

Ways a World Might Be

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Impossibilities (1996/2002)

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1. Introduction

Possible worlds I think we should be willing to accept, at least if they are given a sober actualist explanation. There are possibilities, different ways things could have been, or could still be. But impossible worlds, impossibilities, ways things could not have been—that is too much to swallow. Why make this invidious distinction? Impossible worlds have their defenders: William Lycan, for example, claims that ‘semantics needs

impossible worlds' and that there are no good reasons for recognizing nonactual possibilities that are not reasons for recognizing impossibilities as well. ¹ Others have defended impossible worlds as a dialectical move, agreeing with Lycan that possibilities and impossibilities stand or fall together, but tying them to each other only to lend weight to the rejection of both. The dialectical move is prefigured in Quine's arguments against Wyman, his fictional Meinongian:

All the rank luxuriance of Wyman's universe of possibles would seem to come to naught when we make a slight change in the example and speak not of Pegasus but of the round square cupola on Berkeley College. If, unless Pegasus were, it would be nonsense to say that he is not, then by the same token, unless the round square cupola on Berkeley College were, it would be nonsense to say that it is not....Can we drive Wyman now to admitting also a realm of unactualized impossibles? ²

More recently, such dialectic arguments have been used to criticize David Lewis's modal realism. ³ I don't find either these dialectical criticisms or the heroic defenses of the impossible at all persuasive, but I do think that arguments about this issue are revealing of some of what is at stake in the commitment to possibilities. The friends of possible worlds differ from each other on a number of dimensions—there are contrasting accounts of what possible worlds are and of what explanatory work they are capable of doing that the arguments over impossibilities help to bring into focus. I will try to (p. 56) lay out some of the twists and turns in the argument over impossibilities by recounting a dialogue between two philosophers. It is controversial whether this dialogue really took place. According to one of the participants it did, but whether he is right or not, it is clear that both he and his interlocutor are at best merely possible beings, and so in any case the discussion did not *actually* take place. The reader may see some resemblances, maybe even counterpart relations, between the characters and actual philosophers, but they should see contrasts as well. I want to make clear that these resemblances and contrasts are not my responsibility—they are just features of that part of modal reality that I have chosen to describe.

2. The dialogue

will: I understand the position of those ontological puritans, the Quineans, whose preference for desert landscapes drives them to skepticism about everything other than what exists, but I am surprised that a possibilist like you, a Meinongian at heart with no fear of the incredulous stare, should balk at the impossible. I know of no argument for the existence of merely possible worlds that is not matched by a parallel and equally compelling argument for the existence of impossible worlds.

louis: Before getting to the main issue, let me correct a misunderstanding. I am no Meinongian. In fact, I share Quine's skepticism (if this counts as skepticism) about everything other than what exists. But like Quine, I don't regard the claim that there are no nonexistent things (or the slogan 'to be is to be the value of a bound variable') as a commitment to an austere ontology—it is just a reminder that we should all be clear and unequivocal about our ontological beliefs, whatever they are. In his classic paper, 'On What There Is', Quine first criticizes his fictional Meinongian, Wyman, not for his bloated ontology, but for his misleading characterization of that ontology. 'Wyman', he says, '...is one of those philosophers who have united in ruining the good old word "exist". Despite his espousal of unactualized possibles, he limits the word "existence" to actuality—thus preserving an illusion of ontological agreement between himself and us who repudiate the rest of his bloated universe.' Quine then generously cedes the word 'exist' to Wyman, falling back on 'is'. 'So much for lexicography,' he says, 'let's get back to Wyman's ontology.'⁴

Now I have no quarrel with Quine on this—I have no inclination to refrain from applying the word 'exist' to everything there is to talk about or quantify over. But of course while I endorse Quine's methodological point, and accept his terms for the debate about ontology, I have plenty of disagreements with him about what there is.

