

*How in the World?*¹

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... the final proof of God's omnipotence [is] that he need not exist in order to save us.

—Peter De Vries,
The Mackerel Plaza

Is it just me, or do philosophers have a way of bringing *existence* in where it is not wanted? All of the most popular analyses, it seems, take notions that are *not* overtly existence-involving and connect them up with notions that are existence-involving up to their teeth. An inference is valid or invalid according to whether or not there *exists* a countermodel to it; the *Fs* are equinumerous with the *Gs* iff there *exists* a one-to-one function between them; it will rain iff there *exists* a future time at which it does rain; and, of course, such and such is possible iff there *exists* a world at which such and such is the case.

The problem with these analyses is not just the unwelcome ontology; it is more the ontology's intuitive irrelevance to the notions being analyzed. Even someone not especially *opposed* to functions, to take that example, is still liable to feel uneasy about putting facts of equinumerosity at their mercy. For various awkward questions arise, of which let me mention three.

How is it that I can tell that my left shoes are equal in number with my right ones just by pairing them off, while the story of how I am supposed to be able to ascertain the existence of abstract objects like functions remains to be told?² Pending that story, who am I to say that equinumerosity facts

53. The more general moral, drawn elsewhere by Quine (in "Reference and Modality," in his *From a Logical Point of View* [New York: Harper Torchbooks, 1953], 139–59), is that *any* context within which both of the substitution principles hold is truth-functional.
54. Just to set aside one possible misgiving, I note that the argument does not depend essentially on invoking the universal set. In place of '{ $x: x = x$ & Jack fell down}' it could use '{ $x: x = 7$ & Jack fell down}' or 'the number n such that n is an even prime & Jack fell down', etc.
55. I am siding here with Quine's stricture (op. cit.) that you can substitute coreferring terms only where you can quantify. Alternatively, I might have said that substitution of coreferring terms is not a procedure that is valid across the board and that a safer principle of inference to use is Leibniz's Law. But the use of Leibniz's Law is legitimate only if we can quantify into (2) and (2') in the way I am now going to mention.
56. For further discussion of Davidson's argument, see Terence Horgan, "The Case against Events," *The Philosophical Review* 87 (1978): 28–47; J. L. Mackie, *The Cement of the Universe* (Oxford: Clarendon Press, 1980), ch. 10; and Jonathan Bennett, *Events and Their Names*, 35–41. Of the other diagnoses of Davidson's argument I know of, I believe that mine is closest to that of Sharvy, as reported in Mackie, op. cit., 225.
57. For that matter, is the philosophy of occurrence any easier to accept than the views of the mythical Meinong? I sometimes wonder why shadowy entities (e.g., states of affairs) with a robust mode of existence are thought to be preferable to substantial entities (e.g., golden mountains) with a shadowy mode of existence.
58. See A. N. Prior, *Time and Modality* (Oxford: Clarendon Press, 1957), 8–9.
59. Prior, *Past, Present, and Future*, 41.
60. We can let the occurrences of '*P*' within parentheses be metric if we like; e.g., 'it was the case one hundred years ago that'. We may also drop the ' $\neg p$ ' from each disjunct if we wish to allow, for instance, that I was a tennis player before I was a professor and am now both.
61. See G. E. Moore, *The Commonplace Book of G. E. Moore*, ed. Casimir Lewy (London: George Allen & Unwin, 1962), 404–5; and Broad, op. cit., 298–99.
62. See A. N. Prior, "The Notion of the Present," *Studium Generale* 23 (1970): 245–48.
63. See W. V. Quine, *Quiddities* (Cambridge, Mass.: Harvard University Press, 1987), 196–99.
64. For valuable comments on earlier versions of this paper, I am indebted to Jonathan Bennett, Trenton Merricks, Michael Pendlebury, W. R. Carter, Ernest Sosa, and members of a colloquium audience at Syracuse University.

even correlate with facts of functional existence—much less that the correlation rises to the level of an analysis?

If my left shoes' numerical equality with my right turns on the existence of functions, then in asserting this equality I am giving a hostage to existential fortune; I speak truly only if the existence facts break my way.³ But that is not how it feels. Am I really to suppose that God can *cancel* my shoes' equinumerosity (and so make a liar out of me) simply by training his or her death gun on the offending functions, without laying a hand on the shoes themselves?

Assuming that a one-to-one function between my left and right shoes exists at all, there are going to be lots of them. But then, rather than saying that my left and right shoes are equal in number because these various functions exist, wouldn't it be better to say that the functions exist—are *able* to exist, anyway—because my left and right shoes are equal in number? That way we explain the many facts in terms of the one, rather than the one in terms of the many.

All of the analyses mentioned have problems like this. And the reply is the same in each case: The reason these analyses are so popular is that they do crucial theoretical work. If you know of another way of accomplishing this work, terrific; otherwise, though, spare us the handwringing about existence coming in where it is not wanted. This paper explores a *strategy*, only that, for getting the work done without getting mucked up in irrelevant existence questions.

I

A funny thing happened on the way to the possible-worlds analysis of modality. Or actually, two funny things, of which only the first attracted any notice. The first is David Lewis's well-known "paraphrase" argument for belief in worlds:

I believe . . . that things could have been different in countless ways. . . . Ordinary language permits the paraphrase: there are many ways things could have been besides the way they actually are. On the face of it, this sentence . . . says that there exist many entities of a certain description, to wit 'ways things could have been'. . . . I believe permissible paraphrases of what I believe; . . . I therefore believe in the existence of entities that might be called 'ways things could have been'. I prefer to call them 'possible worlds.'⁴

If someone wants to know what sort of thing these worlds are,

I can only ask him to admit that he knows what sort of thing our actual world is, and then explain that other worlds are more

things of *that* sort, differing not in kind but only in what goes on at them.⁵

So, other worlds (of the same general sort as our actual world) exist because there are other ways things could have been; and other ways things could have been exist because things could have been different from the way they are in actual fact.

Now, everyone knows there is something funny about this argument of Lewis's, because Stalnaker has told them:

If possible worlds are ways things might have been, then the actual world ought to be *the way things are* rather than *I and all my surroundings*. *The way things are* is a property or state of the world, not the world itself. The statement that the world is the way it is is true in a sense, but not when read as an identity statement. . . . One could accept . . . that there really are many ways that things could have been . . . while denying that there exists anything else that is like the actual world.⁶

The second funny thing is this explanation of Stalnaker's. If it hasn't struck people that way, that's because Stalnaker has packed two quite different points very closely together.

Stalnaker's negative point is that while the paraphrase argument may establish something, it does not establish the existence of Lewis-worlds—that is, (i) concrete, I-and-all-my-surroundings, worlds, which unlike this one are (ii) worlds that do not actually exist. All the argument gets you is "ways things could have been," and ways things could have been meet *neither* condition—not (i), because ways of being are not to be confused with the things that *are* those ways, and not (ii), because if we ask, "Are there *actually* other ways things could have been or is it just that there *could* have been?" the answer is that there *actually are* these other ways.⁷

What's so funny about that? Wait, I haven't got to the funny part. That's the part where Stalnaker turns his critique of Lewis's reading of "ways things could have been" into a positive proposal of his own.

Think of Stalnaker as arguing like this: Ways the world *could* have been are of the same ontological type as the way it *is*. So we need to determine the ontological type of *the way the world is*. What better place to start than with the truism that *the world is the way it is*? Some might read this as saying that *the way the world is* is one and the same entity as the humongous concrete object known hereabouts as *the world*. That, however, would be a mistake: "The statement that the world is the way it is is true in a sense, but not when read as an identity statement."⁸ But, if the statement is false read as an identity statement, what is the reading on which it is true? Stalnaker doesn't come right out and tell us, but the usual alternative to an "is" of identity is an "is" of predication. Apparently then Stalnaker is saying that the statement is true when the "is" is taken as predicative.

This is what I find funny, or at least puzzling. Because the phrase following the "is," namely "the way it is," looks less like a *predicate* than a *singular term*. And Stalnaker *uses* it as a singular term, when he says that "*the way things are* is a property or state of the world" and that "*the way the world is* could exist even if a world that is that way did not."⁹ But, looking at the matter naively, when you've got an "is" between two singular terms, the "is" is not an "is" of predication but one of *identity*.¹⁰ Which is just what Stalnaker denies.

Of course, if "the way the world is" stands for a property, then there *is* a true predication in the vicinity: one ought to be able to say that the world *has* this property. But "the world *has* the way it is" sounds quite wrong. Why, if "the way the world is" denotes a property that the world as a matter of fact possesses?

II

What are we to make of this phrase "the way the world is"? According to Stalnaker, it does not stand for me and all my surroundings. But it does not appear to stand for a *property* of me and my surroundings either. What then?¹¹

The strategy that suggests itself is this. Take the matrix "the way the world is is X," plug in a term that makes for a true sentence, and ask what the term stands for. That ought to be what "the way the world is" stands for as well. When we try to carry this strategy out, though, we run into an unexpected problem; the matrix doesn't want a term, it wants adjectives:

The way the world is is large, complicated, law-governed, mostly uninhabited, shot through with force fields, bathed in radiation, etc.

And now things get *really* confusing. There is no way on earth of interpreting the main "is" in this sentence as an "is" of identity. And yet, if we interpret it as an "is" of predication, we are back with Lewis's concrete worlds—for the thing that is large, complicated, bathed in radiation, law-governed, etc., is not a property of me and my surroundings but, well, me and my surroundings.

Here is our puzzle. "The way the world is," "the way it would have been if so and so had happened," "the ways it could have been"—these *look* for all the world like noun phrases. It stands to reason then that they at least *purport* to denote entities of some sort. What sort? This is a puzzle whether you believe in the purported entities or not. Indeed, you don't *know* whether to believe in them until you solve the puzzle—until you figure out what the entities are whose existence is in question.

