Contingent Existents

IAN RUMFITT

1. In a recent lecture at the Royal Institute of Philosophy,[1] Timothy Williamson advanced a 'proof' of the claim that he (and by extension, any object) exists necessarily. 'The proof', he explains,

> rests on three main claims. The first is that my non-existence strictly implies the truth of the proposition which states my nonexistence:
>
> (1) Necessarily, if I do not exist then the proposition that I do not exist is true.
>
> For that things are so-and-so is just what it takes for the proposition that they are so-and-so to be true. The second main claim is that the truth of the proposition strictly implies its existence:
>
> (2) Necessarily, if the proposition that I do not exist is true then the proposition that I do not exist exists.
>
> For if the proposition did not exist, there would be nothing to be true. The final claim is that the existence of the proposition strictly implies my existence:
>
> (3) Necessarily, if the proposition that I do not exist exists then I exist.
>
> For if I did not exist, there would be nothing for the proposition to state the nonexistence of (233–4).

Assuming that strict entailment is transitive, the premises (1), (2) and (3) together yield

(4) Necessarily, if I do not exist then I exist,

which, given classical logic, in turn yields

(5) Necessarily, I exist.

[1] 'Necessary existents'. In Anthony O'Hear, (ed.), *Logic, Thought and Language* (Cambridge: Cambridge University Press, 2002), 233–51. Unadorned page references will be to this paper. Williamson acknowledges (233, *n*.1) a debt to his former pupil, Dr David Efird.

doi:10.1017/S0031819103000433

As Williamson notes, we could generalize the proof by substituting a free variable for the first-person pronoun, thereby showing that every object is such that, necessarily, it exists. So, if the proof shows anything, it shows that every object exists of necessity.

Some people may find attractive Williamson's conclusion that their existence—so far from having depended upon the most fragile contingencies—is really a necessary feature of the cosmos. (Their excitement may, though, be tempered by his caveat that throughout the argument 'exists' is to be taken in a purely logical sense which does not imply any kind of location or embodiment. So while I exist of necessity, my presence as a flesh-and-blood person is wholly contingent. See 244–6.) But whether the conclusion be found attractive or not, I wish to show that Williamson's proof of it is unsound. More exactly, I wish to show that the proof fails even if one accepts its most obviously active ingredient. This is the claim, of which the argument's third premise is an application, that a sentence which contains an indexical, a simple demonstrative, or an ordinary proper name expresses a proposition only when each of its component singular terms possesses a reference.

2. In formulating his premise (2), Williamson has the expression 'the proposition that I do not exist' saturate the first-level predicate 'exists'. Accordingly, his formulation of the proof presupposes that propositions are individuals, or Fregean objects. On this view of the matter, premise (3) is akin to other essentialist claims that express the ontological dependence of one object upon another, such as

(6) Necessarily, if Elizabeth II exists then George VI exists.

Although many philosophers take propositions to be objects, there are reasons quite independent of modality for not doing so. Objects are, by definition, subject to the discipline of the identity relation. Nobody, however, has been able to state identity conditions for propositions which correspond even approximately to the way we use expressions in the form 'the proposition that *P*'. That failure, we may now suspect, is not the consequence of any lack of ingenuity or application on the part of those who have made the attempt. Rather, it suggests that we do not use expressions in the form 'the proposition that *P*' to single out an (abstract) object for the attention of our hearers, in the way that we use the name 'Elizabeth II' to single out a person. Reflection on complete sentences containing such expressions confirms the suggestion. 'The proposition that there is life on Venus' may appear on its face to be some kind of

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press

singular term. But it would be odd to think of that expression as singling out an object to which James is said to stand in some kind of relation by the sentence 'James believes the proposition that there is life on Venus'. For this sentence says no more than 'James believes that there is life on Venus' or 'There is, James believes, life on Venus'. In the latter sentence, there is not even the appearance of placing James in relation to anything. The sentence simply says, in part, how James believes things to be.[2]

We often quantify over propositions. As Williamson remarks (236), we may ask how things would have been had all Napoleon's (actual) hopes come true. The question, though, is whether this sort of quantification is best understood as being objectual. Because 'proposition' is a common noun, the English formulation makes it look as though it is. In quantifying over Napoleon's hopes we seem to be quantifying over objects of which truth may be predicated. It is open to a philosopher to argue, however, that this form of quantification is a misleadingly nominalized rendering of quantification into sentence position. This form of quantification could more perspicuously be Englished using the non-nominal quantificational forms 'however things may be' or 'however things may be said or thought to be' and the corresponding variables or pro-sentences 'things are so' or 'things are that way'.[3] Thus, we may pose Williamson's question about Napoleon by asking how things would have been had it been that, however Napoleon actually hoped things would be, they were that way. This style of quantification is manifestly non-objectual inasmuch as the result of concatenating two variables or pro-sentences with the sign of identity is not even well formed (* 'Things are so is identical with things are thus'). But it is not on that account substitutional. It is not assumed that, however

[2] For linguistic evidence against the view that constructions in the form '*A V*s that *p*' place *A* in relation to a proposition, or to any other object, see Bede Rundle, 'Objects and attitudes', *Language and Communication* **21** (2001), 143–56.

[3] These forms are inspired by Wittgenstein's suggestion that the English expression 'this is how things are' can be used similarly to the propositional variables of a formal language. See Part I §134 of Ludwig Wittgenstein, *Philosophical Investigations* (Oxford: Blackwell, 1953). Prior, who did so much to undermine the notion that there are 'objects' of the attitudes, rendered propositional quantification in English using 'anywhether' and 'somewhether' as quantifiers and forms of 'thether' as the attendant variables. (See A. N. Prior, *Objects of Thought* (Oxford: Clarendon Press, 1971), pp. 37–39.) But this sort of talk has won few imitators, and I prefer to revert to Wittgenstein's original suggestion.

