

*Truthmaking and Difference-Making*¹

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1.

The truth about truth, so far as propositions are concerned, is a long but simple story. A proposition is true iff

it is the proposition that a donkey talks, and a donkey talks; or
it is the proposition that pigs fly, and pigs fly; or
it is the proposition that cats purr, and cats purr; or
it is the proposition that servitude to the state is perfect freedom, and servitude to the state is perfect freedom; or...

So we have the familiar biconditionals—trivial, necessary, and knowable *a priori*—

the proposition that a donkey talks is true iff a donkey talks;
the proposition that pigs fly is true iff pigs fly;
the proposition that cats purr is true iff cats purr;

and so on, for all the propositions there are.

Not for all the “that”-clauses there are. Some “that”-clauses fail to name propositions: for instance because of ungroundedness, or because the embedded sentence is a mere expression of feeling in the syntactic guise of a declarative sentence. Further, some propositions cannot be named by “that”-clauses. First, because there is an uncountable infinity of propositions, whereas there are only countably many “that”-clauses. Second, because some of the propositions, in fact most of them, cannot be named by “that”-clauses of finite length. Third, because some propositions cannot be named at all, not even at infinite length, since we lack names for alien properties that are nowhere to be found in our

actual world, and that cannot be reached by any sort of construction or extrapolation or interpolation from thisworldly properties. So the story of truth cannot be told completely. But there is no need to complete it. The untold part merely repeats the same pattern over and over, so a tiny sample tells us all we need to know.

(Compare the addition or multiplication of real numbers. Most cases involve numbers with infinite, patternless decimal expansions; we cannot express or grasp even one of these typical cases. Nevertheless we pick up the general concept easily from a tiny sample of atypically simple cases.)

This conception of truth is called “deflationary” (Horwich, 1990; Soames, 1999, chapter 8). The thought is that it punctures the big, interesting claims made by rival theories of truth such as the correspondence theory, the coherence theory, the pragmatic theory, or what have you. But I don’t think that’s right.

Suppose some grand theory of truth tells us that the true propositions are just those that satisfy some interesting condition *X*. Taking the deflationary conception and the grand theory together, we infer that

a donkey talks iff the proposition that a donkey talks satisfies *X*;
pigs fly iff the proposition that pigs fly satisfies *X*;
cats purr iff the proposition that cats purr satisfies *X*;

In this way, the deflationary conception and the grand theory coexist peacefully. But by taking them together, we find that the grand theory was not after all a theory about *truth*. It was a theory of many things. It was a theory of the talking of a donkey and the flying of pigs and the purring of cats, and much else. It told us that the talking of a donkey and the flying of pigs and the purring of cats and ... were all of them matters of correspondence to facts; or were all of them matters of the coherence of a total theory; or were all of them matters of what it’s useful for us to believe; or what have you. (Or, to be more cautious, it told us that the talking of a donkey, and so on, were at least equivalent to matters of correspondence to facts, or what not. To impute a direction of conceptual priority may be a gratuitous addition.) When the grand theory was stated in terms of truth, that was just a way of abbreviating its multitude of claims by one concise slogan.

2.

To my mind the most promising, if not the most prominent, among the grand theories of truth are the theories that somehow require what’s true to depend on the way the world of existing things is, or on the way some part of that world is. Such theories come in different versions, some stronger and some weaker. I myself am convinced that some version of this idea is right, though I disagree with some of my allies about which version to prefer. But I don’t

think these theories are theories about truth. They are theories of many things. Once again, the mention of truth is just an abbreviatory device.

Consider first the Truthmaker Principle, defended *inter alia* by C. B. Martin (1996) and D. M. Armstrong (1989; 1997, chapter 8). The idea has turned up under different names in different philosophical traditions (Mulligan, Simons, and Smith, 1984). In a slogan: every truth has a truthmaker. Spelled out at greater length: for any true proposition *P*, there exists something *T* such that *T*'s existence strictly implies (necessitates) *P*.