(p. 57)

will: Okay, I'll agree that you are a clearheaded and unequivocal Meinongian, unlike Quine's Wyman. But my question remains—why possible worlds but not impossible worlds?

louis: My problem is that I don't understand what I would be admitting if I admitted that there were impossible worlds or things. Here is how I understand the word 'possible': What is possible is what is true in some world or what is in the domain of some world. The role of the modifier 'possible' in 'possible world' is not to restrict the class of worlds to a subset meeting some additional condition. The only role of the modifier is to make clear that by 'world' I don't mean something like a planet within the actual world. 'Possible world', as I understand it, is otherwise just a redundancy, like 'existent entity'. So what I mean by 'possible world' is what you impossibilists mean by 'world'. You distinguish a proper subset of the set of worlds that you call 'possible'. What I need

to be told before I understand your impossibilist thesis is what it is that distinguishes this subset from the rest of the worlds.

I see your use of the word 'possible' as being like Wyman's use of the word 'exist': 'Exist', for Wyman, is a predicate that (according to him) picks out a proper subset of the domain of things there are. As Quine argued, to understand Wyman we need to be told what that predicate means—what distinction he is using the word 'exist' to make. I am inclined to reply to you as Quine did to Wyman: By using the word 'possible' to distinguish between the possible worlds, you are ruining the good old word 'possible'. I'll give it to you, but you owe me an explanation of what distinction between the worlds (the things that I am inclined to call 'possible worlds') you are using the word 'possible' to make. Once that is clear, then I can consider whether I think there are any worlds that don't meet the condition—worlds that are not possible in your sense.

will: I don't agree with you about who is ruining terminology, but I agree that we should not argue about who gets the word 'possible', and I am happy to accept the burden of explaining the difference between the worlds I call 'possible' and those I call 'impossible'. It is simple: impossible worlds, in my sense, are worlds in which some contradiction is true. Whatever the terminology, the substantive metaphysical question between us is whether there are any worlds (or in your misleading terminology, any *possible* worlds) in which contradictions are true.

louis: If that is what you mean, then I have an argument that there are no such things as impossible worlds, at least if I am allowed to make the assumption that the actual world is not an impossible world. (This last assumption, I grant, may be controversial in some circles—it might be argued that quantum mechanical phenomena, or United States politics in the 1990s, tend to support the thesis that our world is impossible—but (p. 58) I assume that you agree with me that the actual world is one of the possible worlds.) Here is the argument: Suppose there is a world w in which both P and $\#P$ are true. Let us introduce a modal operator 'in w ' that is interpreted by the following semantical rule: 'in w , P is true in any world x if and only if P is true in w . So by this rule, 'in w , P ' and 'in w , $\#P$ ' are both true *in the actual world*. But 'in w , $\#P$ ' is logically equivalent to ' $\#$ (in w , P)'. So a contradiction will be true in the actual world. We ourselves must affirm a contradiction in order to describe an

impossible world. But this implies that there are no impossible worlds, for, to quote David Lewis from whom I have borrowed this argument, 'There is no subject matter, however marvellous, about which you can tell the truth by contradicting yourself.' ⁵

will: I am not impressed, or convinced, by this argument. You are just begging the question. I grant you that if all worlds were possible, then the inference from 'in w , $\#P$ ' to ' $\#(in w, P)$ ' would be valid, but clearly the inference loses all plausibility as soon as we entertain the idea that there are impossible worlds. ⁶

louis: We are making *some* progress, at least, since we have reduced our metaphysical disagreement to a disagreement about the validity of a logical inference, and this question we should be able to settle. I have given you the semantical rule for my operator 'in w ,' and presumably you don't object to that. The only other relevant symbol is the negation sign, which I thought had a pretty clear and uncontroversial semantics, at least for those of us who accept classical logic. My assumption about the meaning of ' $\#$ ' is this: $\#P$ is true if and only if P is false. Or in other words, the set of worlds in which $\#P$ is true is the complement of the set of worlds in which P is true. I learned this rule early in my first logic class years ago. I suppose one might use the symbol differently, but it is hard to see how any metaphysical question could turn on whether we stick with the traditional truth#table account of the negation symbol. Now isn't it clear that, given this rule for negation, I am right about the equivalence of 'in w , $\#P$ ' and ' $\#(in w, P)$ '? If so, isn't my argument against impossible worlds, as you have defined them, a good one?

