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An introduction to truthmakers

I first learnt to appreciate the power of the notion of a truthmaker from C. B. (Charlie) Martin. A survey of the arguments I was introduced to then should serve as a good introduction to this essay.

The time was the late 1950s, and Martin was a lecturer at the University of Adelaide. I was at Melbourne University. At the time we were both interested in the doctrine of phenomenalism, the claim that physical objects are constituted out of sense-data or sense-impressions. Neither of us had any sympathy for this view, but it was in the air at the time. The question for us was how it was best argued against.

Phenomenalists had a problem about physical objects and events at times that they are not being perceived. The solution to the problem generally given is to be found in embryo in Berkeley and became firm doctrine in John Stuart Mill. It involved an appeal to certain *counterfactual* truths. Counterfactual claims are often to be found in ordinary discourse, for instance, 'If you had not put your foot on the brake so promptly just then, there would have been a nasty accident.' There can be rational discussion of such claims, and it is plausible that they can be true as well as false, though some philosophers want to say that they are no more than 'assertible' or 'not assertible'. Perhaps, then, an account can be given of the physically unobserved in terms of what sort of perceptions would have been had if, contrary to fact, a suitable perceiver had actually perceived them. In Mill's striking phrase, a physical object becomes a mere 'permanent possibility of sensation'.

Many prima facie difficulties for this line of defence using counterfactuals were known. But Martin asked a simple question that seemed to go to the heart of the problem. Suppose that the required counterfactual propositions are indeed true. What are the truthmakers for these truths? Must there not be *some way that the world is* in virtue of which these truths are true? *What is it*? How does the world make these truths true?

Realists about the physical world will have no difficulty in answering Martin's question. Berkeley had an answer, even if an obscure and difficult

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answer, in the *archetype* of the world that he supposed to exist in the eternal mind of God. A realist about unfulfilled possibilities might have an answer. But what answer had the actual phenomenalists got? All these philosophers had available for truthmakers were the *actual* sense-data or sense-impressions had by actual minds. Truthmakers for true counterfactuals about the perception of unobserved material reality would therefore have to be found in the actual, bitty, sense-data. As a result, unobserved physical reality cannot, for the phenomenalist, be what we all think it is in our unphilosophical moments: something ontologically *additional* to observed physical reality.

A bad enough result, one would think. But worse follows. Consider a physical world without any minds in it. That seems to be a possibility, indeed in view of the delicacy of the initial conditions under which life evolved, it seems to be a physical possibility, one compatible with the actual laws of nature. What can the phenomenalist say about such a world? Every physical truth about individual objects and processes must be given a counterfactual analysis in terms of perceptions not actually had. But what truthmakers in that sort of world will there be for these truths? None, it would seem. Such a world is empty of perceptions and the minds that have these perceptions, therefore it is empty, period. So for a phenomenalist there cannot be a physical world empty of minds.

I do not want to claim that these arguments are *absolutely conclusive* against phenomenalism. I deny that there are such arguments in metaphysics, and arguments using truthmakers are no exception. In the present case, for instance, a Berkeleyan idealist, such as the contemporary Oxford idealists John Foster and Howard Robinson, might even welcome them. But I claim that truthmaker arguments are very powerful, that, in Mill's phrase, they are considerations capable of influencing the intellect. Their power in the critique of phenomenalism is, I trust, obvious.

Let us turn from phenomenalism to Gilbert Ryle's account of the mind. As is well known, Ryle bolstered his quasi-behaviouristic account of mental states, events and processes in *The Concept of Mind* (1949) by continual reference to *dispositions*. Certain mental states, in particular beliefs, he saw as fundamentally dispositional. It is a mark of dispositions that they need not be manifested, perhaps at any time during the existence of the thing that has the disposition, although, of course, the physical possibility of that manifestation is involved in the very notion of a disposition. The brittle thing may never break; the elastic thing need never be first stretched and then allowed to return to its previous unstretched state. Similarly, a person

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might hold a belief, but never manifest that belief in behaviour during the whole of a life. No problem, then, for the Rylean account of mind. Unmanifested beliefs are no more than a particularly sophisticated sort of unmanifested disposition.