Four preliminary comments. First, if *P* is a necessary proposition, then for any *T* whatever, *T*'s existence strictly implies *P*. So the Truthmaker Principle, as I have stated it, applies only trivially to necessary truths. A non-trivial principle requiring truthmakers for necessary truths would presumably replace strict implication by some more discriminating sort of "relevant" or paraconsistent implication (Restall, 1996). I will not discuss that amendment, but rather will limit my attention to contingent propositions.

Second, the Principle is meant to be more than accidentally correct. So it applies counterfactually: if proposition *P* is (contingently) false, then *if P were true*, it *would have* a truthmaker.

Third, although the Principle applies in the first instance to true propositions, it applies derivatively to true sentences and true thoughts. If *S* is a true sentence of, say, Latin, then *S* expresses some true proposition *P*; and there is a second true proposition, *Q*, to the effect that *S* expresses *P* according to the semantic conventions of Latin; the true propositions *P* and *Q* have their truthmakers; and these truthmakers for *P* and *Q* jointly constitute a truthmaker for the sentence *S*. (Or, more precisely, for *S* as a sentence of Latin; or, more precisely still, for *S* as a sentence of Latin in such-and-such context.) Likewise *mutatis mutandis* for true thoughts, presumably with functional roles in place of semantic conventions.

Fourth, when we say that *T*'s existence strictly implies *P*, we mean that every possible world where *T* exists is a world where *P*. Possum is a cat, and he is essentially a cat. So Possum makes true the proposition that something is a cat, because every world where Possum exists is a world where something is a cat. But what should we mean by "worlds where Possum exists"?—I myself think that worlds are big things, *cosmoi* (Lewis, 1986). They do not overlap. (More precisely, they have no particular parts in common. If there are universals, presumably those are multiply located among the worlds in just the same way they are multiply located in space and time.) Possum is part of our actual world. He is part of no other world. If existing in a world means being part of that world, then Possum exists in no other world but this one; so every world where Possum exists is this world; so Possum turns out to be a truthmaker for every true proposition! That will never do—truthmaking was not meant to be so easy. Of course, everyone agrees that there is *some* sense in which Possum can be said to exist in other, unactualized possible worlds. I

myself would say that it is true in a counterpart-theoretic sense: Possum exists vicariously in another world when something that is part of that other world is Possum's counterpart, where the counterpart relation is a matter of intrinsic and extrinsic resemblance (Lewis, 1986, chapter 4). But there are many rival conceptions of possible worlds, including conceptions on which worlds are not *cosmoi*, but rather are "abstract entities" which don't have such things as cats as parts of them at all. Further, some who are perfectly willing to speak as I do of unactualized possible worlds do not believe in the existence of these worlds under *any* conception; rather, they think that to talk of possible worlds is to engage in an innocent fiction (Armstrong, 1989; Rosen, 1990). This paper is meant to be entirely neutral on all such questions; I shall take care not to presuppose my own idiosyncratic views. (What can be said from a less neutral standpoint is significantly different. See Lewis, forthcoming, and Rosen and Lewis, forthcoming.) My conclusions here are meant to be acceptable to anyone who agrees that talk of possible worlds is somehow legitimate, whether he takes these worlds and their inhabitants to be "concrete" or "abstract", real or fictitious. So: mean what you like by "exist in a world", provided you have some meaning in mind which does not automatically rule out that an actually existing thing, say Possum, should exist in an unactualized world.

As with other grand theories, so with this one: the Truthmaker Principle coexists peacefully with the deflationary conception of truth. But when it does, the two together generate a multitude of consequences about many different things, but not particularly about truth. Thus:

- if a donkey talks, then there exists something T such that T 's existence strictly implies that a donkey talks;
- if pigs fly, then there exists something T such that T 's existence strictly implies that pigs fly;
- if cats purr, then there exists something T such that T 's existence strictly implies that cats purr;

Since the Truthmaker Principle is meant to apply counterfactually, it applies not only to the truths of our world but to the truths of all possible worlds. Otherworldly truths have their otherworldly truthmakers. If in some world W a donkey talks, for instance, then there exists in W something T such that T 's existence strictly implies that a donkey talks.