(p. 59)

will: As Ronald Reagan used to say, 'There you go again' Once again, you are begging the question. I agree that if we restrict our attention to the *possible* worlds, then the set of worlds in which $\#P$ is true will be the complement of the set in which P is true; but this rule will not apply generally if there are impossible worlds, which is what is in dispute. Impossible worlds are inconsistent, and for the most part are not deductively closed, so it can't be assumed that the set of worlds in which P is true is the complement of the set in which $\#P$ is true.

louis: Impossible worlds are not consistent and not deductively closed? What could that mean? What is it for a *world* to be consistent or inconsistent, deductively closed or not? Imagine the citizens of some impossible world establishing empirically that the cat is on the mat, and

that if the cat is on the mat, then the dog is asleep, and then discovering, to their horror, that the dog is not asleep. The headline in the *National Enquirer* blares: 'top scientists find world not deductively closed.' But even if you can make sense of your attribution of these logical properties to worlds, I don't see that this matters, since the rule for the negation operator doesn't assume anything about the nature of the worlds that are in the set of all worlds, and so cannot be begging any questions about what kinds of worlds there are. Let the worlds be as bizarre and ill-behaved as you like. No matter what worlds you allow into your set of all worlds, none of them will be in some subset of them and also the complement of that subset. Surely you won't deny that my rule is clear and coherent, whether or not there are impossible worlds. So how am I begging the question against them? Are we just arguing about terminology again—about who gets to define the symbol '#'? Paraphrasing Quine one more time, you are ruining the good old symbol '#'—Wyman at least ruined only one word and left others for Quine to use to state his views. I am worried you will take away my whole vocabulary before we are finished.

Okay, you can have the tilde, since nothing hangs on how a bit of logical notation is used (though you owe me an explanation of what you mean by the tilde). But I fear you are going to want to take over the word 'contradiction' as well. I started by asking for an explanation of the distinction between the worlds that you are calling 'possible' and the ones you are calling 'impossible'. You answered by explaining it with the help of the word 'contradiction', and I thought I understood. But now I find that we don't mean the same thing by 'contradiction', so I am no longer sure what you are saying or whether we are disagreeing at all.

Let me try to see if I can describe our dispute, and my puzzlement about it, in neutral language. You claim that there is a distinction between two classes of worlds: there is an inner set that you call possible and that is assumed to include the actual world, and an outer set that you (p. 60) call impossible. Let's call the inner set the boring worlds and the outer set the weird worlds. So far, I have no objection, though I have lots of questions. (What, for example, is the status of the claim that the actual world is boring and not weird? Is this an empirical fact?) But set aside for the moment the question of what distinguishes the two sets. We can say this about the use to which you want to put the distinction: we will use it in our interpretation of a one-place sentence operator, the tilde. It will be a constraint on the interpretation of this operator that

within the set of boring worlds, $\#P$ shall be true if and only if P is false, but in worlds in the weird set, this need not hold. (How is this symbol interpreted relative to the weird worlds? That remains to be specified.) Call the proposition expressed by ' $\#P$ ' a *quasi#negation* of P (since we agree that it coincides with negation at least for the boring worlds), and call the conjunction of any sentence and its quasi#negation a *quasi#contradiction*. Let us specify the rule for ' $\#$ ' so that every weird world will have at least one quasi#contradiction true in it. Now you seem to take our dispute to be about whether there are any weird worlds, any worlds in which quasi#contradictions are true, but I am not in a position to deny that, since you have told me nothing about what makes a world weird. I am certainly willing to grant that however the weird worlds are distinguished from the boring ones, if there are any weird worlds, then for some interpretations of ' $\#$ ' that fit the constraints specified, quasi#contradictions will be true in them. But I am still in the dark about what these worlds are like. So as I said at the start, it is not that I disagree with your metaphysics—I don't see that you have yet given me any metaphysics to disagree with.