III

Suppose we start by beating some neighboring bushes. Ways the world could have been are hardly the only ways countenanced by ordinary speech. Just from the song "The Way You Do the Things You Do" you could gather a respectable collection.¹² But let's have some more humdrum examples: the ways people *feel* on various occasions (sleepy, happy, jealous, relieved, like a motherless child), the ways birds have of building their nests, the ways of getting from point *A* to point *B*, and so on.

Now, what kind of entity am I talking about in talking about these various ways? Take the way I felt when I got up this morning, *viz.*, sleepy; or the way cockatoos build their nests, from the outside in;¹³ or the fastest way of getting from Toronto to Lima, that is, via Tegucigalpa. What *are* these things?

If you are anything like me, the tempting reply is: *What* things? It is hard to think of the phrases "sleepy," "from the outside in," "via Tegucigalpa" as standing for entities at all; their function just does not seem to be referential.

Someone might want to write this off to a lack of imagination. "Sleepy" denotes a state of mind, namely, *sleepiness*; "from the outside in" stands for a property of nest-building events, the property of *centripetality*; "via Tegucigalpa" stands for a path or set of paths or property of paths through space-time.

But if sleepiness, happiness, relief, and so on are the entities collectively denoted by "ways of feeling," then it is strange, isn't it, that one can't say "ways of feeling, for example, . . ." and then plug in *names* of these entities. Why is it "ways of feeling, for example, sleepy, happy, relieved, like a motherless child, . . ." rather than "ways of feeling, for example, sleepiness, happiness, relief, similarity to a motherless child, . . ."? Again, if sleepiness and so on are among the entities that are called "ways of feeling," then it ought to make sense to say "sleepiness is the way I felt this morning" and "nobody knows the way I feel: similarity to a motherless child." And it doesn't. What makes sense is "sleepy is the way I felt." And *sleepy* doesn't seem to be an entity at all, not even an entity of a highly abstract sort.

IV

What is going on? A first clue to the peculiar behavior of "way" is that "*the way I feel*" sounds rather like "*how I feel*."¹⁴ This is no coincidence; "the way" lines up with "how" over a wide range of cases:

- (1) the way you put it just now / how you put it just now

the way things work around here / how things work around here

the way they met / how they met

the way she wants to be remembered / how she wants to be remembered

On the right-hand side of (1) we have what grammarians call *indirect questions*. I can't give you an exact definition (I'm not sure anyone could) but intuitively, indirect questions are noun-like counterparts to ordinary or direct questions:

(2) how things work around here / how do things work around here?

what the coach forgot / what did the coach forget?

why he's acting like that / why is he acting like that?

when the swallows return / when do the swallows return?

who invited them / who invited them?

whether it will rain / will it rain?

where she is headed / where is she headed?

The problem we have been wrestling with is, in effect: Are indirect questions referential or is their semantical contribution to be sought elsewhere?¹⁵

Now in asking, "Are they referential?" I mean not, "Are there Montague grammarians or other formal semanticists somewhere who have cooked up super-duper semantical values for them, say, functions from worlds to functions from worlds and *n*-tuples of objects to truth-values?"¹⁶ The answer to that is going to be *yes* almost no matter what part of speech you're talking about—connectives, prepositions, and apostrophe "s" not excluded. I mean: Are they referential in the way that singular terms are, so that someone using an indirect question could reasonably be said to be *talking about* its referent, or purporting to talk about its purported referent?

Are indirect questions referential in *that* sense? Truth be told, some of them seem at first to be, because some of them seem linkable by true identity statements with phrases whose referential status is beyond question. Here are some examples:

(3) what the coach forgot was the keys, the map, and the schedule

March 31 is when the swallows return

who invited them is your friend Becky

Albuquerque is where she's going¹⁷

Taking the "is" in these statements to express identity—and what other option have we, really, with noun phrases on either side?—"who invited them" stands for Becky, "where she's going" stands for Albuquerque, and so on.

And yet, there can be very similar looking statements where the identity interpretation is unavailable. Newt Gingrich recently had to explain to the mainland Chinese that he hadn't *meant* it about extending recognition to Taiwan, he was "only trying to rattle their cage." Taking him at his word, why Gingrich talks like that is to rattle their cage. Or suppose that pharmacologists studying the effects of tranquilizers on the brain determine that the way Valium soothes our ruffled feelings is by blocking the action of a certain neurotransmitter. Well and good. But, does anyone really take statements like

(4) why he talks like that is to rattle their cage

how Valium soothes is by blocking that neurotransmitter

why we hesitated was out of concern for you

how I want to feel is happy

to assert literal identities? I hope not, because on the face of it there's no such thing as *to rattle their cage* or *out of concern for you* or *happy* to be identical *to*. And this raises doubts about the referential interpretation of the examples in (3) as well. The "is" of "how Valium soothes is by blocking that neurotransmitter" seems indistinguishable from the "is" of "*who* Valium soothes is the people who take it." If it expresses identity in the one case, it ought to do so in the other.

Now, of course, the referentialist can simply insist that the two "is"s are different; the one in (3) expresses identity, the one in (4) expresses predication. This would be just as good from her point of view since, predicative "is" functioning to bring the *referent* of the phrase it follows under the descriptive content of the phrase it precedes, "why he talks like that," etc., would again be cast in a referential light.

But the predicative interpretation is hard to make out. The best way to see this is to *allow* the referentialist her contention that the phrases on the left-hand side of (4) are referential. Say, in other words, that an entity *how I want to feel* exists. Is this entity characterized as happy by the sentence "how I want to feel is happy"? Clearly not. No one is saying that a full accounting of the happy things would include (in addition to Dale Carnegie and Barney the dinosaur and your typical sea otter) *how I want to feel*. The claim is rather that if you are asking me how I want to feel, the answer is that I want to feel happy.

With the other examples, matters are even worse. "X is happy" at least has the right *form* to describe X. But what property or characteristic is attributed to X by "X is to rattle their cage," "X is by blocking that neurotransmitter," or "X is out of concern for you"? Someone might say that "X is

to rattle their cage" describes *X* as being *done* for the purpose of rattling their cage. But then the problem is the same as before: being done for such and such a purpose is a characteristic not of *why people perform actions* (!?!) but of the actions they perform.

Actually, to the extent that the identity-predication distinction finds a foothold in (4) at all, it may be doubted whether the advantage lies with the predicative approach. What was it that the pharmacologists told us? Not that blocking that neurotransmitter is an *aspect* or *feature* of how Valium soothes; according to them, it *is* how Valium soothes. And you can almost hear Gingrich at the press conference: "You people just don't get it, to rattle their cage *is* why I made those statements—there's no difference between the two." Pressed from the other side by the predicative interpretation, one almost wants to say that there's an *identity* here. There isn't, of course, but the *feeling* of identity is a fascinating datum and one that needs to be taken seriously.¹⁸

But the case against referentialism needn't be made to rest on these subtleties about predication versus identity. Take "who invited them," as in "who invited them is your friend Becky." If this referred to Becky, we would expect it to be intersubstitutable *salva veritate* with *other* phrases referring to Becky—phrases like "Becky." What we find though is that the two are not even substitutable *salva congruitate*.¹⁹ This is illustrated by

- (5) I wonder where Becky has gone / *I wonder where who invited them has gone

Becky was accepted at Yale / *Who invited them was accepted at Yale

and, the reverse substitution,

- (6) I wonder who invited them / *I wonder Becky.

It doesn't matter who invited them / *It doesn't matter Becky.

These examples point up a final difficulty with the referential approach. Even if "who invited them" *did* refer to Becky, that would explain only a tiny fraction of its semantical behavior. Karttunen in "Syntax and Semantics of Questions" offers the following overview of indirect-question-embedding contexts:²⁰

(7) VERBS OF

acquiring knowledge: ask, wonder, learn, notice, discover

retaining knowledge: know, be aware, recall, forget

communication: tell, show, indicate, inform, disclose

decision: decide, determine, specify, agree on, control

conjecture: guess, predict, bet on, estimate

opinion: be certain about, have an idea about

relevance: matter, care, be important, be significant

dependency: depend on, be related to, be a function of

"Who invited them" can occur in almost all of these contexts, yet its semantic contribution is purely referential in none of them.²¹ Shouldn't we look for an explanation of the *other-than-referential* work done by indirect questions, before we go ahead and assign them referents? That explanation might turn out to apply across the board.

V

Indirect questions are indirect *questions*; that is the point we keep on losing sight of. Since they are questions it would not be surprising if their interpretation went via the items that *normally* go by that name, viz., *direct* questions. Here is a crude first proposal, using Q for the direct question corresponding to an indirect question IQ:

To say that —IQ— is to offer information about Q's answer or answers.²²

This deliberately leaves a lot to the imagination. Among the issues I propose to duck, or settle in whatever way seems most convenient at the time, are these:

What kind of information? Is the information determined by the sentential context (— . . . —) alone or do other factors contribute? What are the mechanisms by which these factors operate?

Are answers linguistic in nature or do linguistic items function rather as presentations of the real, extralinguistic, answers?

Are answers one and all sentence-length, as you would think from the fact that we call them true and false, or not, as you would think from the fact that "5" (or perhaps 5) is the answer to "what is 2 plus 3?"

Does each question have a unique complete and correct answer or do some have multiple answers with these features?