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press

things may be, there is a sentence which says that they are that way. We should allow for a form of quantification that is neither substitutional (because it is not explained in terms of some substitution class of expressions) nor objectual (because its range does not comprise objects).

We also speak of relations between propositions: we say that one proposition strictly implies another just in case it is necessary that the second proposition is true if the first is (235–6). Again, though, the question is whether such relations are best understood as obtaining between objects. As before, it is open to a philosopher to argue that to apprehend the notion of strict implication is to grasp the sense of a dyadic connective, 'That…strictly implies that—', which may be explained as follows:

> That things are so strictly implies that they are thus if and only if, as a matter of necessity, if they are so then they are thus.

If talk of propositions is understood—or explained away—in this fashion, then premise (3) will be understood in a way that makes it quite unlike the familiar essentialist thesis (6). We could paraphrase (6) by saying

> (7) If a possible world does not contain George VI, then neither does it contain Elizabeth II.

But we could not give a cognate paraphrase of Williamson's utterance of (3) by saying

> (8) If a possible world does not contain Timothy Williamson, then neither does it contain the way things are said to be by an English speaker who says 'Timothy Williamson does not exist'.

For a possible world does not contain a way things are said to be in the sense in which it may contain Elizabeth II. Furthermore, on the recommended view of propositions, Williamson's premise (2) is strictly nonsensical. On that view, then, it is little wonder that we can reach extraordinary conclusions by treating propositions as objects. Indeed, a thinker who accepts some version of the thought behind premise (3) might take Williamson's proof as reducing to absurdity the doctrine that propositions are Fregean objects.

3. Whether there is a way of resisting Williamson's conclusion while accepting both premise (3) and the doctrine that propositions are

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press

objects is a question best left for the doctrine's friends.[4] But even if we reject the doctrine, we have barely begun to deal with Williamson's argument. For, as I now show, his 'proof' may be recast so as not to presuppose that propositions are objects. When it is so recast, it seems even more plausible than in its original form. It is in determining whether this recast proof is sound that the real interest of Williamson's argument lies.

In his early book *The Principles of Mathematics*, Russell defined a proposition as anything which implies itself. 'To say "*p* is a proposition" is equivalent to saying "*p* implies *p*"; and this equivalence may be used to define propositions'.[5] Implication, he thought, was indefinable. But 'the assertion that *q* is true or *p* false turns out to be strictly equivalent to "*p* implies *q*"' (ibid.). From this it follows that to say that *p* is a proposition is equivalent to saying that *p* is true or *p* is false.

With this hint from Russell as our guide, we may recast Williamson's proof as follows:

(1′) Necessarily, if I do not exist then it is true that I do not exist

(2′) Necessarily, if it is true that I do not exist then it is either true or false that I do not exist

(3′) Necessarily, if it is either true or false that I do not exist then I exist.

So far from reflecting a questionable metaphysics of propositions, premise (2′) seems incontestable. It is an instance of the schema

(2+) Necessarily, if P then either P or Q.

Similarly, premise (1′) is an instance of the schema

(1+) Necessarily, if P then it is true that P

which is half of a schema which might be thought to be constitutive of the very meaning of the truth-operator, 'it is true that', namely:

(T1) Necessarily, it is true that P if and only if P.

Again, the third premise seems to be an application in the new

[4] They should be warned, though, that David Efird is set to publish a number of alternative arguments for Williamson's conclusion which rest on the supposition that propositions are objects.

[5] Bertrand Russell, *The Principles of Mathematics* (London: Allen and Unwin, 1903), p. 15.

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press

framework of the very doctrine that underpinned premise (3) in the old. Instead of saying that an object's existence is a pre-condition for the existence of any proposition to the effect that that object is such-and-such, we now say that an object's existence is a pre-condition for its being either true or false that that object is such-and-such. (Indeed, given Russell's own eliminativism about propositions, the revised formulation is more faithful than is Williamson's to the doctrine's Russellian roots.) As before, however, the transitivity of strict entailment ensures that the premises (1′), (2′) and (3′) together yield

(4) Necessarily, if I do not exist then I exist,

which in turn yields

(5) Necessarily, I exist.

Persuasive as the recast proof may seem, however, I shall argue that it subtly equivocates over the senses of the modal operator 'necessarily' and the truth-operator 'it is true that'. For each of its premises, there are indeed senses of 'necessarily' and of 'it is true that' which render the premise true. And there is also a sense of 'necessarily' in which (5) expresses an arresting metaphysical conclusion. But there is no one pair of senses for 'necessarily' and 'it is true that' which at once renders all the premises true and in which the conclusion is metaphysically controversial.

4. We may begin by considering the sense that 'necessarily' bears in Williamson's argument. It is customary, and helpful, to distinguish between two families of senses that this adverb can bear. It is sometimes used to express *metaphysical* necessity: it is metaphysically necessary that *P* if and only if things could not be, or could not have been, otherwise than that *P*. But it may also be used to express *logical* necessity. As I shall soon explain, there are a number of different notions of logical necessity, but the core idea is that it will be logically necessary that *P* just when there is a contradiction in the contrary supposition that not *P*. Most philosophers who have any time for the notion of metaphysical necessity accept that there are metaphysically necessary truths that are in no sense logically necessary. It is, for example, widely held to be metaphysically necessary that water is not an element: water, it is said, could not have been anything other than a compound of hydrogen and oxygen. In no sense, however, is it logically necessary that water is not an element. There is no contradiction in the supposition that water *is* an element. Indeed, the founder of logic is on record as having asserted that it is.[6]