We noted that the point of mentioning truth was that it allowed us to formulate the Truthmaker Principle concisely, rather than as an infinite list of claims about all manner of things. And when we make explicit that the Principle is supposed to apply to all worlds, we can state it thus:

- for any proposition P and any world W , if P is true in W , there exists something T in world W such that T 's existence strictly implies P .

The final clause means that every world where T exists is a world where P is true. So we have

(TM) For any proposition P and any world W , if P is true in W , there exists something T in world W such that for any world V , if T exists in V , then P is true in V .

This logically implies:

for any worlds W and V , if some proposition P is true in W but not in V , then something T exists in W but not in V .

But now I say that for *any* two worlds W and V , there is some proposition true in W but not in V . For myself, I would be content to invoke the doctrine that a proposition just is a class of worlds, and any class of worlds is a proposition. But that doctrine is contentious, and I can get by with less. I need only ask you to accept that for any world W , there is the proposition that world W is actualized; this is a proposition true in W and not in any other world. Given that any two worlds are divided by some proposition, the Truthmaker Principle boils down to a Difference-Making Principle

(DM) For any two worlds W and V , something T exists in W but not in V .

All mention of truth, and all mention of propositions, has dropped out. The Truthmaker Principle turns out to imply something about how possible worlds can and cannot differ. It says that every difference between worlds is a difference in population. And further, every difference between worlds is a *two-way* difference in population: each world has something that the other lacks. In other words, every difference between worlds requires a difference-maker. In fact, two difference-makers: one in one world and the other in the other.

I once professed agnosticism about whether there are indiscernible possible worlds (Lewis 1986, p. 224). The Difference-Making Principle says that there are not, since a world in which something exists could scarcely be indiscernible from a world in which it does not. (Remember that whatever existing in a world may mean, it does not just mean being part of that world.) I have no particular objection to abandoning my former agnosticism; but if neutrality were preferred, the needed amendment to what I have said would be easy and harmless. Let a *discerning* proposition be one that never has different truth values in two indiscernible worlds; understand (TM) to be restricted to discerning propositions. (I would say that discerning propositions are qualitative propositions; but those who believe in haecceitistic difference between worlds should say that haecceitistic propositions also are discerning.) It never happens that two indiscernible worlds are divided by a discerning proposi-

tion, so we get a restricted form of (DM): only when two worlds are discernible must something exist in one but not the other.

By applying the Truthmaker Principle to the proposition that world W is actualized, we derive this Principle of Distinctive Occupants

(DO) For any world W , something exists in W and in no other world.

Call such a thing a *distinctive occupant* of world W . The principle that every world has a distinctive occupant is a special case of the Truthmaker Principle. But the general case follows from the special case: (DO) implies (TM).

Proof. For any proposition P and any world W , if P is true in W and T is a distinctive occupant of W , then T is a thing that exists in W such that T 's existence strictly implies P .

Hence (DO) must imply (DM). We can verify this directly.

Proof. For any two worlds W and V , if T is a distinctive occupant of W , then T is something that exists in W but not in V .

Whether we have the implication from (DM) back to (TM) is a more difficult question. We can certainly get this far

(TMP) For any proposition P and any world W , if P is true in W , there exist some one or more things T_1, T_2, \dots in world W such that for any world V , if all of the T 's exist in V , then P is true in V .

(DM) implies (TMP), and conversely.

Proof. Let $U_1, U_2 \dots$ be all the worlds where P is false. By (DM), we have something T_1 that exists in W but not in U_1 ; and we have something T_2 that exists in W but not in U_2 ; and so on for all the U 's. Any world V where all the T 's exist cannot be any one of the U 's, so it must be a world where P is true.