All that we need to assume for now is that to each direct Q corresponds a unique complete and correct answer-*set* AQ; there is no official line on how many answers AQ contains or what sorts of entities these answers are.²³

Statements embedding indirect questions IQ are in the business of offering information about Q's answer or answers—about AQ.²⁴ One move in this direction stands out as particularly natural; we might seek to provide AQ

outright. The natural way to proceed if that is our goal is to say simply that *IQ is AQ*:

- (8) what the coach forgot was the keys, the map, etc.
who invited them is Becky
why Gingrich talks like that is to rattle their cage
how Valium soothes is by blocking that neurotransmitter
why we hesitated was out of concern for you
how I want to feel is happy

Notice again the equational, identity-like, feeling of these statements. A tempting explanation is that in each case we have an identity in the vicinity: "Becky" *is* (in the identity sense) the answer to "who invited them?," "to rattle their cage" *is* the answer to "why does he act like that?," and so on.²⁵ As for the identity-feeling's curious insensitivity to the grammatical category of the phrase following the "is"—that "happy" is an adjective does not make "how I want to feel is happy" feel any less identity-like—this is only to be expected if the underlying identity is between "happy" and the answer to "how do I want to feel?" rather than (?!) *happy* and *how I want to feel*.

Another puzzle left over from the last section is this. Why is it that some indirect questions, like "who invited them," seem at first glance referential while others, like "how Valium works," do not? The equational flavor of "IQ is AQ" suggests a two-part explanation. First, some AQs ("Becky") are referential; others ("via Tegucigalpa") are not.²⁶ Second, the "is" of "IQ is AQ" acts as a pipeline transmitting felt referential character from the one side to the other. This leads to the prediction that IQ should strike us as *prima facie* referential when

- (i) "IQ is AQ" makes sense;
(ii) AQ is referential.²⁷

Is the prediction borne out? Indirect who-, where-, and when-questions typically satisfy both conditions, so we would expect them to give the impression of referring.²⁸ And for the most part they do: "who invited them" appears to refer to Becky, "where she's headed" to Albuquerque, and so on.

Indirect how- and why-questions satisfy (i) but not (ii); "how I feel is happy" and "why he talks like that is to rattle their cage" both scan, but their right-hand sides do not refer. So the prediction is that they will *not* feel referential, and this again seems true.

Indirect which-questions are a mixed bag, but what *often* happens is that they satisfy (ii) but not (i). The answer to "which door do you pick?," for example, might be "door number three," a perfectly good referring phrase. But "which door you pick is door number three" doesn't scan. The predic-

tion then is that "which door you pick" will not strike us as a referring phrase. (The reason is not inherent ungrammaticality, since "which door you pick is up to you" sounds fine.)

Indirect whether-questions feel *highly* nonreferential, finally, as a result of satisfying neither (i) nor (ii). Not only are their AQs lacking in reference, they cannot be plugged into sensical "IQ is AQ" statements: witness "whether you are still grounded is yes."

Before getting back to possible worlds, consider one last puzzle from the previous section. If the point and purpose of indirect questions is to refer, then what are we to make of

- (9) I wonder who invited them
it doesn't matter who invited them
who invited them is none of your business
where guests sit is a function of who invited them?

Read these statements as commenting on the answers to their embedded questions,²⁹ and all becomes clear. *Something* is said not to matter by "it doesn't matter who invited them," but it is not Becky, it is the answer to "who invited them?" "Where guests sit is a function of who invited them" does not assign seating authority to any particular person, it says that the answer to "where shall X sit?" depends on the answer to "who invited X?"³⁰

VI

Assuming that something like this approach to indirect questions is correct, what does it tell us about the possible-worlds account of modality?

Here is the answer you probably expect: It upsets Lewis's paraphrase argument according to which we are committed to worlds in being committed to ways things could have been. The argument doesn't hold up, because each and every way things could have been is a *how* things could have been. And the phrase "how things could have been" is an indirect question with zero referential import.

I see three connected problems with this answer. The first is hinted at by the awkwardness of what I just said: "each and every way things could have been is a *how* things could have been." A *how* things could have been? What on earth is that? "How things are" makes sense as the translation of "the way things are," and "how things would have been" works as the translation of "the way things would have been." But nothing along these lines is available for "some/all of the ways things could have been," because *hows* are not things the language countenances.³¹ If the idea was to translate world-talk

into way-talk, and way-talk into how-talk, and how-talk into answer-talk, then the idea doesn't work, because *quantificational* way-talk doesn't translate.

Now for the second problem, which has to do with our emphasis throughout on the *irreferentiality* of indirect questions. Isn't this missing the point of the paraphrase argument? Lewis's concern is with ontological *commitment*. And as Quine thought he had made sufficiently clear about half-a-century ago,³² one makes little progress on matters of ontological commitment by staring at controversial chunks of language waiting for them to yield up the secret of whether they are really referential or not.³³ (You know what they say about a watched mot.) The true and proper test of ontological commitment is *quantification* into the position a given chunk of language occupies. That is why Lewis argues from the fact, not that ordinary language *refers* to ways, but that ordinary language *quantifies* over ways.

Third, the paraphrase argument was never the important one in the first place. The important argument has always been that possible worlds are too useful to be done without. Lewis is crystal clear about this:

Why believe in a plurality of worlds?—Because the hypothesis is serviceable, and that is a reason to think that it is true.³⁴

"Even those who officially scoff," he adds, "often cannot resist the temptation to help themselves abashedly to this useful way of speaking."³⁵ And to repeat, this is a way of speaking that is up to its neck in ontologically committal quantification.

Wrapping all of this up into a single point: if your one ontologically deflating move concerns indirect questions, and if the real measure of ontological commitment is not these but quantification into the spots they occupy, and if quantification into the spots they occupy is practically speaking unavoidable, then you really haven't gone very far towards diminishing commitment to possible worlds.³⁶

VII

Hold on, though. Because "the way that such and such" translates into "how such and such," one naturally supposes that "some/all of the ways that such and such" has got to translate into "some/all of the *hows* such and such"—which of course it can't, because "hows" makes no sense. But this is to insinuate a problem about *plurals* into what was supposed to be a problem about *quantification*.

Imagine someone arguing as follows: "the reason I did it" translates into "why I did it," but no analogous translation is possible for "some/all of the

reasons I did it," because *whys* are not things the language countenances. Similarly, we have "when the swallows return," "where your story breaks down," and "what really gets my goat," but not "some/all of the *whens* they return," "some/all of the *wheres* your story breaks down," or "some/all of the *whats* that get my goat." There is no grammatical alternative, it seems, to objectual quantification over reasons, times, narrative breakdown points, and whatever sort of thingum it is that gets people's goats.

What this argument overlooks is that one doesn't *need* pluralizations of "why," "when," "where," etc., to carry out the relevant sorts of quantification; that's what words like "whyever," "never," "always," "somewhere," and "whatever" are for. The same applies to "how." "Some/all of the *hows*" may not make sense, but it doesn't *have* to, for we have "somehow" and "however":³⁷

- (10) if Valium works how you say, then Librium works similarly
variables: if Valium works *thusly*, then Librium works *like so*
existential: if Valium works *somehow*, then Librium too works *somehow*
universal: *however* Valium works, *so* also works Librium.³⁸

This is important because it means that quantificational way-talk *can* be rendered in terms of "how," if only we drop the assumption that all quantifiers are (like the logician's "there is an *x* such that . . .") *entitative* or *objectual*.³⁹ Of course, the embrace of nonobjectual quantifiers gains us nothing unless they share in the freedom from ontological commitment we saw with the corresponding indirect questions. But intuition is absolutely clear on this point. "He blew the house down by huffing and puffing" is a strictly *stronger* statement than "he blew it down somehow." And it would *not* be stronger if the "somehow" carried a commitment to, say, ways, for "by huffing and puffing" is not committal in anybody's book.

VIII

All of that having been said, let me be the first to admit that colloquial how-quantification is a pretty clumsy semantical instrument compared to direct objectual quantification over ways. Anyone who doubts this is invited to try to render "there is more than one way to skin a cat," or "there are more ways of skinning a cat than of falling off a log," or "some ways of falling off a log resemble some ways of skinning a cat" in the idiom of "somehow," "nohow," and "however." One *could* try to meet these expressive difficulties head on by concocting ever fancier how-quantifiers ("cats can be skinned *doublehow*," "skinning a cat is *howlier* than falling off a log," . . .).⁴⁰ But as a practical

matter, there seems little real alternative to quantifying directly over ways, or some approximation to ways.

A second reason why "somehow" and "however" are no automatic panacea is that *all* quantifiers, however nonobjectual in appearance, are caught up in a powerful objectual undertow that threatens to obliterate the distinction here at issue. Talk about objects has a clarity and tractability that few can resist—neither ordinary folk trying to convey meanings nor philosophers trying to explain them.⁴¹ Things have reached the point that to give the "semantics" of a construction is almost by definition to tell a story about which entities have to behave in which ways for it to make what sort of contribution to truth-value. Anything less and it will be protested that the construction's meaning has still not been rendered completely clear.⁴²

The third reason for refusing to rest content with "somehow" is that an objectual story is not out of the question in this case. Quantified uses of "how" have, it seems, a similar semantical function to indirect interrogative uses. Both enable commentary on the answers to direct how-questions; but where indirect "how" does it by, for lack of a better word, *invoking* these answers, quantified "how" does it by *generalizing* over them. "Life after death is possible somehow" says more or less that "how is life after death possible?" has a correct answer. "However you want to do it is fine with me" says that if "like so" is a correct answer to "how do you want to do it?," then doing it like so is fine with me. That the *majority* of nonobjectual quantifiers are built around question-words ("whichever," "somewhere," "whyever," "whatever," "however many," "whoever") only strengthens the case for a semantic link with answers.

IX

Haven't we now painted ourselves into a corner? Nonobjectual quantifiers, let them be as seriously intended as you like, are not ontologically committal. But they are not semantically primitive either, and our best bet about how to explicate them is in terms of quantifiers over answers that *are* (when seriously intended) committal.