What, though, is meant by saying that there is a contradiction *in* a supposition? In explaining this idea, we may advance in at least two quite different directions. We find ourselves on one path if we gloss the notion in terms of logical consequence or entailment. Thus we may say that a contradiction lies in the supposition that *P* if its being the case that *P* entails that things are thus-and-so and not thus-and-so. This generates a notion of logical necessity—a notion we may label *e*-logical necessity—whereby it is logically necessary that *P* if and only if its being the case that not *P* entails that things are thus-and-so and not thus-and-so. Or rather, it generates a family of such notions. Different determinations of entailment yield different notions of *e*-logical necessity. Thus one obtains a narrow notion of *e*-logical necessity if the principles regulating entailment are restricted to formal rules concerning the traditional logical notions. One gets a broader notion by allowing these principles to include any rules whose soundness will be recognized by anybody who grasps the supposition in question, even when these rules do not regulate the traditional logical concepts. (Older writers call this notion of broad *e*-logical necessity 'conceptual' necessity.) Thus it is broadly *e*-logically necessary that if John is a bachelor he is not married, but so much is not narrowly *e*-logically necessary. For in order to convert 'It is not the case that if John is a bachelor he is not married' into the paradigmatically contradictory form, it is not enough to apply principles concerning 'not' and 'if…then—'. We need to be able to infer 'John is not married' from 'John is a bachelor'.

We find a different family of notions of logical necessity if we gloss 'There is a contradiction in the supposition that not *P*' as meaning 'In supposing that not *P*, one is logically committed to supposing that things are thus-and-so and not thus-and-so'. Where this condition holds, we may say that it is *c*-logically necessary that *P*. The difference between *e*- and *c*-logical necessity lies in the fact that pre-requisites for entertaining the supposition that not *P* can generate commitments which are not entailed by its being the case that not *P*. Again, different rules for determining what one is committed to by virtue of making a supposition yield different specifications of *c*-logical necessity.

A philosopher who accepts the Russellian doctrine of singular propositions that underpins premise (3) of the purported proof will

[6] For Aristotle's adherence to the doctrine of the four elements, see e.g. *De Sensu* 443 a 9–10.

take it to be (broadly) *c*-logically necessary that Williamson exists. According to that doctrine, a pre-condition for entertaining any thought whatever about Williamson is that one should know who Williamson is. So, in particular, a pre-condition for supposing that Williamson does not exist is that one should know who he is. Such knowledge, the doctrine runs, is available only when Timothy Williamson does exist. So by applying rules that are implicit in grasping the supposition that he does not exist, we can reduce that supposition to manifest absurdity. Given this doctrine, then, it is broadly *c*-logically necessary that Williamson exists.

Is it, though, *metaphysically* necessary that Williamson exists? What is arresting about Williamson's proof is that it purports to establish that it is. It purports to show, in other words, that things could not have been otherwise than that he exists. It is clear from the text of his lecture that Williamson intends 'necessarily' to express metaphysical necessity. If this were not so, then his observation that the Brouwerian principle $\varphi \rightarrow \Box \Diamond \varphi$ 'is plausible when $\Box$ and $\Diamond$ stand respectively for metaphysical necessity and metaphysical possibility' (246, *n*.8) would be irrelevant to his argument. Clearly, however, his proof will succeed in establishing the metaphysical necessity of his existence only if each of the premises (1′) to (3′) is true when the component occurrences of 'necessarily' are understood to express metaphysical necessity. In particular, if it should emerge that any of the premises is true only when 'necessarily' is taken to express some variety of logical necessity, then the argument must be deemed unsound. Any plausibility it possesses will derive from an equivocation on 'necessarily'.

5. Are all the premises (1′) to (3′) true when 'necessarily' is understood to express metaphysical necessity? Premise (2′), along with all the other instances of the schema (2+), surely is true on this reading. If things were otherwise than that (if *P* then either *P* or *Q*), they would be such that *P* and yet neither *P* nor *Q*. Things could not be that way. In order to judge whether premises (1′) and (3′) are true under the relevant interpretation of 'necessarily', however, we need to attend to the meaning of the operator 'it is true that'. Again, I suggest, there are two senses that this expression might bear.

On one understanding, 'it is true that' is simply *redundant*: any occurrence of this operator can be deleted from any context without changing the truth-value of the sentence from which it has been deleted. Clearly, there is nothing to stop a speaker from using 'it is true that' in this way: if an expression's introduction changes nothing, it can do no harm. But our treatment of propositions enables us to understand the rôle played by so apparently useless a device. For suppose, to use Prior's words, that the form 'It is true that John is taller than James' is just a 'fluffed up version' of the simpler sentence 'John is taller than James'. The fluffed up version contains a word, 'true', which is an adjective or predicate in English, and so it can be fluffed up further into a form—'The proposition that John is taller than James is true'—which consists grammatically of a complex singular term combined with a predicate. In making generalizations of which these claims are instances, we may then use the devices of nominal quantification that come so naturally to our lips. For example, if Mary has said that John is taller than James, we may conclude that she has said something true. Of course, the use of these devices is potentially misleading. The use of the nominal form 'the proposition that John is taller than James' may suggest that propositions are objects when, I have suggested, they are not. The fact remains, however, that in making quantified claims in English we find it most convenient to use nominal quantifiers, and the introduction of a redundant truth-operator may be seen as a first step—in itself harmless—which makes such convenience possible. Certainly, if the truth-operator is understood as serving this kind of function, it is essential that it should be redundant, at least in contexts expressing metaphysical modality. As Williamson rightly observes, when a thinker assesses whether the proposition that John is taller than James strictly implies the proposition that James is not taller than John, his 'interest is primarily in the comparative heights of John and James, and in the truth of the propositions only to the extent to which it correlates with [that] primary interest. We want to know whether necessarily, if John is taller than James then James is not taller than John' (236). 'Our question', he continues, 'is answered by the information that necessarily, if the proposition that John is taller than James is true then the proposition that James is not taller than John is true', only *provided* that the operator 'the proposition that…is true' is redundant in modal contexts (*ibid*.). On the suggested account of the genesis of that operator, that requires that 'it is true that' should be redundant there too.