Conversely, let W and V be any two worlds. We have some proposition P true in W but not in V . All of the T 's given by (TMP) exist in W ; but at least one of them does not exist in V , else P would be true in V .

(TMP) is a *plural* Truthmaker Principle: it says that the T 's collectively make P true. (TM) says that some one thing does the job single-handed.

One thing to do might be to rest content with (TMP), and not even try to close the gap between (TMP) and (TM). (This is suggested by Restall 1996, p. 332). That would violate the letter, but hardly the spirit, of the Truthmaker

Principle as we find it defended by Martin and Armstrong. A point in favor of this course is that it gives us a very natural treatment of plural existential propositions. What makes it true that Max and Moritz exist?—Even if there is no single truthmaker, Max and Moritz can do the job together.

Or instead we might try to lump all the *T*'s together, somehow, into a single truthmaker for *P*, thus getting from (TMP) to (TM). We need to find something that will exist in any world iff all the many *T*'s exist there. Should we take the mereological fusion of the *T*'s? That will work only under the assumption of Mereological Essentialism, but that assumption is questionable. My left hand is part of me, but it seems that I could have been without it, say because of a misadventure with thalidomide. (I myself think that some counterpart relations validate Mereological Essentialism and other equally legitimate counterpart relations do not.) Should we take the class of all the *T*'s? That will often work, if we assume—plausibly enough, once we've decided that “in a world” needn't mean “part of that world”—that a class of things in a world is itself something in that world. But it won't work if some of the *T*'s happen to be things—proper classes, perhaps—which are ineligible to be members of a class. (Could we really have a world so big that proper classes exist in it? For a strong case that such enormous worlds are to be taken seriously, see Nolan, 1996.) If all the *T*'s are classes, we could take their union, but that is again a special case. But the following general recipe will work, given certain plausible assumptions. Split each of the *T*'s into its largest part which is a class and its largest part which is an individual. Take the union of (1) all the class-parts of the *T*'s, and (2) the class of all the individual parts of the *T*'s. In the special case where all the *T*'s are individuals, this reduces to taking their class. In the special case where all the *T*'s are classes, this reduces to taking their union.

It is worth noting that the Principle of Distinctive Occupants also has a plural version

(DOP) For any world *W*, some things T_1, T_2, \dots exist in *W* and do not all exist in any other world.

Just as (TM) and (DO) are equivalent, so likewise are (TMP) and (DOP).

Because (DM) is a principle of *two-way* difference-making, it has another consequence: a sort of negative mirror-image of (TMP). This will serve as an introduction to the idea of truth by lack of falsmakers, our next topic.

(MI) For any proposition *P* and any world *W*, if *P* is true in *W*, there exist some one or more possible things F_1, F_2, \dots not in world *W* such that for any world *V*, if none of the *F*'s exists in *V* then *P* is true in *V*.

(MI) implies (DM), and conversely.

Proof. Let W and V be any two worlds. We have some proposition P true in W but not in V . None of the F 's given by (MI) exists in W , but at least one of them exists in V , else P would be true in V .

Conversely, let U_1, U_2, \dots be all the worlds where P is false. By (DM), we have something F_1 that exists in U_1 but not in W ; and we have something F_2 that exists in U_2 but not in W ; Any world V where none of the F 's exists cannot be one of the U 's, so it must be a world where P is true.

Accordingly, our original Truthmaker Principle, (TM), itself implies (MI).

We have not said that the F 's are falsemakers for P , in other words that they are truthmakers for not- P . But that is at any rate one case that might arise. P might, for instance, be the true proposition that there are no unicorns; and the F 's might be the various otherworldly unicorns. (I assume, *pace* Kripke, 1980, pp. 157–8, that “unicorn” is a predicate that applies to some possible animals but no actual ones; and that any unicorn would be essentially a unicorn. If you like, you may imagine that genetic science has discovered a certain DNA sequence that would code for animals that exactly match the familiar stereotype; that “unicorn” has been redefined in terms of this sequence; but that no such animals will ever be made.)