I see only one way out. If a construction that is not committal-when-serious is to be explained by a construction that *is*, then the second construction had better be treated for purposes of the explanation as *nonserious* or *feigned*. Someone who says that the treasure is buried somewhere is saying that "where is it buried?" has an answer, *bracketing* any and all worries about the existence of entities suited to play that role—*stipulating*, if you like, in a spirit of make-believe, that questions that "have answers" in the ordinary-language sense of not being unanswerable have them in a more ontologically loaded sense as well.

This leaves the shape of the make-believe somewhat open. A lot will depend on our views about answers: about what they are in general (linguistic items or their denotata?) and the (grammatical or ontological) forms that they take in connection with specific sorts of questions. If we favor the linguistic conception, for example, then what needs to be imagined is that any answer that was, as we say, "there to be given," *was* given. This is to avoid holding the truth of "he blew the house down somehow" hostage to the issue of whether someone has in fact bothered to put "by huffing and puffing" into words.

But suppose that linguistic so-called "answers" are instead answer-formulations; the real answers are the worldly entities to which they refer and other entities of the same sort.⁴³ Then there are two cases, according to whether the linguistic so-called "answers" are of the right grammatical *form* to refer.

The easy case is the first; here our main imaginative task is to supply each linguistic "answer" with a referent. There will have to be such things as the Easter Bunny, for instance, and the number twelve, to serve as answers to "who does Isaac expect to see at the mall?" and "how much is five plus seven?" Otherwise it will not come out false, as it should, that whoever Isaac expects to see at the mall, Sally expects to see as well, and that however much you get by adding five to seven, you get as much or more by adding three to eight.

If on the other hand we are dealing with linguistic "answers" that do not even *purport* to refer (perhaps they are adjectives or adverbs), then referential purport will have to be projected onto them. The needed make-believe will have two interlocking parts: one in which the phrases in question are seen as referential, another in which their referents are seen to be drawn from the ranks of some real or concocted ontological category. (This paper does not advocate any particular account of ways, but one could do worse than the following: ways are the things we imagine ourselves referring to by use of phrases like "by huffing and puffing," when we imagine that phrases like that are used to refer.)

X

But we are getting ahead of ourselves. It is time to put make-believe to the side for a while and return to the original objection: "If the idea is to translate world-talk into way-talk, and way-talk into how-talk, and how-talk into answer-talk, then the idea doesn't work, because *quantificational* way-talk doesn't translate." Our reply is that *quantificational* way-talk *does* translate—into colloquial how-quantification—and that colloquial how-quantification translates in turn into (feigned, but we are putting that aside for now) objectual

quantification over answers to how-questions. That the middleman here has its expressive limits is not a problem, for we can cut the middleman out and read apparent quantification over ways *directly* into objectual quantification over answers.

Take for instance Lewis's statement that "there are many ways things could have been besides the way they actually are." This says that "how could things have been?" has many incompatible answers that do *not* correctly answer "how are things as a matter of fact?"

Next try "there is a way things could have been such that blue swans existed." One interpretation is that "how could things have been?" has an answer according to which there are blue swans. But this might give the impression of a two-stage process in which we first collect answers to "how could things have been?" at random, only then considering whether we have hit on anything favorable to the blue swan hypothesis.⁴⁴ A better interpretation homes in on the scenarios we are actually interested in: "how could it have been that there were blue swans?" *has an answer*, full stop.⁴⁵

XI

Anyone who does modal metaphysics at all has got to feel *some* attraction to the formula: *S is possible iff there is a way things could have been such that S*. To go by what was just said about quantification over ways, the formula means something like this:

(11) $\Diamond S$ iff $H\Diamond S?$ has a correct answer.

("H $\Diamond S$?" is short for "how could it have been that *S*?") Standard possible worlds semantics has of course grown up around a quite different reading: *S* is possible iff there is at least one *S*-world, an abstract sort of world in Stalnaker's version of the semantics,

(12) $\Diamond S$ iff there is an abstract world according to which *S*,

a concrete sort in Lewis's version,

(13) $\Diamond S$ iff there is a concrete world at which *S*.

Not surprisingly, the three approaches agree in linking possibility to the existence of an appropriate witness. (If necessity is the dual of possibility, they agree too in linking *S*'s necessity to the *nonexistence* of witnesses to the possibility of not-*S*.) But notice a crucial difference between them. (12) and (13) we believe, or try to believe, because we are so impressed by the theoretical work they do. (11) on the other hand comes close to being a conceptual truth about possibility.

How is that? (11)'s right-to-left direction says that *S* is possible provided that "how is *S* possible?" has a correct answer. Assuming that a correct answer to "how is *S* possible?" will be a truth of the form "*S*⁺ is possible," where *S*⁺ has *S* as a consequence, this amounts to the claim that

(11') $\Diamond S$ if $\Diamond S^+$ —where *S*⁺ is sufficient for *S*.

And on any halfway natural reading of "sufficient," it is true as a conceptual matter that if something sufficient for *S* is possible, then *S* is possible as well.⁴⁶

Now consider the direction from left to right: *S* is possible *only* if "how is *S* possible?" has an answer. This forces us to speculate a little on the kind of *S*⁺ the questioner is looking for. I hear her as issuing a challenge:

You think that *S* is possible but I suspect that this is only because you have neglected the matter of *T*. I therefore ask you: is *S* possible in the *T* way, or is it possible in the not-*T* way? According to you, for instance, there can be a town whose barber shaves all and only the town's non-self-shavers. But are we to think of this barber as shaving himself, or as not shaving himself?

Understood like this, the question "how is *S* possible?" has an answer iff it is possible that *S* & *T*, or else possible that *S* & $\neg T$.⁴⁷ Since there is no way of telling in advance what unresolved issue *T* might have attracted the questioner's attention, we arrive at the claim that, pick any *T* you like,

(11'') $\Diamond S$ only if $\Diamond S^+_1$ or $\Diamond S^+_2$ —where $S^+_1 = S \ \& \ T$ and $S^+_2 = S \ \& \ \neg T$.

This says that possibility is *expansive*: nothing is possible which cannot be expanded into a more *inclusive* possibility, inclusiveness being judged along any dimension you like.⁴⁸ To come at it from the other side, there can be no refuge from impossibility in refusing to take a stand on matters left open; if an impossibility would result *however* these matters were decided, you've got an impossibility already.⁴⁹ Either way, expansiveness looks like a conceptual truth.

XII

Voila! possible world semantics without possible worlds. Because what we have in (11) is a structural analogue of Lewis's (13) in which worlds do not figure⁵⁰—an analogue, moreover, with some claim to be regarded as analytic. But I can imagine various questions and objections, starting with the objection that since (11) is *circular*—modal notions appear on its right-hand side—it fails to provide a reductive analysis of modality.

There is no denying the circularity. "S⁺ is possible" does not count as a correct answer to "how is S possible?" unless it is *true*, which means that S⁺ has got to really be possible.⁵¹ But why exactly is this an *objection*? To reply that (11) is up against (13), which being noncircular *can* function as an analysis, just pushes the question back a step. Why should the potential for functioning as an analysis count so heavily in (13)'s favor?

The answer may seem obvious from something already mentioned, that the argument for (13) is in terms of the theoretical services it offers. Lewis offers an impressive catalogue of these services in his book *On the Plurality of Worlds*; here we will have to limit ourselves to a single example. How, without an analysis like (13), are we to understand why this, that, and the other should be the laws of modality? True enough, it can be proved in pure mathematics that

*if modal operators can be correctly analysed in so-and-so way [as quantifiers over worlds], then they obey so-and-so systems of modal logic.*⁵²

This conditional gets us nowhere, however, unless we are in a position to discharge the antecedent. And to get ourselves into that position, we need to count an analysis like (13) into our belief system.

But although this is often said, it is hard to see how the application depends on (13)'s constituting an *analysis*. As long as (13) is *true* (the left-hand side holds just when the right one does) and *known* to be, the deduction of modal laws from the laws of quantification would appear to go through just the same. And now we begin to lose our grip on where the insistence on a *reductive* correlation is coming from. If the choice of a correlation is to be driven by considerations of theoretical utility alone, nothing should matter but that

- (a) the correlation is *there*,
- (b) it is *comprehensive*,
- (c) it is not *itself* unduly mysterious, and
- (d) it can be used to dispel *other* mysteries.

And, to twist around a famous remark of Lewis's, it is not clear why a non-reductive correlation must have trouble with these conditions—unless you beg the question by saying that it already *is* trouble.

For Lewis, a reductive correlation is the only kind worth having—so, anyway, it is usually assumed, and given that the correlation he defends is the most reductive available, there seems little reason to doubt it. But the fact is that one can read quite a way into Lewis's book without reductiveness coming up as an explicit desideratum.⁵³ Most of the time it sounds as though

the reason for believing in his "concrete correlation" (13) is that it exemplifies better than any competing correlation the values expressed above, such as comprehensiveness and theoretical power.⁵⁴ That the correlation is reductive besides appears to be just gravy, *except* to the extent that it helps with the other desiderata.

Starting about halfway through the book, however, we find Lewis objecting to certain ersatzist alternatives to (13) that they smuggle modal notions in on the right-hand side. Apparently, then, reductiveness is something that Lewis is prepared to insist on. Why? Is it because he takes the same view of modality that Jerry Fodor does of intentionality, viz., that if it is really real, it must really be something else? I doubt it. No one could be less sentimental than he about the trade-offs philosophers are occasionally forced to make between ideology and ontology. If the price were right, he would be as willing as anyone to buy relief from unwelcome entities by taking on a primitive notion or two.⁵⁵ It's just that in *this* case, the price is not right; in fact, the trade-offs play out the other way.⁵⁶ A reductive account of modality is so enormously valuable as to more than compensate us for the humongous ontology of worlds.