Now if 'it is true that' is redundant in contexts expressing metaphysical modality, then premise (1′) will certainly be true. For in uttering (1′) we shall be saying no more than

(9) Necessarily, if I do not exist then I do not exist

and things could surely not be other than that I do not exist if I do not exist. What, though, of premise (3′)? In this connection, two

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press

points are salient. First, if 'it is false that' is understood (as it usually is understood) to be equivalent to 'it is true that it is not the case that', and if any occurrences of 'it is true that' may be deleted from within modal contexts, then (3′) is equivalent to

(3″) Necessarily, if either I do not exist or it is not the case that I do not exist, then I exist.

In turn, however, (3″) is classically equivalent to the eventual conclusion of Williamson's proof, namely (5). It is, in other words, just an elaborate way of saying 'Necessarily, I exist'. On this reading, then, the proof is circular. Any reader of the proof who is not antecedently convinced of its conclusion will simply reject its third premise. The second point is a consequence of this first observation. If 'it is true that' is understood to be redundant in modal contexts, then (3′) does not express what we intended it to express. It was intended to lay down a necessary condition for something to be thinkable. As we have seen, however, (3″) expresses no such thesis. It is equivalent to 'Necessarily, I exist'. So, if the premise (3′) is to say what we want it to say, then its component occurrence of 'it is true that' *cannot* be understood to be redundant in contexts of metaphysical modality.

I see nothing objectionable in construing 'it is true that' as a non-redundant operator. Many philosophers—even some who are clear that truth-*predicates* need not be redundant—seem to suppose that any truth-*operator* must be redundant. However, the only argument they ever advance for this conclusion is fallacious. Frege's flirtation with the redundancy view of truth provides a case in point. 'When I affirm "It is true that sea-water is salt",' he wrote, 'I thereby affirm the same thing as when I affirm "Sea-water is salt".' And he took it to follow that 'the word "true" has a sense that contributes nothing to the sense of the whole sentence in which it occurs'.[7] But while his premise may well be true, his conclusion does not follow. From the fact that an outright *affirmation* of one free-standing sentence asserts the same thing as an outright affirmation of another, one cannot conclude that the sentences may be interchanged *salva veritate* in every sentential context, let alone that the deletion of 'it is true that' leaves the sense unchanged.

For an example to show that this does not follow, let us

[7] Gottlob Frege, 'Meine grundlegenden logischen Einsichten' (1915). In Frege, (ed.) Hans Hermes *et al.*, *Nachgelassene Schriften* (Hamburg: Meiner, 1969), 271–2 at pp. 271–2. Translated as 'My basic logical insights' in Frege, translated Peter Long and Roger White, *Posthumous Writings* (Oxford: Blackwell, 1979), 251–2 at pp. 251–2.

understand the operator 'actually' as a rigidifying sentential operator which returns the evaluation to the actual circumstances no matter how deeply embedded it may be within modal operators. On this understanding of 'actually', an outright affirmation of 'Blair is Prime Minister in 2002' is tantamount to an outright affirmation of 'Blair is actually Prime Minister in 2002'. But these sentences cannot always be interchanged *salva veritate* within the scope of modal operators. The sentence

(10) It is metaphysically necessary that, if Blair is Prime Minister in 2002, then Blair is Prime Minister in 2002

is clearly true. However,

(11) It is metaphysically necessary that, if Blair is actually Prime Minister in 2002, then Blair is Prime Minister in 2002

is false.[8] In Dummett's terminology, corresponding instances of '*P*' and 'Actually *P*' agree in assertoric content while differing in ingredient sense.[9] For all that Frege's argument shows, the same might hold good of corresponding instances of '*P*' and 'It is true that *P*', so that the truth operator is not redundant in modal contexts.

But if 'it is true that' is not redundant, what does it mean? In order to answer this question, we need to consider the doctrine of 'singular propositions' of which Williamson's original premise (3) was an application. For premise (3′) is also supposed to be an application of this doctrine, recast so as not to presuppose that propositions are objects. Now Frege's word for 'proposition' was 'thought' (*Gedanke*), and on his view a thought may be said to have being when 'different thinkers are able to grasp it as one and the same

[8] For, assuming that metaphysical necessity conforms to the *K*-schema $\Box(\varphi \rightarrow \psi) \rightarrow (\Box\varphi \rightarrow \Box\psi)$, (11) entails

> If it is metaphysically necessary that Blair is actually Prime Minister in 2002, then it is metaphysically necessary that Blair is Prime Minister in 2002.

Given that 'actually' is understood as a rigidifying sentential operator, the antecedent of this last conditional is true, while its consequent is false. Williamson takes the propositional logic of metaphysical necessity to be S5, which includes *K*.

[9] For this distinction, see Michael Dummett *Frege: Philosophy of Language*, 2nd edition (London: Duckworth, 1981), p. 447. For '*P*' and 'Actually *P*' as examples of sentences which share an assertoric content while differing in ingredient sense, see J. N. Crossley and I. L. Humberstone, 'The logic of "actually"', *Reports on Mathematical Logic* **8** (1977), 11–29, at pp. 14–15.

