = h)$', no theory formulated in L' is committed to Hawking. By the same token, since no sentence of L' translates into a sentence of L that entails '$\sim \exists x\,(x = h)$', no theory formulated in L' is committed to Hawking's nonexistence. It should be noted, though, that if a means for expressing

[49] I thank Aliosha Barranco and Viorica Ramírez de Santiago for pressing me to clarify my thoughts regarding the utility of the $L' \rightarrow L$ scheme.

existence is added to L', then the theory formulated in the expanded language by 'h is a physicist & (h is a physicist $\rightarrow$ h exists)' is ontologically committed to physicists in general, and to Hawking in particular. What matters for ontological commitment is not whether '$\exists x\,(x = h)$' fully translates into L'—with full preservation of content, including ontological commitment. (It does not.) What matters is whether the envisioned history of physics analytically entails '$\exists x\,(x = h)$' when 'x' ranges only over things that exist. This, according to *OC*5, is precisely what it is for the history to be ontologically committed to Hawking.[50]

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