All right, but now we need a distinction. Is it that a reductive account of modality is so *intrinsically* valuable as to compensate us, etc.? This is hard to take seriously. Faced with a no-strings-attached decision between the humongous ontology of concrete worlds, on the one hand, and letting possibility be what it is and not another thing, on the other, most of us would know which way to jump.

So the claim has got to be that a reductive analysis of modality is so *extrinsically* valuable as to compensate us, etc.—that is, so valuable from the point of view of desiderata *other* than reductiveness. And now we are back where we started: if the concrete correlation is better, that is *not* because it is nonreductive per se but because it outperforms the competition in other respects. Whereupon we're entitled to ask why a nonreductive correlation like (11) couldn't do just as well.

Or indeed better. Because if a correlation is going to do theoretical work, it's very important that it *be* there, that it be comprehensive, and that it not be *itself* unduly mysterious. And between (11) and Lewis's (13), the verdict is clear. (11) is bordering on analytic, which is about as good as you can do in the truth and comprehensiveness and unmysteriousness departments. Whereas (13), on top of being *prima facie* as improbable as anything ever was, is baffling even on the supposition of its truth. If an oracle convinced us that ours was one of a large number of spatiotemporally isolated universes, each enacting modal facts about the others while they all the while returned the favor, this would be regarded as the most amazing coincidence on record.⁵⁷

Now, the natural and proper reply to this is that Lewis's concrete correlation, its existence momentarily granted, so thoroughly *creams* the competition at dispelling modal mysteries that we should take it on board however prima facie improbable and however baffling if true. (13) has been undersold, in other words. This is something we'll get to in a moment; let us consider first a way in which (11) has been *oversold*.

Again and again (11) has been billed as *close* to a conceptual truth, or *bordering* on analytic. Why the hedge, if (11') and (11'') are conceptual truths and (11) is their conjunction? The hedge is because (11) is *not* their conjunction; it is slightly but crucially stronger. This comes out if we compare what (11) tells us on the supposition that *S* is possible with what (11'') tells us on the same supposition. According to (11), "how is *S* possible?" has a correct answer. But (11'') only as it were *exhibits* this answer,⁵⁸ without testifying to its existence. [(11'') does perhaps tell us that "how is *S* possible?" is correctly answerable, in some appropriate sense of that word. But answerability is one thing, having a correct answer another.]⁵⁹ The upshot is that (11) is a conceptual truth only modulo the existence of answers with the requisite contents. And that is a very big modulo. It begins to appear that, although on friendly terms with conceptual truths, (11) is not itself actually even true.⁶⁰

Not good. And we have yet to consider the other reply, namely, that (13) is needed *regardless* of (11)'s truth-value on account of its greater effectiveness against modal mysteries. Take again the "mystery" of the laws of modality, using

(14) if $\diamond S$ and $\square T$ then $\diamond(S \ \& \ T)$

as a typical instance. Why is it that counterexamples to this never turn up? (13) has an explanation to offer: If *S* is possible, then there is an *S*-world, call it *W*. *W* cannot be a not-*T*-world, since there aren't any; so, worlds being complete, it must be a *T*-world. *W* is accordingly an (*S* & *T*)-world, which means that possibly *S* & *T*. Now try the same thing using (11). Since *S* is possible, "how is *S* possible?" has a correct answer *A*. *A* is clearly *not* an answer to "how is not-*T* possible?" for *T* is necessary. But this still doesn't give us an answer to "how is *S* & *T* possible?" for *A* may well be *silent* on the subject of *T*.

Examples could be multiplied. (13) has a real analytic advantage for the simple reason that worlds are complete while answers to "how is that possible?" questions tend to leave a great deal undecided.

Someone might wonder why completeness should be such a sticking point. Can't possible world semantics equally well be done in terms of incomplete or "partial" worlds?⁶¹ It is true that these partial worlds have to be conceived as subject to a *refinability* condition: given any *T* you like,

(15) any partial world at which *S* is true has a refinement at which *S* is true and *T* is true or else one at which *S* is true and *T* is false.⁶²

But this condition seems very much in the spirit of (11)'s portrayal of possibility as *expansive*: *S* is possible only if it is possible together with *T* or possible together with not-*T*.

Looking a little closer, though, we see that that refinability *adds* something to expansiveness that is necessary for serious modal mathematics; it says not merely that *S* is possible only if its conjunction with *T*, or with not-*T*, is possible, but that any *witness* to *S*'s possibility can be built up into a *witness* to the possibility of one of these conjunctions. If a version of this held for answers—if we could be assured that

(16) any correct answer to $H\diamond S$? has a refinement that correctly answers $H\diamond(S \ \& \ T)$? or else one that correctly answers $H\diamond(S \ \& \ \neg T)$?

—then the analytic gap between (11) and (13) would be significantly narrowed.⁶³ But unless we have it in mind to shoot ourselves in the foot by indulging at this late date in wishful platonic thinking, (16) is not something we can afford to assume. The only answers we can safely rely on in this context are the ones that have actually cropped up in conversations or on paper. And these, it seems clear, are not closed under refinement; time being short and attention limited, they eventually peter out.

XIV

All right; people have not in fact gotten around to giving all the answers our approach needs. But having come this far, it seems a shame to retreat before so dreadfully medical a difficulty. And in fact we don't have to. The insight that (11) is struggling to express is that *S* is possible iff it is possible *somehow*. And we know from section IX that if "somehow" is going to be understood in terms of quantification over answers, that quantification needs to be seen as *feigned* or conducted in a spirit of make-believe.

As to the form of the make-believe, we can let our present difficulties be our guide. The difficulty about the *existence* of answers to "how is *S* possible?" is met by supposing that whenever "how is *S* possible?" is correctly answerable (it is possible that *S*⁺), a correct answer to it actually exists.⁶⁴ The difficulty about the *refinability* of these answers is met by supposing that any correct answer to "how is *S* possible?" has a correct refinement that either affirms *T* or denies it. These two ideas together can be called the *refinable-answer story*, or RAS. All that remains is to reconceive the quantifier in

(11) as “feigned” by prefixing it with an “according to RAS” operator. The biconditional

(17) $\Diamond S$ iff according to RAS, $H\Diamond S?$ has a correct answer

that results is a conceptual truth that enables free back-and-forth motion between possibility, on the one hand, and existential quantification over a single matrix of as-determinate-as-you-need witnesses on the other. To the extent that (12) and (13) have their analytic power as catalysts in this sort of transition, (17) can offer the same power at a fraction of the ontological cost.⁶⁵

All right, but why stop there? If we are willing to stipulate that incomplete answers are *partly* refinable, why not go whole hog and make them *completely* refinable? The *determinate-answer story* is just like the refinable-answer story, except that correct answers to “how-possible?” questions are always refinable into correct answers leaving nothing unsettled. This gives us a still closer approximation to the standard analysis:⁶⁶

(18) $\Diamond S$ iff according to DAS, $H\Diamond S?$ has a determinate correct answer.

And now for a final weird twist. “Answer” is a theoretical notion whose proper treatment is to some extent up for grabs. No doubt answers are often best seen as representations. (“*Here* is your answer” I say: “your cousin Giorgio.”) Sometimes though it is the thing *represented* that seems better suited to the role. (“*There* is your answer,” I say, with a nod at your approaching cousin.) So far we have been assuming a version of the first approach; more or less determinate answers to “how is *S* possible?” have been more or less comprehensive representations according to which *S*. But once having made the switch to *fully* determinate answers, and *pretended* ones at that, the second option becomes suddenly attractive.

You want to know how blue swans are possible, in full and comprehensive detail? *There* is your answer, I say, gesturing or pretending to gesture, to the best of my expressive abilities, at a concrete I-and-all-my-surroundings world wherein swans really are blue.⁶⁷ Reconceive determinate answers like this and the determinate-answer story becomes the *many-worlds story*: *S* is possible only if “how is *S* possible?” has an answer taking the form of a concrete world at which *S* is true. And (18) becomes

(19) $\Diamond S$ iff according to MWS, there is a concrete world at which *S*.

You might think that Lewis would welcome (19) with open arms; isn’t the many-worlds story *his* story? *It is not.*⁶⁸ Both stories tell of an array of concrete worlds. But Lewis’s story portrays these worlds as independently constituted, not inherently modal entities which somehow nevertheless contrive to constitute the ground of modal truth. The present story conjures worlds

up from within the structure of possibility itself—from what we called its *expansive* quality. Worlds are the ideal objects of our efforts to give more and more specific answers to the question “how could that be?” This is how we can know that (19) is true—that *S* is possible iff according to the story, there is an *S*-world.⁶⁹

XV

Thirty or so years ago, before the campaign to make modal metaphysics honest had gotten seriously under way, the talk was less of *worlds* than of something called the world *metaphor*. One reason this sort of talk fell out of favor was Lewis’s Quinean scrupulosity about ontological commitment. Another reason, however, was that it was never quite clear what the talk *meant*. One saw what worlds qua metaphors were supposed to *do*: shed metaphysical light on modality just by making themselves available to theoretical contemplation.⁷⁰ But it was never explained what they *were* that this was within their powers.

All the same, it seems to me that the pre-Lewis approach to these matters was onto something. Talk about worlds *is* metaphorical, or close enough not to matter. Some of the argument for this is already in place: world-talk as it features in (19) is fictional and so the sort of thing we are to *pretend* or *imagine* is true. The next step is to observe that the pretense is in a quite particular spirit, a spirit characteristic of metaphor.