will: Hold on—let's not get carried away with this question#begging talk of quasi#negation and quasi#contradictions. I don't owe you an explanation for my use of the tilde, since I am using it exactly as you are. That truth#table rule that you learned in your first logic class is fine with me (for at least one kind of negation). Like you, I assume that the tilde is a truth#value reverser: $\#P$ is true if and only if P is false. My difference with you is not over the tilde, or the definition of 'contradiction'. It is rather that I allow for the possibility of statements that are both true and false—for truth#value gluts (and perhaps also for truth#value gaps). The rule for negation that you know and love is compatible with the truth of a contradiction. $P \& \#P$ will be true, given the classical rules for negation and conjunction, whenever P is both true and false. An impossible world might be defined as a world in which some proposition is both true and false. This will be equivalent to saying that a contradiction is true in it.

louis: Now I am really confused. It seems now that it is the good old words 'true' and 'false' that you are ruining, and given the crucial role that those words play in semantics, that threatens to throw everything into disarray. (Not that I see how this move helps you anyway. If P is (p. 61) both true *and* false in some impossible world w , then '*in w, P*' will be both true and false in the actual world, indeed in all possible

worlds. So it still seems to follow that all worlds are impossible.) But my real problem is that I have no idea what it could mean to say that a proposition is both true and false. Let me explain my puzzlement by saying how I understand truth and falsity.

Our aim in communicating is to locate the actual world within some subspace of the space of all possible worlds. A proposition is no more than such a subspace, or subset, and to *assert* a proposition is just to locate the actual world in that subset. To say that a proposition is *true* at or relative to a possible world x is just to say that x is in the subset that constitutes that proposition. To say that a proposition is true *simpliciter* is to say that the *actual* world is in the subset. 'True' and 'false' are just labels that help to tell this story. The proposition is identified with its *truth* conditions, which is to say with the possible circumstances that, if realized, would make it true, which is just to say the possible worlds that are included in the set that constitutes the proposition.

Now if we want to allow propositions to be both true and false, relative to some world, we can't think of them this way. To accommodate truth-value gluts, we might take the value of a sentence to be, not a single subset of the set of worlds, but instead a *pair* of such subsets: a truth set and a falsity set. Call them *D*-propositions ('D' for double). For well-behaved *D*-propositions, the one set will be the complement of the other, but not all *D*-propositions will be well-behaved. (It seems that it will be required, however, that all *D*-propositions be well-behaved relative to the boring worlds. Each of those worlds will be included in any proposition's truth set if and only if it is excluded from the falsity set.) Now it is clear enough what these *D*-propositions are, but what is their point? What is it to assert or believe one of them? Suppose world w is in both the truth and falsity sets for some *D*-proposition P . If I assert P , what am I saying about w ? If I believe P , is w compatible with my beliefs or not? And if one is to allow ill-behaved *D*-propositions at all, why are they restricted to pairs of sets that are well-behaved relative to the boring worlds? This doesn't help explain the metaphysical difference between worlds that you are asking me to believe in, so I am still in the dark about whether I should believe in the kind of world that you are calling impossible.

will: First, let me respond to your parenthetical point—that truth-value gluts won't avoid your argument that all worlds are impossible. I think the problem is that I have not been careful enough in giving

my definition of an impossible world, but the problem is easily remedied. We should say that an impossible world is one *about which* a contradiction is true. Your operator, '*in w*' is just a device for turning a proposition that is really about what goes on in world *w* into a proposition that is true in (p. 62) different worlds. Since '*In w, P*' is about world *w* (assuming that *P* is), the fact that it is both true and false in the actual world won't make the actual world impossible.