3.

The idea that we should set some sort of limits on the ways that possible worlds can differ looks clearly right. To adapt a pair of motivating examples from Martin and Armstrong, it seems preposterous to think that two possible worlds might be just alike except for a difference in counterfactual conditionals about sense-experience; or just alike except for a difference in counterfactual conditionals about how someone would behave if put to a test. To make a difference to those counterfactuals, we need some other difference: perhaps a difference in the arrangement of material objects (or else a difference in God's thoughts) in the one case, or a difference in the agent's inner states in the other. So far, so good. But I doubt that our two-way principle of difference-making is the right limit to set.

Why two-way? Certainly, one good way for two worlds to differ is for one of them to have something that the other lacks. But why must it be reciprocal? If we pass from world W to world V by removing something, why must we add something else to take its place? Why not replace it with nothing at all, and leave a gap? That is to say, why not rest content with a principle of one-way difference-making?

(DM-) For any two worlds W and V , either there is something that exists in V but not in W , or else there is something that exists in W but not in V .

Two-way difference-making is of course not ruled out. But it is no longer required. This one-way Difference-Making Principle would correspond to a weakened version of the Truthmaker Principle that has sometimes been advocated by John Bigelow: “If something is true, then it would not be possible for it to be false unless either certain things were to exist which don’t, or else certain things had not existed which do” (Bigelow, 1988b, p. 133). If we take “things” to mean “at least one thing”, and if we take Bigelow’s principle to apply necessarily, and if we regiment it in terms of possible worlds, it becomes:

(TM-) For any proposition *P* and any worlds *W* and *V*, if *P* is true in *W* but not in *V*, then either something exists in *V* but not in *W* or else something exists in *W* but not in *V*.

And this is equivalent to the one-way Difference-Making Principle.

Bigelow’s principle (TM-) allows truths to have truthmakers, but also it allows them to be true just because they lack falsemakers. The simplest case is that of a negative existential: the proposition that there are no unicorns, say. It is true in the actual world just because there are no unicorns to make it false. In any world where it is false, certain things would have to exist which in actuality do not exist, namely one or more unicorns. Those otherworldly unicorns are the one-way difference-makers between worlds like ours where the negative existential proposition that there are no unicorns is true and other worlds where it is false; and in worlds where the negative existential proposition is false, they are the truthmakers for its true negation. What more do we need?

(Two less simple cases: Take the truth that there are cats but no unicorns. Some worlds where it is false have unicorns, others lack cats. Or take the truth that either there are cats or there are no unicorns. Any world where it is false must both lack cats and have unicorns. So neither one of these compounds has a truthmaker, at least not among uncontroversial things like cats and unicorns; and neither one is true just for lack of falsemakers.)

Suppose we insisted on positing some sort of truthmaker for the negative existential truth that there are no unicorns. There would have to be something in a unicorn-free world like ours to replace the missing unicorns, thereby making a two-way difference between a world without unicorns and a world with them. These unicorn-replacements would have to meet two conditions. First, none of them could possibly coexist with a unicorn; else it would make the negative existential proposition true even in a world where there *was* a unicorn. Second, some one of them could not possibly fail to exist in any world where there were no unicorns. (Some or other one, not necessarily the same one in every unicorn-free world.) Else there will be some worlds where the negative existential proposition is true without benefit of a truthmaker. We could call this unicorn-replacement an “absence of unicorns”, understanding that

phrase as a genuinely referential term. Or we could call it “the negative state of affairs of there being no unicorns”. Or we could call it “the general state of affairs of everything being a non-unicorn.” Call it what you will, I think it is bad news for systematic metaphysics.