Almost wherever there is disciplined pretense or imagination, there is something that can be considered a *game of make-believe*.⁷¹ Take for instance the games we play with representational paintings and novels. Standing before Caravaggio’s “Bacchus,” we are supposed to imagine ourselves meeting the gaze of a figure entreating us with a glass of wine, when all that is really there is marks on a canvas. Reading “The Speckled Band” by Arthur Conan Doyle, we are supposed to imagine ourselves reading (not sentences strung together for dramatic effect) but reports of a detective’s activities compiled by one who knows whereof he speaks.

Both of these games can lay claim to some sort of official sanction; the reason we are supposed to imagine in such and such ways is that *that* is what the author intended, or that is how the institution of painting works. Other games derive their shape and authority from humbler sources. Some are grounded in ad hoc arrangements (“these clumps of mud can be the pies”) or the understanding of a moment (“look out, I’ve got your nose”). Some are grounded in nothing at all, arising among like-minded pretenders of their own accord. (Finding ourselves in an unexpectedly swanky hotel room, we begin putting on airs and acting the part.) The common thread here—the factor that

links all make-believe games together—is that they call upon their participants to pretend or imagine that certain things are the case. These “to-be-imagined” items make up the game’s *content*, and to elaborate and adapt oneself to this content is often the game’s very point.⁷²

Often, but not always; an alternative point suggests itself when we reflect that all but the most boring make-believe games are played with *props*, whose game-independent properties help to determine what it is that the players are to imagine or pretend. Nowhere in the rules of mud pies does it say that Sam’s pie is too big for the oven; we are to imagine this because Sam’s clump of mud doesn’t fit into the hollow stump. Nowhere in the rules of the Holmes game does it say that Holmes lives nearer to Hyde Park (in London) than to Central Park (in New York). If this is fictionally the case, the facts of nineteenth-century geography deserve part of the credit.⁷³

Now, a game whose content reflects in part the properties of worldly props can be seen in two quite different lights. What ordinarily happens is that we take an interest in the props because and to the extent that they influence the game’s content; one tramps around London in search of 221B Baker street for the light it may shed on what is true according to the Holmes stories.

But in principle it could be the other way around: we could be interested in a game’s content because and to the extent that it informed us about the props. This would not stop us from *playing* the game, necessarily, but it would tend to confer a different significance on our moves. Pretending within the game to assert that blah would be a way of giving voice to a fact holding *outside* the game: the fact that the props are in such and such a condition, viz., the condition that makes blah a proper thing to pretend to assert. One can even imagine there being *advantages* to this style of expression. It might be the only way open to us of putting the indicated fact into words. Or, it might be the *best* way of putting the fact into words, the one with the happiest cognitive and motivational effects.⁷⁴

Using games to talk about game-independent reality makes a certain in-principle sense, then. But is such a thing ever actually done? A case can be made that it is done all the time, not indeed with explicit self-identified games like “mud pies” but with impromptu everyday games hardly scratching the surface of consciousness. Some examples of Walton’s suggest how this could be so:

Where in Italy is the town of Crotona? I ask. You explain that it is on the arch of the Italian boot. ‘See that thundercloud over there—the big, angry face near the horizon,’ you say; ‘it is headed this way.’ . . . We speak of the saddle of a mountain and the shoulder of a highway. . . . All of these cases are linked to make-believe. We think of Italy and the thundercloud as something like pictures. Italy (or a map of Italy) depicts a boot. The cloud is a

prop which makes it fictional that there is an angry face. . . . The saddle of a mountain is, fictionally, a horse’s saddle. But our interest, in these instances, is not in the make-believe itself, and it is not for the sake of games of make-believe that we regard these things as props. . . . [The make-believe] is useful for articulating, remembering, and communicating facts about the props—about the geography of Italy, or the identity of the storm cloud . . . or mountain topography. It is by thinking of Italy or the thundercloud . . . as potential if not actual props that I understand where Crotona is, which cloud is the one being talked about.⁷⁵

Games of make-believe, Walton says, can be “useful for articulating, remembering, and communicating facts about [their] props.” He might have added that they can make it easier to reason about such facts, to systematize them, to visualize them, to spot connections with other facts, and to evaluate potential lines of research. That similar virtues have been claimed for metaphors is no accident, if Walton is right in his account of how metaphor works:

The metaphorical statement (in its context) implies or suggests or introduces or calls to mind a (possible) game of make-believe. The utterance may be an act of verbal participation in the implied game, or it may be merely the utterance of a sentence that *could* be used in participating in the game. In saying what she does, the speaker describes things that are or would be props in the implied game. [To the extent that paraphrase is possible] the paraphrase will specify features of the props by virtue of which it would be fictional in the implied game that the speaker speaks truly, if her utterance is an act of verbal participation in it.⁷⁶

Stripped to essentials, the account is this: A metaphor is an utterance *U* that portrays its subject as of a kind to make *U* pretense-worthy in a game that *U* itself suggests. The game is played not for its own sake but to make clear *which* game-independent properties are being attributed; they are the ones that do or would confer legitimacy upon the utterance construed as a move in the game.

Is it just me, or do utterances about possible worlds appear to fit the bill pretty exactly? “There are worlds in which blue swans exist” suggests a game in which we pretend that all and only the things that *could* happen in this world *do* happen in some world or other. The point of the utterance is to say that the modal facts are such as to make “there are blue swan worlds” pretense-worthy in the game—to say, in other words, that blue swans could have existed. I conclude that even if the tradition did not know quite what it *meant* in calling worlds metaphors, that is what they plausibly are.⁷⁷

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2. Compare Paul Benacerraf, "Mathematical Truth," *Journal of Philosophy* 19 (1973): 661–79. See also Jerrold Katz, "What Mathematical Knowledge Could Be," *Mind* 104 (1995): 491–552.
3. Compare John Etchemendy, *The Concept of Logical Consequence* (Cambridge, Mass.: Harvard University Press, 1990).
4. David Lewis, "Possible Worlds," in *The Possible and the Actual: Readings in the Metaphysics of Modality*, ed. Michael J. Loux (Ithaca, N.Y.: Cornell University Press, 1979), 182–89; the quotation appears on 182.
5. *Ibid.*, 184.
6. Robert C. Stalnaker, "Possible Worlds," in *The Possible and the Actual*, 225–34; the quotation appears on 228.
7. Otherwise it would seem that blue swans, although they *would* have been possible had things been different, are not possible as matters stand.
8. Stalnaker, *op. cit.*, 228. Identity statements are reversible: if $A = B$, then $B = A$ as well. To say that *the way the world is is the world*, however, sounds wrong. (Except maybe to those who believe with Wittgenstein that the world is all that is the case. Even to them, though, it won't sound truistic, as *the world is the way it is* does. And it should, if the latter is an identity statement.)
9. Someone might say that the same word or phrase can play both roles depending on grammatical context; "red" functions as an adjective in "the book is red," a noun in "red is a color." I am not sure what to say about this, but one possibility is that there are *two* words here with the same spelling. (Why *color* nouns in particular should be so often spelled the same as their corresponding adjectives is unclear to me; compare "triangle is a shape," or "tiny is a size.") Another example, suggested by Niko Scharer, is this: "the color it is" functions as an adjective in "the book is the color it is," a noun in "the color it is is a dark color." Again it seems possible that we have two phrases here with the same orthography. The second is a definite description, the first is a concealed question, like "his age" in "I know his age."
10. Or perhaps of composition, as in "that clay you sold me is now a statue of Goliath." But that is not a likely reading here.
11. Perhaps "the way it is" is a proadjective or proadverb along the lines of "thus" or "thusly." This would leave us without a reading of Stalnaker's statement that "the way the world is is a property of the world." But Stalnaker's exegesis aside, the proform idea seems worth pursuing. Eventually a theory of proadjectival or proadverbial quantification would be needed, for we have sentences like "whatever way things had been, they would have been such and so" to deal with. There is in fact a neglected literature on this, much of it inspired by the work of Lesniewski. See A. N. Prior's *Objects of Thought* (Oxford: Oxford University Press, 1971); G. Kung's "The Meaning of the Quantifiers in Lesniewski," *Studia Logica* 26 (1977): 309–22; and P. Simons' "A Semantics for Ontology," *Dialectica* 39 (1985): 193–216. Also relevant is the program laid out in Dorothy Grover, "Propositional Quantifiers," *Journal of Philosophical Logic* 1 (1972): 111–36; and Dorothy Grover, Joseph Camp, and Nuel D. Belnap, Jr., "A Prosentential Theory of Truth," *Philosophical Studies* 27 (1975): 73–124. Both articles are reprinted in Dorothy Grover, *A Prosentential Theory of Truth* (Princeton, N.J.: Princeton University Press, 1992).
12. The way you smile so bright, the way you knock me off my feet, etc. This is to say nothing of "Fifty Ways to Leave Your Lover."
13. I am told that cockatoos don't build nests, but say they do.
14. Exercise: Compare and contrast (i) "how S " / "the way that S ," (ii) "why S " / "the reason that S ," (iii) "whether S " / "the truth-value of S ," (iv) "which S " / "the S 's identity," and (v) "how many S s" / "the number of S s." [It was some remarks by Ian Rumfitt about (iii) that got me thinking about (i).]
15. The issue is complicated by the distinction between indirect questions and free relative clauses. The distinction is not always well marked in English, but there are some clear cases. "What you think" is a free relative in "I think what you think," an indirect question in "I wonder what you think." Sometimes context does not resolve the ambiguity: "what you know" is a free relative in "I know what you know" interpreted as "whatever you know, I know," an indirect question in the same sentence interpreted as "whatever you know, I know you know."
16. I certainly don't mean to disparage this kind of approach; it can be powerfully illuminating. See in particular J. Groenendijk and M. Stokhof, "Semantics of Interrogatives," in *Properties, Types, and Meaning*, ed. Gennaro Chierchia, Barbara Hall Partee, and Raymond Turner (Dordrecht: Kluwer, 1989), 21–68.
17. Or are the initial phrases in (3) free relatives? Here are some reasons to think not. First, free relatives are interrogated with the relative pronouns they embed—"I once had a drink where Elvis was born" / "you once had a drink where?"—whereas indirect questions are interrogated with "what?"—"I wonder where Elvis was born" / "you wonder what?" And in response to (e.g.) "March 31 is when the swallows return," we say not "March 31 is when?" but "March 31 is what?" Second, interrogative pronouns take strong stress in a way that relative pronouns do not; "I know WHERE Elvis was born—only not WHEN" but "I had a drink WHERE Elvis was born—only not WHEN." And we have no problem with "WHO invited them is Becky; WHY I have no idea." Third, plural relatives in subject position take the plural form of the verb—"what Shakespeare regarded as his best plays are nowadays seldom read"—whereas indirect questions take the singular form—"what Shakespeare regarded as his best plays is anybody's guess." And we say, "what the coach forgot is the keys, the map, etc.," not "what the coach forgot are the keys, the map, etc." Finally, free relatives according to most authors can only be introduced by "what," "when," or "where." But the construction in (3) works for all *wh*-words other than "whether." I am indebted to C. L. Baker's *Indirect Questions in English* (Ph.D. diss., University of Illinois, 1968).
18. Not that all indirect-question-embedding statements with main verb "is" have the atmosphere of an identity statement. Some feel downright predicative, for instance, "she is how I used to be" and "the world is how it is." A good theory of indirect questions ought to have something to say about this.
19. Admittedly, the *salva congruitate* test has its limits; "sunny Madrid is a favorite of ours" sounds good, "sunny the capital of Spain, etc." doesn't. Examples can also be given however where it is truth-value that changes.
20. I have taken some liberties. See Lauri Karttunen, "Syntax and Semantics of Questions," *Linguistics and Philosophy* 1 (1977): 3–44.
21. As always, I am talking about ordinary common-sensical reference, not reference to higher-type objects as in Montague grammar; "who invited them" refers to the one who invited them if it refers at all.
22. "Offering information about Q 's answer(s)" is not to be thought of as necessarily involving reference to or quantification over answers, or acceptance of answers into one's ontology. I can give information about the answer to "where is she going?" by saying simply