So, I think, Ryle saw it. But he could only so see the matter because he was working in a philosophical climate that saw little need to take up metaphysical (ontological) questions, and in particular no need to consider the question of the truthmaker for dispositional truths about minds. I think he was quite right to claim an essential role for dispositionality in the elucidation of our notion of the mental. That was a great and lasting contribution. But we need then to go on to consider the question of the truthmaker for these dispositional truths. What is there in the world in virtue of which these truths are true? Ryle had no answer.

Once we do raise the truthmaker question, then our view of the nature of mind will very likely be transformed and we will move in a quite un-Rylean direction. We will (very likely) identify a belief, say, with some inner *state* of the mind (materialist metaphysicians will identify it further with some state of the brain) that, in suitable circumstances, but only in suitable circumstances, will manifest itself in various ways, some of which ways may be outward behaviour.

Of course, even if under the influence of the truthmaker question we do 'move inside' to the brain (or the soul), there will be plenty of room for disagreement about the exact nature of the inner state that should be postulated. For myself, I incline to a *categorical* state, a state involving non-dispositional properties, and, as I now understand the matter, a state that requires to be supplemented by the relevant laws of nature. (The laws of nature, in turn, cannot be mere truths, but must be conceived ontologically.) Martin thought of the state required as having a categorical 'side' but as also involving *powers*, powers that are not reducible to the categorical, and which serve as his substitute for laws of nature. Others take subtly different views. But the truthmaker insight, as I take it to be, prevents the metaphysician from letting dispositions 'hang on air' as they do in Ryle's philosophy of mind. That is the ultimate sin in metaphysics, or at any rate, in a realist metaphysics.

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The general theory of truthmaking

2.1. INTRODUCTION

We have noticed already that simply to accept the idea that truths have truthmakers by no means dictates just what these truthmakers are. The question what truthmakers are needed for particular truths (what we take to be truths!) can be, and regularly is, as difficult as the question of metaphysics, the question of ontology. To ask the truthmaker question is, I maintain, a promising way to regiment metaphysical enquiry. But it is not a royal road. No such roads are available in philosophy. In this work I will defend various particular answers to the truthmaker question, sometimes (but not invariably) defending metaphysical positions that I have advocated in earlier work, but here always putting the truthmaking question at the centre. All the more reason then, to distinguish between the general theory of truthmaking and particular answers that may be given to truthmaking questions. The division is not all that sharp. There is, very properly, interaction between one's general theory of truthmaking and the particular truthmakers one postulates for particular classes of truths. The two enterprises have to be brought into reflective equilibrium. But it does seem worthwhile to make the distinction, and this chapter will be given over to the general theory with only glances at particular doctrines.

2.2. HISTORICAL

The notion of the truthmaker may be traced right back to Aristotle. (See, in particular, *Categories*, 14b, 14–22.) Aristotle's remarks were noted by a number of leading Scholastic philosophers, but the notion seems after this to have gone underground for some centuries, although intimations of it may be found here and there. The notion is present in Russell's thought, and in his later philosophizing he introduced a term for the notion, the

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somewhat unfortunate word 'verifier' (Russell, 1940, 1948, 1959).¹ Reference to truthmakers, and some development of truthmaking theory, is now quite widespread among philosophers working in Australia. I think that the source is always C. B. Martin, as certainly it was for me. But the very same notion, and the very same term, were introduced quite independently by Kevin Mulligan, Peter Simons and Barry Smith in a joint article 'Truth-makers' published in 1984. They provide a suggestive quotation from Husserl, and mention Russell and the *Tiactatus* by Wittgenstein.