In the past, I made two different complaints (Lewis, 1999, chapters 12 and 13). First, I complained that such a thing seems to be somehow constructed out of simpler things, among them the property of being a unicorn; yet this cannot be any well-understood kind of composition—mereological, or even set-theoretical—since if it were, the constructed thing would exist if its constituents did, even if unicorns existed as well. Second, I complained that in order to do its job as a truthmaker, the unicorn-replacement must be involved in necessary connections between (mereologically) distinct existences; and it is the Humean prohibition of necessary connections that gives us our best handle on the question what possibilities there are. But now I think that the second complaint subsumes the first. For we *can* explain how unicorn-replacements are constructed out of their constituents, provided we define the “construction” simply in terms of the necessary connections themselves. Then indeed “unmereological composition” has been explained—but in a way that does nothing at all toward excusing or explaining the necessary connections.

To uphold the Truthmaker Principle in its original form, we need to say that if there are no unicorns, there must be a unicorn-replacement instead. Suppose there were no material objects at all; then likewise there would have to be a replacement for them, a truthmaker for the negative existential proposition that there are no material objects. We could call this thing an absence of material objects, or a negative state of affairs, or a general state of affairs; and again it would be objectionable because its *raison d'être* would require it to be involved in mysterious necessary connections.

Suppose there were no contingent things whatever. Again there would have to be a replacement. So we have a swift reason why there must be something, and not rather nothing: else the proposition that there is nothing would be a truth without a truthmaker. Altogether too swift, say I. (This is not to deny that we might find some better, less swift reason to deny the possibility of a world with no contingent things, even if that denial compromised our commitment to the combinatorial nature of possibility. See Lewis, 1986, pp. 73–4; Armstrong, 1989a, pp. 24–5 and 63–4.)

Martin has noted that when I say that a negative existential truth is true for lack of falsemakers, my statement that there are no falsemakers is itself a negative existential (Martin, 1996, p. 61). Sometimes, in fact, as in the case of the proposition that there are no unicorns, it is the very same negative existential. So the proposition that there are no unicorns is true just because there are no unicorns! What sort of explanation is that?—No explanation at all, I agree. But who says a Truthmaker Principle, whether weakened or not, must yield informative explanations? I say to Martin: *Tu quoque!* His original, full-

strength Truthmaker Principle says that a positive existential, for instance the proposition that there is a cat, is true because it has a truthmaker. The statement that it has a truthmaker is itself a positive existential. In fact, it is the very same positive existential. The proposition that there is a cat is true just because there is a cat. What sort of explanation is that?—No explanation at all, and none the worse for that.

In sum, I still find *prima facie* mystery in the necessary connection whereby the truthmaker for the proposition that there are no unicorns is something that cannot possibly coexist with a unicorn. Perhaps there is a way to dispell the mystery; but not, I think, without violating the neutrality about controversial issues in the metaphysics of modality which is my policy in the present paper.

4.

Bigelow's retreat to one-sided difference-making and truth by lack of falsemakers was a step in the right direction, say I. But I think we ought to consider one further step. Why shouldn't two possible worlds differ without any difference at all in their population? Why shouldn't the difference just be that something has a property—let it be a fundamental property, intrinsic and perfectly natural—in one world which it lacks in the other? Or couldn't the difference just be that two things stand in a relation—let it be a fundamental relation, intrinsic to its pairs and perfectly natural—in one world but not in the other? If we take properties seriously, why shouldn't such a difference in properties suffice to make a difference of worlds?

The strongest principle of difference-making that seems to me clearly acceptable is

(DM=) For any two worlds, either something exists in one of the worlds but not in the other, or else some n -tuple of things stands in some fundamental relation in one of the worlds but not in the other.