"she's going to Albuquerque." (This fits nicely with Alasdair MacIntyre's suggestion that "where she's going is Albuquerque" is a piece of playacting in which I set myself a question and then respond.)

23. Both kinds of flexibility will be important later on when we get to questions like "how is that possible?"—the first because such a question might have any number of correct answers, the second because its answers might be understood either as (linguistic or abstract) world representations or as the possibility-conferring worlds themselves.
24. Wherever convenient the distinction between AQ and its members will be blurred—so that "what is 2 plus 3?" although strictly speaking {"5"} or {5}, is in practice "5" or 5.
25. Or perhaps it is the *meanings* of these phrases that constitute the answers; this is one of the issues we're leaving open. Note that the identity feeling wanes as the material after the "is" goes from *providing* the answer to merely *constraining* it to merely *commenting on* it. Thus "who invited them is Becky," "who invited them is someone with a strange sense of humor," "who invited them is no one you want to know," "who invited them is classified information," "who invited them is a mystery to me."
26. Here again I am blurring the difference between AQs and their members. Also I assume for convenience that answers are linguistic in nature; if not, substitute "AQ's linguistic presentation" for "AQ."
27. Jerrold Katz objected that this is circular since AQ might *itself* be an indirect question. One reply is just to stipulate that indirect-question substituends are not allowed. Another is to say that we should read (ii) as: AQ is obviously, convincingly, invincibly referential. Indirect questions fail this condition, so we can safely ignore them.
28. Some what-questions belong here too, e.g., "what the coach forgot." But what-questions are incredibly various. Just as often they resemble how- and why-questions in satisfying (i) but not (ii), as for example "what works best is to dip the brush in turpentine." Where- and when-questions are tricky too. Prior (op. cit.) observes in effect that these often call for prepositional answers rather than nominal ones: "in Paris," "to Albuquerque," "on March 31," and so on. That leaves only indirect who-questions as *clearly* apparently referential.
29. Strictly, the answers to the direct counterparts of their embedded questions.
30. This section has borrowed freely from the literature on questions, including Karttunen, op. cit.; E. Engdahl, *Constituent Questions* (Dordrecht: Reidel, 1986); and J. Higginbotham, "Interrogatives," in *The View from Building 20*, ed. K. Hale and S. J. Keyser (Cambridge, Mass.: MIT Press, 1993), 195–228.
31. Phrases like "whys and wherefores" perhaps reflect some long-ago attempt to go plural while remaining interrogative. Even "hows and whys" is not unheard of. Consider this from *Webster's 3rd New International Dictionary*: "most of the film is devoted to the grim hows and not the difficult whys of battle."
32. See W. V. O. Quine, "On What There Is," *Review of Metaphysics* 2 (1948): 21–38.
33. There is a cartoon about the last worker on the Sara Lee assembly line: She sits by the conveyor belt asking herself of each passing pie, "Would I be proud to serve this to my family?" Replace the pies with noun phrases and you have Quine's picture of the traditional ontologist: "Am I content to think that this refers to a bona fide entity?"
34. David Lewis, *On the Plurality of Worlds* (New York: Basil Blackwell, 1986), 3.
35. *Ibid.*
36. This objection might be answerable for a particular *S* if we had an inventory of all the ways things could have been which afforded *S* any chance at possibility: say, the way they would have been if A_1 , the way they would have been if A_2, \dots , and so on. Then we could say that *S* is possible

iff there's a way things could have been such that *S*

iff *S* is how things would have been if A_1 , or

S is how things would have been if A_2 , or . . .

iff *S* figures in the answer to "how would things have been if A_1 ?" or *S* figures in the answer to "how would things have been if A_2 ?" or . . .

(Or, we could drop questions altogether and say simply that *S* is possible iff it would have been that *S* had it been that A_1 , or it would have been that *S* had it been that A_2 , or . . .) I take it, though, that this kind of inventory is not to be had. The best we can do is: *S* is possible iff there is *some* way things could have been such that *S*.

37. See Prior, op. cit., 34ff.
38. For some reason this sounds better in old English: "however Valium worketh, so also worketh Librium."
39. Better: we need to drop the assumption that the only alternative to an objectual quantifier is a substitutional one.
40. This approach would resemble the *modalist* project of trying to approximate the expressive power of direct quantification over worlds by means of souped-up modal operators, e.g., indexed actuality operators. See Kit Fine, "Postscript: Prior on the Construction of Possible Worlds and Instants," in *Worlds, Times, and Selves*, ed. Arthur Prior and Kit Fine (London: Duckworth, 1977), 116–61; and Graeme Forbes, *The Metaphysics of Modality* (Oxford: Clarendon Press, 1985), 89ff.
41. See W. V. O. Quine, "Speaking of Objects," in *Ontological Relativity & Other Essays* (New York: Columbia University Press, 1969), 1–25.
42. This is not to forget the occasional brave soul who attempts to do the semantics of, say, tense or adverbs in a tensed or adverbial metalanguage. The brave soul is the exception that proves the rule, because the feeling is bound to be that she is an obscurantist who for some reason refuses to dig down to the deepest semantic levels. If there is no deeper story to be had, the construction itself will be derided as (in a pejorative sense) idiomatic; like "for the sake of . . ." and "believes that . . ." it is better suited to the "the market place or . . . the laboratory" than to precincts more theoretical (W. V. O. Quine, *Word and Object* [Cambridge, Mass.: MIT Press, 1960], 228).
43. E.g., in the case of who-questions, persons rather than their names, and indeed regardless of whether they *have* names.
44. It might; I don't say it must. I prefer the interpretation to be given next because it steers around various tricky issues raised by "according to," such as the following: can a strictly microphysical answer to "how could things have been?" be such that according to *it* there are blue swans?
45. Of course, the answer has to be *correct*. Someone might say that worlds reinsert themselves just here, when we try to explain what correctness comes to. But why does the explanation have to be in terms of what does or does not exist, as opposed to what is or is not possible? Suppose that an answer to "how is *S* possible?" takes the form " S^+ is possible," where S^+ is presented as sufficing for *S*. Then the main thing correctness requires is that S^+ is possible and *does* suffice for *S*. How the correctness of *these* claims is to be understood is another question. Some may opt for homophonic correctness conditions or for Piercean ones; others may insist on something more substantive, up to and including, I suppose, conditions framed in terms of possible worlds. That these various options continue to be available is in a way the point. The worldly semantics is presented as an offer we cannot refuse. But the same analytic advantages are available to those choosing another semantics and, indeed, to those leaving the semantical choice unmade. (This note is one of several places in which I blur the distinction between possible worlds semantics and the possible worlds account of modality.)
46. Sufficing might be a matter of metaphysical necessitation. Then (11') is the modal-logical truth that anything necessitated by a possibility is itself possible. Or it might be a subjunctive affair: if S^+ were the case, *S* would be the case as well. Again, from this and the fact that S^+ is possible, *S*'s possibility logically follows. Of course, (11') continues to be a logical truth on stronger readings of "suffices," e.g., S^+ necessitates *S* and understandably so, or it is a priori that *S* would be the case if S^+ were the case.