2.3. THE TRUTHMAKING RELATION

The idea of a truthmaker for a particular truth, then, is just some existent, some portion of reality, in virtue of which that truth is true. The relation, I think, is a cross-categorial one, one term being an entity or entities in the world, the other being a truth.² (I hold that truths are true *propositions*, but will leave this matter aside until 2.6.) To demand truthmakers for particular truths is to accept a *realist* theory for these truths. There is something that exists in reality, independent of the proposition in question, which makes the truth true. The 'making' here is, of course, not the causal sense of 'making'. The best formulation of what this making is seems to be given by the phrase 'in virtue of'. It is in virtue of that independent reality that the proposition is true. What makes the proposition a truth is how it stands to this reality.

Two questions immediately arise. First, do truthmakers actually *necessi-tate* their truths, or is the relation weaker than that, at least in some cases? Second, do *all* truths have truthmakers, or are there some areas of truth that are truthmaker-free, modal truths for instance? My answers to these questions are, first, that the relation is necessitation, absolute necessitation, and, second, that every truth has a truthmaker. I will call these positions respectively Truthmaker Necessitarianism and Truthmaker Maximalism.

Turning first to Necessitarianism, the first thing to notice is that the necessitation cannot be any form of entailment. Both terms of an entailment

¹ I am indebted to the late George Molnar for pointing this out to me. Russell's later work has been amazingly neglected. Herbert Hochberg has further pointed out to me that as early as 1921, in the *Analysis of Mind*, p. 277, Russell uses the word 'verified' where he means 'made true by'.

² Ken Barber has asked whether there are any other cases of cross-categorial relations. One could say 'yes, the relation of difference', but that is rather trivial. Whether there are other important cross-categorial relations, I do not know. It will prove to be important later that the relation is an *internal* one.

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relation must be propositions, but the truthmaking term of the truthmaking relation is a portion of reality, and, in general at least, portions of reality are not propositions. The simplest of all truthmaking relations is that which holds between any truthmaker, T, which is something in the world, and the proposition <T exists>.³ Here, clearly, the relation has to be cross-categorial.

It might be said, instead, that in this simple case the relation holds between *T's existence* and the proposition <T exists>. Presumably, *T's existence* is here supposed to be a state of affairs. I think, however, that it is a mistake to recognize states of affairs having this form. To do so seems to turn existence into a *property* of T. Although 'exists' is a perfectly good predicate, I think with Kant that it is a mistake to recognize an ontological property of existence. But if the Kantian position is wrong, *T's existence* would still be something in the world, and so the relation between it and the proposition <T exists> would still be a cross-categorial one.

This very simple relation between T and <T exists> may be thought to be rather trivial. Would it not be sufficient for the purposes of truthmaking theory to start in each case from truths having the form <T exists> and then spell out truthmaking relations in terms of entailments of propositions of this sort? The difficulty with this suggestion is that the truthmaking relation seems to hold in cases where entailment is completely lacking. Suppose that it is true that there exists a certain quantity of water in a certain place at a certain time. Will not a sufficiently dense conglomeration of H_2O molecules in that space at that time be a truthmaker for this truth? It seems to me that we ought to accept such truthmakers. But if we replace this truthmaker, as we can do easily enough, with a truth of existence, this truth does not entail the first truth. For entailment we need an additional premise: that a quantity of water is a certain sort of conglomeration of H₂O molecules. But how is a truthmaker for this additional premise to be spelled out in terms of entailments? So I say that the conglomeration of H₂O molecules at a certain place and time (the truthmaker) necessitates that <there is water at that place and time> (the truth), but this is not entailment.

But what is the argument for saying that a truthmaker must necessitate a truth it is truthmaker for? Here is an argument by *reductio*. Suppose that a

³ I will use < ... > to pick out propositions, a device I was introduced to by Paul Horwich, but regularly will not bother about this in simple cases, e.g. proposition *p*. These angle brackets may be iterated for propositions about propositions.