louis: Fair enough, provided you can give me an explanation of the notoriously difficult notion of aboutness. On my understanding of proposition—as a set of worlds—it would make no sense to say that a proposition is about one world rather than another, but you will presumably want some more fine-grained notion. If you can explain what it is for a proposition to be about a world, you will avoid the conclusion that all worlds are impossible, but you are still stuck with the consequence that belief in impossible worlds commits you to the actual assertion of a contradiction. But anyway, my main concern is to understand the metaphysical distinction that you are claiming exists between the boring and weird (or possible and impossible) worlds.

will: Let's look at an example, just to try to be more concrete about what impossible worlds (or weird worlds, to adopt your weird terminology) are like. Quine, in his argument with Wyman, referred to (in some sense of 'referred to') the round square cupola on Berkeley College. A world containing a building with a round square cupola would be an impossible (or weird) world. My claim is that there are such worlds, or at least that you have no reason to rule them out. But you, as I understand you, are denying the existence of such worlds. Isn't this a clear metaphysical disagreement?

louis: This does not help me very much. My problem is still in understanding exactly what sort of world you are asking me to believe in. As I understand the meanings of the adjectives 'round' and 'square', they pick out disjoint parts of logical space. On this understanding, when you tell me that a certain weird object is, in its weird world, round, you are telling me that it is not square there. But then you tell me that it *is* square there. As in the case of the simple contradictions, it seems that *you* must contradict yourself to describe the possible—sorry, I mean impossible—world you are trying to get me to believe in. Now I am an open-minded person who does not want to be dogmatic about the limits of logical space. I am prepared to learn that I was wrong to

think that the properties round and square are incompatible. For all I know, logical space is richer and more flexible than I am capable of imagining, allowing for a possibility that I would recognize (if only I could understand it) as including things that are both round and square at the same time. But to admit this would be to admit that round squares are perhaps possible after all, and that is not what you are asking me to believe. Your example serves its purpose only if roundness and squareness really are incompatible properties. So you are not asking me to make room in logical space for an object that is both round and square in the sense you intend. You (p. 63) want me to make room for it only in illogical space. I would understand you if you were asking me to expand my conception of the possible—to admit that there are weird and wonderful possibilities beyond those I have imagined, or even could imagine. But I haven't, in this discussion, said anything substantive about the limits of the possible, so you can't be asking me to go beyond those limits. You seem to be telling me that whatever worlds I admit, there are some other ones as well, and this is what I find hard to grasp.

will: Perhaps I was wrong to begin by trying to argue from within your modal realist perspective, suggesting that *you*, with your conception of possibilities, ought to find room for impossibilities as well, when my real point is that a good theory of possible worlds (one that does not have the drawback of being outrageously false) ought to allow for them. I should perhaps admit that your concretist conception of a world as a very large parcel of real estate compels you to rule out impossible worlds. But we actualists have no problem making sense of them—they might be understood, for example, as inconsistent sets of propositions. And if you are right that modal realism can find no room for impossible worlds, so much the worse for your modal realism. In the weighing of costs and benefits of concretism versus actualism it seems to me that it is a benefit of actualism that it can accommodate impossible worlds. (They are useful, for example, for explaining counterfactuals with impossible antecedents and perhaps for giving a semantics for propositional attitudes that can account for inconsistent belief.)

louis: Modal realism (or concretism, as you like to call it) we can argue about another time. I think the particular disagreement we have been having today is independent of that issue. As for the existence of inconsistent sets of propositions, I hope *that* is not what we have been arguing about. I have no inclination to deny the existence of sets of propositions that are inconsistent, and if you think they can

do some explanatory work for you in semantics, go right ahead and use them—you need not reject modal realism to have recourse to sets of propositions, either maximally consistent ones or those that fail to be either consistent or deductively closed. But you can't buy any metaphysics by calling such sets 'worlds'.