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press

thought'.[10] It is very doubtful whether this relation of different thinkers' grasping thoughts *as* the same thought exhibits the transitivity that it must possess if it is to serve as a criterion of identity. But however flimsy a basis Frege's explanation may provide for classifying propositions as objects, it yet suggests how we might recast the doctrine of singular propositions if there are no such objects. For the crucial notion in the explanation is that of *grasping* a thought, where grasping the thought that *P* may be glossed as understanding the question whether *P*.[11] The thesis that we may take to underpin the original premise (3), then, is

(12) Necessarily, if I do not exist, then no group of thinkers will be able to attain a common understanding of the question whether I do not exist.[12]

For this combines with Frege's explanation of when a proposition has 'being' to entail premise (3). And this in turn gives us the key to the intended non-redundant sense of 'it is true that'. For let us consider the schema

(*T*2) Necessarily, if it is either true or false that *P* then a group of thinkers will be able to attain a common understanding of the question whether *P*.

[10] Frege, 'Die Verneinung', *Beiträge zur Philosophie des deutschen Idealismus* **I** (1919), 143–57, at p. 146.

[11] See e.g. Frege, 'Der Gedanke', *Beiträge zur Philosophie des deutschen Idealismus* **I** (1918), 58–77, at pp. 62–3: 'We distinguish:

(1) the grasp of a thought—thinking,
(2) the acknowledgment of truth of a thought—the act of judgment,
(3) the manifestation of this judgment—assertion.

We have already performed the first act when we form a propositional [i.e. a yes-no] question.'

[12] I hope it is clear that I am not myself asserting (12), or any other instance of the doctrine of 'singular propositions'. My aim is only to show how one can accept the doctrine without being committed to Williamson's conclusion (5). The doctrine raises a number of delicate issues, especially about the nature of our understanding of singular terms. (Some of these issues are instructively debated in R. M. Sainsbury and David Wiggins, 'Names, fictional names, and "really"', *Proceedings of the Aristotelian Society,* Supplementary Volume **73** (1999), 243–86.) Readers of Williamson's proof who are convinced (as many will be) of the falsity of its conclusion, may be tempted to see it as reducing the doctrine of singular propositions to absurdity. My chief concern is to show that this reaction would be precipitate. Discussion of the delicate issues has not been pre-empted.

An instance of *T*2 is

(13) Necessarily, if it is either true or false that I do not exist, then a group of thinkers will be able to attain a common understanding of the question whether I do not exist

which combines with (12) (or, better, with its contrapositive) to yield the desired

(3′) Necessarily, if it is either true or false that I do not exist, then I exist.

Schema *T*2, in other words, is what is needed if (12) is to ground, not (3) itself, but its purported *Ersatz* (3′). The notion of ability that *T*2 invokes is not defined in terms of metaphysical or logical possibility. If some people are able to do something, then it will be metaphysically, and logically, possible that they should do it. But the converse entailments do not hold.

Can we understand 'it is true that *P*' in such a way that it validates *T*2? I think we can, if we gloss it as meaning 'A group of thinkers will be able to attain a common understanding of the question whether *P*, and *P*'. We may gloss 'it is false that *P*' similarly as meaning 'A group of thinkers will be able to attain a common understanding of the question whether *P*, and not *P*'. We may abbreviate these glosses using the forms 'It is truly thinkable (falsely thinkable) that *P*'. 'It is truly thinkable that' qualifies as a genuine truth-operator by virtue of rendering true each instance of the unmodalized schema

(*T*3) An outright assertion that *P* is tantamount to an outright assertion that it is truly thinkable that *P*.

It also renders true each instance of

(*T*4) Necessarily, if it is truly thinkable that *P* then *P*.

But this truth-operator is non-redundant in modal contexts because there are counter-instances to the converse schema

(*T*5) Necessarily, if *P* then it is truly thinkable that *P*.

It is, indeed, clear from *T*2 itself that this new truth-operator is not redundant in modal contexts. For underpinning the whole doctrine of singular propositions is the idea that for some substituents for '*P*', it is not *necessarily* thinkable that *P*.

So, when the truth-operator is understood in this non-redundant way, premise (3′) comes out true. What, though, of premise (1′)? We know that premise (1′) cannot be justified as half of an instance of the schema *T*1. For if each instance of the schema *T*1 held good, then 'it is true that' would be redundant in modal contexts, and in the present sense it is not. And, it seems to me, a thinker who accepts premise (3′) on the grounds just outlined, but who wishes to resist Williamson's conclusion (5), is well placed to argue that (1′) is false. 'I accept premise (3′)', he will say, 'because, had I not existed, there would have been no asking anything about me. In particular, there would have been no asking whether or not I exist. From this it follows that, had I not existed, it would have been neither truly thinkable that I do not exist nor falsely thinkable that I do not exist. This is why (3′) is correct. But it also follows that, had I not existed, it would not have been truly thinkable that I do not exist. Given, then, that I might well not have existed, there are metaphysically possible circumstances in which I do not exist, and in those circumstances it is not truly thinkable that I do not exist. So it is not metaphysically necessary that if I do not exist then it is true that I do not exist, when "it is true that" is read as our non-redundant truth-operator.' On this reading too, then, Williamson's proof is circular. The truth-operator that renders premise (3′) of the revised proof true renders premise (1′) false, unless Williamson's conclusion is assumed.

The problem I perceive for the recast version of Williamson's proof will now be clear. If the proof is to establish its conclusion, all of the occurrences of 'necessarily' in it must be understood as expressing metaphysical necessity. Given that they are so understood, however, neither of the proposed interpretations of 'it is true that' validates all the premises. If this operator is understood to be redundant, then premise (1′) is true; but premise (3′)—which then amounts to the conclusion of Williamson's proof—is false. If, on the other hand, we understand the truth-operator in our non-redundant way, premise (3′) will be true, given Russellian assumptions about singular propositions. On that interpretation, however, premise (1′) is false. Of course, this criticism may not be conclusive. Perhaps a third sense can be found for the truth-operator which would validate all three premises under the metaphysical interpretation of 'necessarily'. But until that third sense has been articulated the proof must be judged to fail. Neither Williamson's original proof, nor the suggested revision of it, shows that he, or any of us, exists as a matter of metaphysical necessity.