(We identify 1-tuples of things with the things themselves, so the case of a difference in fundamental monadic properties of something is covered as the case $n=1$.) There is a corresponding version of the Truthmaker Principle (if we may still call it that)

(TM=) For any proposition P and any worlds W and V , if P is true in W but not in V , then either something exists in one of the worlds but not in the other, or else some n -tuple of things stands in some fundamental relation in one of the worlds but not in the other.

This principle too has sometimes been advocated—somewhat hesitantly—by John Bigelow. At one point he paraphrased a demand for truthmakers as a ques-

tion of “what things there must be and how they must be arranged” in order for a certain claim to be true (Bigelow, 1988a, p. 38). It is fairly clear in context that he was not thinking only of the spatiotemporal arrangement of things; I take him to have meant something more like “what particulars and universals there must be, and how they must be arranged in a pattern of instantiation”. Soon after, he offered this “attempt to re-articulate the conviction behind Truthmaker: In order for something to be true, there must not only be certain individual things, but *there must also be somehow* that these things are”, where the italicized phrase is understood as a second-order quantifier (Bigelow, 1988b, p. 159). Our first step backward from the full-strength Truthmaker Principle relieved us of the burden of finding truthmakers for negative existentials. Our second step relieves us also of the burden of finding truthmakers for predications of fundamental properties. (And again, various compound propositions are affected as well.) Suppose it is true in our actual world that something *A* instantiates the fundamental property *F*. (DM=) demands that the difference between a world like ours where *A* has *F* and another world where that is not so must either be a difference in what exists in the two worlds, or else a difference in what stands in some fundamental property or relation. If that other world is a world where *A* and *F* exist but *A* lacks *F*, then the difference is of the latter sort: *F* is a fundamental property, *A* has *F* in one world but not in the other.

If we had not taken this second step backward, we would need to posit a truthmaker either for the predication $F(A)$ or for its negation. A truthmaker for $F(A)$, especially if it is taken to be one single thing common to all and only the worlds where *A* has *F*, is called “the (atomic) state of affairs” or “the (atomic) fact” of *A*’s having *F*. This is something that would not have existed at all if *A* had not had *F*.

(It is not something that would still have existed but would not have “obtained”; or something that would have existed but would not have deserved the name of “fact”. Therefore it is nothing like a true proposition that might have been a falsehood, or a mathematical representation that might have been a misrepresentation. Not just any theory that posits something called a “state of affairs” or a “fact” is designed to meet a demand for truthmakers.)

Somehow, this state of affairs is said to be constructed—neither mereologically nor set-theoretically—from its “constituents” *F* and *A*. I used to complain that I didn’t know what this unmereological composition was. But now I think I understand it well enough, because I can define it in terms of necessary connections. To say that the state of affairs is unmereologically composed of *F* and *A* (in that order) is to say nothing more or less than that, necessarily, it exists iff *A* has *F*. My only remaining complaint is that this necessary connection between seemingly distinct existences has been in no way explained or excused. Unless that mystery can be cleared up, then, despite the undeniable attraction of keeping the Truthmaker Principle as strong and sim-

ple as we can, it would be well worth taking the second step backward to get rid of it. And can that mystery be cleared up? Perhaps; but, again, I think not without violating my present neutrality about controversial issues in the metaphysics of modality.

Shall there now be a third step backward?—I see no need for it. In the thesis that all contingent matters supervene on what there is, together with the pattern of instantiation of the fundamental properties and relations, I think we have reached a stable resting place. And, note well, not anything goes: worlds that supposedly differ only in their phenomenalist or behaviorist counterfactuals are still ruled out as decisively as they ever were. So likewise are worlds that differ only in their Molinist counterfactuals about the outcomes of unactualized indeterministic processes (Adams, 1977; McDermott, 1999). So likewise are worlds that differ only in the lawfulness of their regularities, or only in their causal relations (provided those are not fundamental). So likewise are momentary worlds that differ only in their less-than-fundamental ersatz-historical properties (Keller, forthcoming).

Note

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