As I see it, the crucial difference between us concerns the role of possible worlds in the explanation of possibility (and more generally in the explanation of propositions and relations between propositions). More specifically, the issue is whether we should analyze worlds in terms of propositions or propositions in terms of worlds. While I am perfectly comfortable with sets of propositions, one reason I resist the identification of possible worlds with sets of propositions is that I think propositions are sets of possible worlds. It may be that my modal realism is one (p. 64) thing that motivates a preference for an analysis in this direction, but some actualists would agree with me on this question, and I think the real motivation for it is a conception of propositional content that is not tied to modal realism. The starting point is the familiar idea that the intentional content of a statement or thought is its truth-conditions, where truth-conditions are the way that the world would have to be for the statement or thought to be true. One knows what a statement says to the extent that one is able to form some conception of the distinction between the kind of world that would make it true and the kind that would make it false. If one has succeeded in forming a conception of a world that would, if realized, make the statement true, then one has succeeded in showing it to be possible. Now whatever one's metaphysical theory about the nature of worlds—whether one thinks of them as large parcels of real estate, to use your words, or as a kind of actually existing way the world might or might not be—the following will be true: If there is a domain of all the worlds, then one can interpret modal operators in terms of unrestricted quantification over this domain: necessity is truth in *all* worlds, 'Possibly ____' is true in any world if ____ is true in *some* world. That is what I mean when I talk of metaphysical possibility, but if you want to interpret possibilities and impossibilities in a different way—in terms of restricted quantification—that is fine with me. And if you do, I shouldn't even accuse you of ruining good old words, since modal words—'possible', 'may', 'might', 'could', 'must', 'ought', etc.—are most commonly interpreted in terms of some proper subset of the possibilities, a set defined by an accessibility relation between worlds (the worlds compatible with the laws of nature that hold in the actual

world, or with what Pierre knows there, or with Igor's moral obligations all being satisfied, for example). All I need to know is what the basis is for your restriction. But whether your concept of impossibility is based on restricted or unrestricted quantification, it seems to me hard to escape the conclusion that at least *some* impossible statements will come by their impossibility by being true in no world at all, possible or impossible. For you surely will agree that a proper semantics explains truth-conditions in terms of compositional rules, and that whatever possibilities and impossibilities are available for semantics to appeal to in its explanations of the content of a complex statement as a function of the meanings of its component parts, there might be statements that are true in no possible or impossible world.

Of course, one can be ignorant or mistaken about what is possible in this unrestricted sense. One may be under the illusion that one has conceived of a possibility when one has not. Since statements, and other kinds of representations, represent possibilities in complex ways, it may take some effort to see what a statement says, and the effort may reveal that a statement that one thought described a coherent possibility in fact does not—that despite first appearances there are *no* conditions under which it (p. 65) would be true. That is what it is to discover, or come to believe, that a proposition is impossible in this sense. It is not that one forms a conception of a kind of situation that would make the statement in question true but judges that kind of situation to be one that fails to meet some metaphysical condition. Rather, one fails to turn up any situation, or 'world', at all.

will: So are you suggesting that statements describing impossibilities are meaningless—devoid of content—sentences with no truth-conditions? If so, you are following the precedent of 'wily Wyman', who tried to escape Quine's *reductio* by saying that the phrase 'round square cupola' is meaningless. As Quine said, the doctrine that contradictions are meaningless has a long history, but I am inclined to agree with him that 'it has no intrinsic appeal' and has 'severe methodological drawbacks',⁷ such as, for example....