6. The recast version of the proof, though, does a service in drawing attention to our non-redundant truth-operator, an expression

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press

whose very possibility is frequently overlooked.[13] This operator casts light on a notorious argument of Prior's.[14] Like most of us, Prior thought that objects such as Timothy Williamson exist only contingently. And, like the proponent of premise (3′), he held that in a world lacking Williamson, no proposition attributing any property to him is 'statable'. This led him to the doctrine that while tautologies concerning contingent existents are not possibly false, neither are they necessarily true. To see how he was led to this, let us use the letter '*P*' in this paragraph and the next to abbreviate 'Williamson is human', and consider the tautology '*P* or not *P*'. Now, Prior argues, it is not possibly false that either *P* or not *P*, because if it were false that either *P* or not *P*, then it would be true that neither *P* nor not *P*. By De Morgan, this would be true only if both not *P* and not not *P*, and it is not possible that both not *P* and not not *P*. All the same, Prior thinks, it is not necessarily true that either *P* or not *P*. For there are possible worlds which lack Williamson, and in any such world it is not statable that *P* or not *P*. *A fortiori*, in any such world it is not true that *P* or not *P*. Prior was thereby led to recommend a somewhat complicated system of propositional modal logic (his 'system *Q*') in which 'possibly' and 'necessarily' are not duals. Put another way, his system *Q* contains a weak necessity operator meaning 'not possibly not' alongside a strong operator meaning simply 'necessarily'.

Our analysis shows that Prior was right to perceive a distinction between strong and weak necessity operators, but wrong to think that he needed to break the duality between 'possibly' and 'necessarily' in order to make this distinction out. For the needed distinction is that between a 'necessarily' which is dual to 'possibly', and the compound operator 'necessarily, it is true that' where 'it is true that' is our non-redundant truth-operator. In the obvious notation, we certainly have $\neg\Diamond\neg\,(P \vee \neg P)$, from which it follows that $\neg\Diamond\, T\,\neg\,(P \vee \neg P)$. (Proof: Each instance of the schema $\Box\,(T\,\varphi \rightarrow \varphi)$ is true (cfr. schema *T*4). So in particular we have $\Box\,(T\,\neg\,(P \vee \neg P) \rightarrow \neg\,(P \vee \neg P))$. So if we had $\Diamond\, T\,\neg\,(P \vee \neg P)$, we should also have $\Diamond\,\neg\,(P \vee \neg P)$, contrary to $\neg\Diamond\neg\,(P \vee \neg P)$. Hence $\neg\Diamond\, T\,\neg\,(P \vee \neg P)$.) Since falsity may be

[13] Von Wright's solution to the problem of future contingents turns on the availability of a non-redundant truth-operator. But the sense he is led to attach to 'it is true that' differs from that regulated by our schema *T*2. See Georg Henrik von Wright, 'Determinism and future truth', in his *Truth, Knowledge, and Modality: Philosophical Papers Volume III* (Oxford: Blackwell, 1984), 1–14, esp. pp. 5, 12.

[14] See A. N. Prior, *Time and Modality* (Oxford: Clarendon Press, 1957), pp. 41–54.

identified with truth of the negation, this shows that Prior was right to say that it is not possibly false that either P or not P. From these observations we may infer $\Box (P \vee \neg P)$, and $\Box \neg T \neg (P \vee \neg P)$, for '$\Box$' and '$\Diamond$' are dual. From neither of these results, however, may we infer $\Box T (P \vee \neg P)$. There are false instances of the schema $\Box (\varphi \rightarrow T \varphi)$ (cfr. *T*5), and the formula '$P \vee \neg P$' is one of them. In this way, we may respect Prior's conclusion that it is not necessarily *true* that P or not P, without breaking the duality between necessity and possibility.

Since Prior's 'it is statable that P' corresponds to 'a group of thinkers is able to attain a common understanding of the question whether P', we may use an operator 'S' meaning 'it is statable that' to formulate the general principle of which (12) is an application. For a thinker who accepts the 'object dependence' of singular propositions will accept every instance of the following schema, in which '$\varphi a_1 \ldots a_n$' holds a place for any formula whose component singular terms are 'a_1',..., 'a_n':

$$\Box [S (\varphi a_1 \ldots a_n) \rightarrow \exists x (x = a_1) \wedge \ldots \wedge \exists x (x = a_n)].$$

In a case where one of the objects, a_i, exists only contingently (so that $\neg \Box \exists x (x = a_i)$), we shall have $\neg \Box S (\varphi a_1 \ldots a_n)$: some singular propositions are only contingently statable. Our non-redundant truth-operator, which means 'it is truly statable that', may be defined in terms of 'S' as follows: $T P \leftrightarrow (P \wedge S P)$.

7. One loose end remains to be tied. In §4, I argued that if the doctrine of 'singular propositions' is correct, then it is *c*-logically necessary that Timothy Williamson exists. The late Ian McFetridge, however, claimed to be able to show that 'if it is logically necessary that P, then it is necessary that P in any other use of the notion of necessity there may be'.[15] If McFetridge's argument goes through when 'logically necessary' is taken to mean '*c*-logically necessary', then I must be wrong—either in taking metaphysical necessity to be an intelligible notion of necessity, or in maintaining that one can concede the *c*-logical necessity of Williamson's existence without conceding its metaphysical necessity.