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suggested truthmaker T for a certain truth p fails to necessitate that truth. There will then be at least the possibility that T should exist and yet the proposition p not be true. This strongly suggests that there ought to be some further condition that must be satisfied in order for p to be true. This condition must either be the existence of a further entity, U, or a further truth, q. In the first of these cases, T + U would appear to be the true and necessitating truthmaker for p. (If U does not necessitate, then the same question raised about T can be raised again about U.) In the second case, q either has a truthmaker, V, or it does not. Given that q has a truthmaker, then the T + U case is reproduced. Suppose q lacks a truthmaker, then there are truths without truthmakers. The truth q will 'hang' ontologically in the same sort of way that Ryle left dispositional truths hanging (Ryle, 1949).

Perhaps this argument gives sufficient support to Truthmaker Necessitarianism. But someone who accepted Necessitarianism for truthmakers might still hold that there can be truths that lack necessitation by a truthmaker. May there not be truths – such as q in the previous paragraph – that lack any truthmaker? Maximalism is needed to rule this out. What, then, is my argument for Maximalism?

I do not have any direct argument. My hope is that philosophers of realist inclinations will be immediately attracted to the idea that a truth, any truth, should depend for its truth for something 'outside' it, in virtue of which it is true. What I then offer in this essay is a running through of the main categories of truths, suggesting what I hope are reasonably plausible truthmakers in each category. I do not expect that my suggestions will all be accepted! Different metaphysicians, different proposed truthmakers. But I hope enough will be done to show that there are real prospects of providing truthmakers in all cases, and that this will encourage realists to take a favourable attitude to Maximalism. So let us treat Maximalism as a hypothesis to be tested by this whole work.

2.3.1. Supervenience

I have so far explicated truthmaker theory in terms of individual truthmakers for individual truths (although, as we shall see, there is no question of a one-one correlation of truthmakers and truths). But perhaps this piecemeal procedure can be bypassed. John Bigelow has introduced the very attractive slogan 'Truth supervenes on being' (1988, ch. 19). It looks rather

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good. Given all that there is, is one not given all truth? Truth ought to be determined by being, and that by an absolute necessity. In particular, if anything that is true had not been true, then being would have to have been different in some way.

It would seem incidentally that not only does truth supervene on being, but being supervenes on truth. For if anything that has being did not have being, then something that is true would not be true. The supervenience is symmetrical. (The word 'supervenience' suggests an asymmetry, but there seems nothing in the concept to rule out symmetry.) We will come back to this matter in the next section.

The first thing to be said here in criticism of Bigelow's suggestion is that if this is to be the sole explication of the truthmaking relation, then it will rule out any serious attribution of truthmakers for modal truths, in particular for necessary truths. Suppose, or try to suppose, that some necessary truth, say <2 + 2 = 4>, is not true. How would being differ? There seems to be no coherent answer. It is true of course that many sympathizers with a truthmaking programme have thought that nothing but trivial truthmakers *can* be given for modal truths. But in accordance with Maximalism, I will be attempting to do better than that in this work.

With respect to contingent truths, Bigelow's slogan seems true and valuable, and perhaps he intended no more. But to remain with it as the sole insight needed for contingent truths would still be unfortunate. It takes focus away from the piecemeal task of finding plausible truthmakers for important classes of truths, a task that ought to be undertaken by realist metaphysicians. Consider, for instance, the difficult case – difficult for truthmaking theory – of contingent but universally quantified truths (with existence of the subject term presupposed). The truth <all electrons have charge e> may do as an example. Suppose that there are electrons, but that, contrary to the truth, some of these electrons lack charge e. (Perhaps the charge on these electrons is just a little bit smaller.) It is obvious that being would then have to be different. Supervenience holds. This, though, is not all that needs be said about truths of this sort. At least if we are Maximalists, we need to enquire just what are the particular truthmakers for these truths.⁴

⁴ Bigelow's own position about these sorts of truth is that what we have is an *absence of falsemakers*. But since he rejects *absences* from his ontology, I think that here he does not advance beyond the supervenience thesis.