47. It might be objected that "possibly, S & T " has the wrong form for an answer to "how is S possible?" The questioner does not want to know what could have been the case *together* with S , but what could have been the case *to bring it about* that S . This assumes that the "how" in "how is S possible?" has got to be one of *means* rather than *manner*. "Possibly S & T " answers "how is S possible?" in much the same way as "they fit stacked together like so" answers "how do all of those dominoes fit into that little box?" The emphasis on manner is only natural given that doubts about " S is possible" are prompted by the thought, not that there is *no basis* for S 's possibility—some possibilities are *surd* after all—but that there is a positive *obstacle* to its possibility. This thought takes the form indicated in the text: scenarios according to which S have a way of falling apart when one tries to flesh them out so as to render a verdict about T . (For more on this theme, see my "Is Conceivability a Guide to Possibility?" *Philosophy and Phenomenological Research* 53 [1993]: 1–42.)
48. Subject to the usual qualifications about semantical paradox.
49. Otherwise one could say: It's perfectly possible to have a barber who shaves all and only the non-self-shavers; what's impossible is that *along* with a specification of who if anyone shaves the barber.
50. I leave (12) aside for now since Lewis has questioned its claim to be called reductive.
51. Further circularities creep in later when (11) gives way to (17).
52. Lewis, *On the Plurality of Worlds*, 17; italics added.
53. It does come up in passing, for instance, in the passage just quoted.
54. So, Lewis objects to linguistic ersatzism that it misclassifies "alien" possibilities as impossible, and to magical ersatzism that it postulates a mysterious making-true relation. Lewis's own favored correlation has been charged with falsely "predicting" the impossibility of island universes, a charge he takes dead seriously.
55. Here is a typical expression of his attitude:

I conclude that linguistic ersatzism must indeed take modality as primitive. If its entire point were to afford an analysis of modality, that would be a fatal objection. But there are many theoretical services left for a version of ersatzism to render, even if it cannot analyze modality away. So it is open to an ersatzier to pay the price, accept modality as primitive, and consider the proposal well worth it on balance. Many ersatzers . . . see the contest between genuine and ersatz modal realism in just that way: there is a choice between unwelcome ontology and unwelcome primitive modality, and they prefer the latter. That seems to me a fair response on their part, but of course not conclusive (Lewis, *On the Plurality of Worlds*, 156).

56. Thus, he says:

If our work is directed to ontological questions only, we may help ourselves to any primitives we please, so long as we somehow understand them. But if our work is directed to ontological and analytic questions both, . . . then we are trying at once to cut down on questionable ontology and to cut down on primitives; and it is fair to object if one goal is served at too much cost to the other (*ibid.*, 157).

57. Comprehensiveness may be a problem too, since (13) as Lewis understands it rules out the possibility of spatiotemporally unrelated ("island") universes. Far from hushing this problem up, Lewis has done a good deal to publicize it:

The intuitive case that island universes are possible has been much strengthened by a recent argument in John Bigelow and Robert Pargetter, "Beyond the Blank Stare." . . . First, mightn't there be a world of *almost* isolated island universes, linked only by a few short-lived wormholes?

And mightn't the presence of the wormholes depend on what happens in the islands? And then wouldn't it be true that if the goings-on in the islands had been just a little different, there wouldn't have been any wormholes? Then wouldn't there have been a world of altogether isolated islands? (David Lewis, "Review of Armstrong, *A Combinatorial Theory of Possibility*," *Australasian Journal of Philosophy* 70 [1990]: 223).

His rejection of island universes puts Lewis in the *prima facie* awkward position of maintaining that there is something—the mereological sum of all the various worlds—such that a thing like that cannot be. But reject them he must if he wants to hold on to his definition of worlds as maximal spatiotemporally connected objects. A lot is riding on this definition here since all the alternatives that come to mind are explicitly or implicitly modal. Allow island universes and it is not clear whether (13) can still be regarded as a reduction. (See Lewis, *On the Plurality of Worlds*, 69ff.)

58. And this only schematically.
59. One could attempt to deny the distinction, maintaining that Q is correctly answerable iff it has a correct answer iff there is a fact of the matter as to IQ . There is certainly something to be said for this view. "What would China do if the United States recognized Taiwan?" has an answer" does not intuitively make an existence claim; it says that there is a fact of the matter as to what China would do. By the same token, when (11) assures us that "how is S possible?" has an answer, this means only that there is a fact of the matter as to how S is possible. And (11') gives us the same assurance when it tells us that S is possible either T -ishly, or (failing that) not- T -ishly. Now, though, we have to decide whether "there is a fact of the matter as to . . ." involves genuine quantification over facts. If it does, we lose; the cause of ontology-free theoretical power is hardly served by trading one ontology for another. If it doesn't, we lose again; give up the quantification and the theoretical power goes too.
60. Another option is to read "there is an answer" in (11) as "there *could* have been an answer, such and such conditions holding fixed." Similarly, one could read "there is a world" in (12) and (13) as "there could have been a world"—a type of quantifier discussed in Fine, *op. cit.* I will be taking a different line, but this one strikes me as well worth pursuing.
61. These are sometimes called "situations" or "possibilities."
62. Cf. I. L. Humberstone, "From Worlds to Possibilities," *Journal of Philosophical Logic* 10 (1981): 313–39; and Forbes, *op. cit.*, 18–22 and 43–47. True refinability is a more complicated affair than (15) suggests, but the differences are not important here.
63. For example, we could explain (14) by saying that any answer to "how is S possible?" is refinable into an answer to "how is S & T possible?," since given T 's necessity "how is S & $\neg T$ possible?" is unanswerable.
64. As discussed above, S^* should suffice for S . There might be "pragmatic" conditions on S^* as well; it should speak to the questioner's doubts. (11") guarantees that "how is S possible?" is correctly answerable in a way that addresses these doubts whatever they may be, provided that S is indeed possible.
65. Compare Gideon Rosen's "Modal Fictionalism," *Mind* 99 (1990): 327–54. The present paper represents one possible development of Rosen's next to last paragraph:

Throughout I have supposed that fictionalism, like modal realism, aims to be a *theory of possibility*. . . . But note that this assumption is not strictly necessary given the modest problem we began with. All Ed ever wanted was license to move back and forth between modal claims and claims about worlds . . . it is one thing to embrace these biconditionals—even to embrace them as a body of necessary truths—and another to regard them as providing analyses. . . . This timid fictionalism of course raises as many questions as it answers. Still it must be granted that many of the objections we have mentioned . . . simply do not arise for this view (*ibid.*, 233–34).

66. Albeit to the version (12) that quantifies over abstract representations of concrete worlds rather than the worlds themselves
67. Sentential and propositional answers to "how is *S* possible?" still exist on this view, but they interest us mainly as *presentations* of the fully determinate answers otherwise known as concrete worlds.
68. For the same reasons, it is not Gideon Rosen's story in "Modal Fictionalism" either.
69. Someone might think that MWS was lacking in substantive content. But a story's content is not exhausted by what is explicitly written down (see the next section). If *S* is possible, then according to MWS, there is a world in which *S*. Since blue swans are possible, according to MWS there is a world at which blue swans exist; since they are possible together with a German victory in the First World War, according to MWS there is a world like that as well. How claims like this make their way into the content of Lewis's story (as elaborated by Rosen) is a nontrivial question. See Rosen, *op. cit.*, 227–28.
70. See the epigraph.
71. "Almost" because the pretense has to be disciplined in the right way. I'm not sure what the right way is but at least this much is true. There is no make-believe game if imaginings are *forbidden* but none are *prescribed* (Albanians under Enver Hoxha were told not to imagine life in the West) or if they are prescribed but on a basis having not enough to do with what they are imaginings *of* (as in a biofeedback game where contestants try to raise their heart rates just by the exercise of their imaginations).
72. Better, such and such is part of the game's content if "it is to be imagined . . . *should the question arise*, it being understood that often the question *shouldn't arise*" (Kendall Walton, *Mimesis & Make-Believe* [Cambridge, Mass.: Harvard University Press, 1990], 40). Subject to the usual qualifications, the ideas about make-believe and metaphor in this and the next few paragraphs are all due to Walton. See his "Metaphor and Prop Oriented Make-Believe," *European Journal of Philosophy* 1 (1993): 39–57.
73. The example is adapted from David Lewis, "Truth in Fiction," *American Philosophical Quarterly* 15 (1978): 37–46.
74. The kind of point I am gesturing at might be guessable from the literature on indexicality, for instance, John Perry's "The Problem of the Essential Indexical," *Noûs* 13 (1979): 3–21, and David Kaplan's "Demonstratives," in *Themes from Kaplan*, ed. by Joseph Almog, John Perry, and Howard Wettstein (Oxford: Oxford University Press, 1989), 481–564. See also Josef Stern, "Metaphor as Demonstrative," *Journal of Philosophy* 92 (1985): 677–710. A metaphor that shares its *content* with some literal paraphrase might still be indispensable due to its special *character*; that the content is arrived at by way of a contextually salient make-believe game might make a world of difference to its cognitive reception.
75. Walton, "Metaphor and Prop Oriented Make-Believe," 40–41.
76. *Ibid.*, 46. (I should say that Walton does *not* take himself to be offering a general theory of metaphor.) Walton goes on to say that unparaphrasable metaphors "may still amount to descriptions of their (potential) props" (*ibid.*). If he is right, then it becomes suddenly clear how, even if modal reality had nothing to *do* with worlds, there could still be modal truths requiring quantification over worlds for their expression. The point generalizes. Ineliminable quantification over *blahs* does not count in favor of *blahs' existing* unless it can be shown that the quantifier is not metaphorical. Add to this that the metaphorical-literal distinction is deeply and irremediably inscrutable, and the whole project of Quinean ontology is thrown into considerable doubt, while Carnap's position that there is no worthwhile activity of trying to puzzle out what "really" exists begins to look notably less insane. These matters are discussed in "Does Ontology Rest on a Mistake?" (forthcoming in *The Proceedings of the Aristotelian Society*).
77. Some of the many additional topics that need attention are: iterated modalities, transworld identity, grades of modality, impossible worlds, and modal epistemology.