McFetridge's argument rests on two assumptions. First, 'that adding extra premises to a valid argument cannot destroy its validity … If the argument "P; so Q" is valid then so is the

[15] Ian McFetridge, 'Logical necessity: some issues'. In his *Logical Necessity and Other Essays*, John Haldane and Roger Scruton (eds.) (London: The Aristotelian Society, 1990), 135–54, at pp. 136–7.

argument "*P*, *R*; so *Q*" *for any R*'. Second, 'that there is this connection between deducing *Q* from *P* and asserting a conditional: that on the basis of a deduction of *Q* from *P* one is entitled to assert the conditional, *indicative or subjunctive*, if *P* then *Q*'.[16] The argument then runs as follows. Suppose that it is logically necessary that if *P* then *Q*. Suppose also, for *reductio*, that in some other sense of 'necessary', it is not necessary that if *P* then *Q*. Then, in the sense of 'possible' that corresponds to this other sense of 'necessary', it will be possible that *P* and not *Q*. But

> if that *is* a possibility, we ought to be able to describe the circumstances in which it would be realized: let them be described by *R*. Consider now the argument '*P* and *R*; so *Q*'. By the first assumption if '*P*; so *Q*' is valid, so is '*P* and *R*; so *Q*'. But then, by the second assumption, we should be entitled to assert: if *P* and *R* were the case then *Q* would be the case. But how can this be assertible? For *R* was chosen to describe possible circumstances in which *P* and not *Q*. I think we should conclude that we cannot allow, where there is such an *R*, that an argument is valid.[17]

When it is logically necessary that if *P* then *Q*, however, the argument '*P*; so *Q*' will be valid. So in that case there is no such *R*. So it is in no sense possible that *P* and not *Q*. So it is in every sense necessary that if *P* then *Q*. 'Logical necessity, if there is such a thing, is the highest grade of necessity'.

This argument has won high praise. According to Bob Hale, it displays 'something close to philosophical genius in its originality and simplicity'.[18] Its simplicity, however, comes at the price of begging the question. The problem lies in McFetridge's second assumption—more particularly, in his assumption that on the basis of a deduction of *Q* from *P* one is always entitled to assert the *subjunctive* conditional, 'Had it been that *P*, it would have been that *Q*'. There are contexts in which a speaker is entitled to assert the subjunctive conditional 'Had it been that *P*, it would have been that *Q*' only when it is metaphysically necessary that if *P* then *Q*. (An example is our imaginary interlocutor's statement, 'Had I not existed, there would have been no asking anything about me', in his speech against premise (1′) in §5.) So to make McFetridge's second

[16] McFetridge, op. cit., p. 138; emphases in the original.

[17] McFetridge, op. cit., pp. 138–9; the final quotation in this paragraph is from op. cit., p. 139.

[18] Bob Hale, 'On some arguments for the necessity of necessity', *Mind* **108** (1999), 23–52, at p. 26.

assumption is already to assume that whenever a conditional is logically necessary it is also metaphysically necessary.[19]

Question-begging or not, the assumption may yet seem plausible. We exercise our capacity for deductive reason, it may be said, when we deduce consequences from an initial supposition that may be false. And some of the initial suppositions from which we deduce consequences are expressed in the subjunctive form 'Suppose that it had been that *P*'. But then, whenever *Q* is validly deduced from *P*, we may surely record the outcome of such a process of reasoning by asserting 'Had it been that *P*, it would have been that *Q*', just as McFetridge's second assumption says that we may.

I think, though, that this argument conflates two quite different enterprises that may be labelled 'deducing consequences from an initial supposition that *P*', enterprises which correspond to the two families of notions of logical necessity that were distinguished in §4. One such enterprise is that of exploring what follows if such-and-such a supposition is the case. If, from *P*'s being the case, it follows logically that *Q*, then it is indeed hard to see how it might in any sense be possible that *P* but not *Q*. Similarly, it is hard to see how the counterfactual 'Had it been that *P*, it would have been that *Q*' could then fail to be assertible. In our terminology, then, we should accept the claim that whenever it is *e*-logically necessary that (if *P* then *Q*) then it is metaphysically necessary that (if *P* then *Q*). We may also accept on this basis the more general principle that whenever it is *e*-logically necessary that *P*, then it is metaphysically necessary that *P*. (This principle may be all that McFetridge himself wished to assert.)

A quite different enterprise that may be called 'deducing consequences from a supposition' is that of exploring what one is (or would be) committed to supposing by virtue of making the initial

[19] In an earlier article, Hale had discerned some 'avoidable complications' in McFetridge's argument, and presented his own version. Hale's version, though, is no less question-begging than its original. It rests on the assumption that logical 'entailment [signified by "$\rightarrow$"] and any reasonable notion of possibility [signified by "**Poss**"]' will validate the principle (A4): If **Poss** *A* and $A \rightarrow B$ then **Poss** *B*. (Hale, 'Modality', in Bob Hale and Crispin Wright, eds., *A Companion to the Philosophy of Language* (Oxford: Blackwell, 1997), 487–514, at pp. 489–90.) But (A4) is classically equivalent to the claim that whenever anything entails *C* then not **Poss** not *C*. (To see this, replace '*A*' in (A4) by 'not *C*' and '*B*' by '$\perp$'.) That is to say, the assumption (A4) is classically equivalent to a version of McFetridge's desired conclusion—that anything that is *e*-logically necessary will exhibit any reasonable notion of necessity.