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2.3.2. Expressibility

I have suggested that the converse of the Bigelow thesis holds, at least for contingent truths. If anything had been different in any way from what there actually is, the totality of the body of truths would have had to be different in some way. But it needs to be noted that this is a further, and perhaps disputable, thesis. It is the thesis that Stephen Read (2000, pp. 68-9) calls Expressibility. For all being, there is a proposition (perhaps one never formulated by any mind at any time) that truly renders the existence and nature of this being. When Wittgenstein said 'Whereof one cannot speak, thereof one must be silent' he was (perhaps) suggesting that there were existences, or aspects of existence, that of necessity could not give rise to truths. At any rate, it seems that such a thesis can be held. A presumably different way in which expressibility might fail is if there could not be infinite propositions (presumably only available, on the supposition that there are such things, to infinite minds), yet there was infinity in the world. I will leave consideration of Expressibility at this point. I have a rationalist prejudice in its favour, but no particular arguments to offer for this prejudice.

2.3.3. Truthmaking an internal relation

It should be noted that if, as argued, the truthmaking relation is a necessitating relation, then it is an internal relation. I mean by calling a relation internal that, given just the terms of the relation, the relation between them is necessitated. Given the terms 7 and 5, in that order, then the relation of *greater in number than* must hold between them. In the same way, given a certain real object, and a certain proposition, in that order, then the truthmaking relation (or the falsemaking relation) is automatically determined, fixed, necessitated. And although the matter requires further discussion at a later point, I suggest it is an attractive ontological hypothesis that such a relation is no addition of being. Given just the terms, we are given the ontology of the situation. The relation is not something over and above its terms (which is *not* to say that the relation does not hold, *not* to say that it does not exist).

2.4. FALSEMAKERS

Philosophers who are introduced to the concept of a truthmaker quickly notice that there is room for the concept of a falsemaker. It is the notion

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of a pair, some entity in the world and a proposition, such that the entity necessitates that the proposition is false. But although the notion seems a perfectly legitimate one, for a long time I could see no great use for it. Every truthmaker for a truth p, it would seem, is a falsemaker for the proposition <not-p>. And if something is a falsemaker for p, then again it is a truthmaker for the contradictory of p. But do we need to give much attention to the notion of a falsemaker?

However, falsemakers do play a more useful, or at any rate more interesting, role in some cases. Consider, in particular, one sub-class of modal truths: truths of impossibility. Suppose it is true that <it is impossible that *p* and not-*p* be both true> but necessary that one of the conjuncts be true. The truthmakers for the true conjunct will *simultaneously* be falsemakers for the other conjunct. (See further 8.8.)

Again, consider the truth that a certain wall is painted green. It seems reasonable to suppose that greenness is some sort of positive property (given what we know about colour, perhaps not an ontologically highclass property, not a 'sparse' one in David Lewis's terminology), and the wall's having that property is the truthmaker for that truth. Consider now the further truths that the wall is not white, is not red, is not... One may suggest that the wall makes these truths true by being a falsemaker for the corresponding positive attributions of colour. This in turn may encourage the idea that it is not necessary to postulate negative truthmakers for negative truths. Here we have the interesting, even if as I think ultimately unsatisfactory, 'Incompatibility theory' of truthmakers for negative truths.⁵ (See 5.2.1 for discussion of this theory.)

2.5. THE ENTAILMENT PRINCIPLE

We come to what will prove a very important thesis in truthmaking theory. Suppose that T is a truthmaker for proposition p. Suppose further that p entails proposition q, with the exact force here of 'entails' subject to discussion. Then T will be truthmaker for q. This may be informally symbolized:

$$T \to p$$

$$p \text{ entails}^* q$$

$$\therefore T \to q$$

⁵ The link between Incompatibility theories and falsemaking was brought to my attention by Peter Simons.