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press

supposition. This enterprise corresponds to our earlier notion of *c*-logical necessity: it is *c*-logically necessary that (if *P* then *Q*) if and only if a thinker who supposes that *P* is also committed to supposing that *Q* on pain of contradiction. There is, however, no plausibility whatever in the claim that it is metaphysically necessary that *P* whenever it is *c*-logically necessary that *P*. To see why, consider the supposition that there is no such planet as Neptune, made during the period after Leverrier had hypothesized that there was such a planet in order to explain certain observed irregularities in the orbit of Uranus, but before Galle first observed the hypothesized planet. An astronomer wishing to elaborate this alternative supposition might well have spoken as follows. 'It is agreed between us that there are irregularities in the orbit of Uranus. Suppose for a moment that Leverrier is wrong, and that there is no such planet as Neptune. In that case, the irregularities observed in the orbit of Uranus are not caused by the presence of another planet. So we should try to determine whether there are moons of Uranus which could have a comparably perturbing effect on its orbit'. In making the argument

> There are observed irregularities in the orbit of Uranus
> Neptune does not exist
> So: Those irregularities are not caused by the presence of another planet

our man validly uncovers the commitments of his initial supposition that there is no such planet as Neptune. Accordingly, it is *c*-logically necessary that if there are observed irregularities in the orbit of Uranus, and if Neptune does not exist, then those irregularities are not caused by the presence of another planet. This conditional, however, is not metaphysically necessary. There are metaphysically possible worlds in which: (a) the familiar irregularities were observed by nineteenth-century astronomers; (b) the planet Neptune was destroyed millions of years before it had a chance to cause those observed irregularities; but (c) the irregularities are caused by the presence of a single other planet, viz., a body (distinct from Neptune) which had come to occupy Neptune's orbit at some time after Neptune's destruction. That (a) to (c) constitute a metaphysical possibility means that we shall not always be able to assert the counterfactual conditional: 'Had it been the case that there were observed irregularities in the orbit of Uranus and Neptune did not exist, then those irregularities would not have been caused by the presence of another planet'.[20]

[20] Compare the example of Dorothy Edgington's that McFetridge discusses at op. cit. pp. 139–40.

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press

From the premise that it is *c*-logically necessary that *P*, then, we cannot in general infer that it is metaphysically necessary that *P*. The observation made in §4, however, was that on Russellian assumptions it was *c*-logically necessary that Williamson exists. McFetridge's argument, then, affords no path from that observation to Williamson's desired conclusion—namely, that it is metaphysically necessary that he exists.

In allowing that McFetridge may be right to deem it metaphysically necessary that *P* whenever it is *e*-logically necessary that *P*, I may seem to have made another rod for my own back. As noted in §4, we obtain narrower and broader notions of *e*-logical necessity depending on how entailments are determined. Let us suppose, though, that they are determined by the rules of the standard classical first-order calculus with singular terms. The rules of that system presuppose that any meaningful singular term has a bearer. So on this determination it will be *e*-logically necessary that Williamson exists. If we make the proposed concession to McFetridge, it will then follow that it is metaphysically necessary that Williamson exists. We thereby reach Williamson's conclusion, although not for his reasons. In responding to this, though, I think we ought simply to deny that all the theorems of the classical first-order calculus with singular terms are *e*-logical necessities. 'Every object is self-identical' is a genuine logical necessity, entailed by any premise or by none. 'There exists an object identical with Timothy Williamson' is not.

Denying the status of logical necessities to some theorems of the classical first-order calculus with terms may seem to be a very radical step. But we shall need in any event either to revise that system, or to emend a basic principle of modal logic, if we are to avoid Williamson's conclusion. Even where '*a*' regiments a proper name for a contingently existing object, such as 'Timothy Williamson', '$\exists x\, x = a$' is a theorem of classical quantification theory with terms. So where '$\vdash$' signifies such theoremhood, we have $\vdash \exists x\, x = a$. Suppose, though, that the logic of metaphysical necessity includes the unrestricted rule of necessitation: from $\vdash A$, infer $\vdash \Box A$. We shall then be able to infer from $\vdash \exists x\, x = a$ to $\vdash \Box \exists x\, x = a$. If we are not to concede the game to Williamson, then, we must either restrict necessitation or reject $\vdash \exists x\, x = a$.

Although it complicates the metalogic of metaphysical necessity, restricting necessitation is a formally viable strategy.[21] It would be

[21] For the shape of a modal metalogic without necessitation, see Harry Deutsch, 'Logic for contingent beings', *Journal of Philosophical Research* **19** (1994), 273–329.

more in the spirit of the present paper, however, to follow Fine in using a free quantification theory to trace logical entailments involving contingent existents.[22] In a free logic, '$\exists x\ x = a$' will not be a theorem, so we can allow unrestricted necessitation without allowing '$\Box\ \exists x\ x = a$'. Allowing unrestricted necessitation, it may be noted, does not compromise our claim that propositions concerning contingent existents are not necessarily statable. For where '*a*' stands for such an object, we shall have e.g. $\vdash Fa \vee \neg Fa$ and hence $\vdash \Box\ (Fa \vee \neg Fa)$, but not $\vdash S\ (Fa \vee \neg Fa)$ and hence neither $\vdash \Box\ S\ (Fa \vee \neg Fa)$ nor $\vdash \Box\ T\ (Fa \vee \neg Fa)$. Logical rules may reduce a given supposition to absurdity without reducing to absurdity the distinct supposition that the first supposition is not statable.

Given his principle that everything exists of necessity, Williamson is able to combine classical quantification theory with unrestricted necessitation. This gives him a more familiar logic and a simpler metalogic. We need, though, a better reason for accepting that principle than the familiarity of the resulting logic and the simplicity of the corresponding metalogic. I have tried to show that Williamson's attempted proof of the principle provides no such reason.[23]

University College, Oxford

[22] See Kit Fine, 'Model theory for modal logic: Part I—the *de re/de dicto* distinction'. *Journal of Philosophical Logic* **10** (1978), 293–307.

[23] For comments on a draft of this paper, I am much indebted to David Efird, Dorothy Edgington, Timothy Williamson and, especially, to Sir Michael Dummett and James Walmsley. I also thank the Leverhulme Trust, whose award of a Philip Leverhulme Prize Fellowship gave me the time to write it.

https://doi.org/10.1017/S0031819103000433 Published online by Cambridge University Press