louis: Wait—sorry to interrupt, but I don't want you wasting your time refuting a doctrine that I have no inclination to defend. Of course contradictions are meaningful. Contradictory statements and thoughts succeed in expressing a proposition—one that is true under no conditions. On the picture I am trying to sketch, the meaning of a

statement is something like a recipe for determining truth#conditions. One may know the meaning of a complex statement—know the recipe for determining its truth#conditions as a function of the meanings of its components and the compositional rules—without yet having done the computational work to discover what those truth-conditions are (or whether there are any conditions under which it would be true). There is perhaps an ambiguity in the expression ‘truth-conditions’ that is responsible for the inclination some philosophers have had to say that contradictions are meaningless. The recipe for computing the content of a statement as a function of the meanings of its parts (plus context) is a statement of the conditions under which the statement would be true, and so this recipe might reasonably be called ‘the truth-conditions of the statement’. In this sense, any statement with a determinate meaning will have truth-conditions. But even if a statement has truth-conditions in this sense, it still may be that the result of the computation of the recipe is that there are no conditions under which it would be true.

will: Okay, I get this distinction, but I am still suspicious of your picture, partly because I am not sure I understand what it is to ‘form a conception of a world that would, if realized, make a statement true’. How do we form a conception of the worlds in which a certain statement is true except by describing the worlds, and doesn't the statement itself do that? (The kind of world that would, if realized, make ‘there is a round square cupola on Berkeley College’ true is a world in which there is a round square cupola on Berkeley College.) The reason we know we have not formed a conception of a *possible* world in which the statement is true is that the statement describes an impossibility. So I don't see how your picture provides us with any criterion for possibility.

louis: I have to agree with you—I would not pretend to have given a criterion for possibility—a general way of settling disputes about what is possible. But I think the issue is about how to understand questions about what is possible, and not how to settle them. Suppose two philosophers are arguing about whether time travel is metaphysically possible, whether Aristotle—the man himself—could have been an artichoke, whether water could have been something other than H₂O, whether physical space could have seventeen dimensions. If I think of such questions your way, then the problem is to decide whether the worlds which we agree there are and in which these conditions are realized are located in the inner set of *possible* worlds or the outer set

of metaphysical impossibilities. Once you have told me more about how you make this distinction, I will know how to go from there. If I think of the questions my way, then the problem is to determine whether an expression succeeds in representing a kind of world at all. The focus of our dispute or inquiry shifts from the status of the worlds to the meanings of the expressions and the rules for interpreting them. When we disagree about whether some statement could possibly be true, we are arguing about what the statement says.

will: I find it ironic that you, the consummate metaphysician who takes modal claims to be claims about the properties of a domain of parallel universes, should be arguing that disputes about what is metaphysically possible are really disputes about the meanings of words or at least about what statements say. Are you sure you are not a closet logical empiricist who believes that all necessity is a matter of convention?

louis: I take it to be a triviality that the truth of any statement depends on two things: what it says, and whether the world is as it says. That is, it depends on what the truth#conditions are and whether those conditions are satisfied. If the statement is true under all conditions, or under none, then we know whether the world is as the statement says simply by determining what it says. So arguments about what is metaphysically necessary or possible are inevitably arguments about what a statement says. If this is the point that the slogan 'all necessity is a matter of convention' is trying to make, then I agree with it. But the truth of propositions themselves (including the necessary and impossible propositions) does not depend at all on any conventions.

will: Let me see if I have this straight. Consider a statement like 'Either donkeys talk or they do not'. Applying the truth#functional rules that you are so fond of, we learn that the proposition expressed by this statement (p. 67) is the one that is the union of some subset of the set of all possible worlds with its complement. Obviously, this proposition tells us nothing, either about the world or about modal reality—about what sorts of worlds are included in the space of all possible worlds. But your conception of content implies that *any* necessarily true statement, any true statement about what is common to the whole of modal reality, or any statement about what is possible (any statement about what worlds are included in the space of all possible worlds) will say nothing more than this trivial tautology. They all have exactly the same content, and so once we understand what they say we see that they too tell us

nothing about what the space of all possible worlds is like. So you have given us these modal riches—a plenitude of possible universes—but your conception of content seems to imply that modal reality is impossible to characterize. Is this right? (Maybe you should change your name from Louis to Ludwig and make dark and delphic pronouncements about the limits of language and the limits of the world.)

louis: No, I am afraid that is not my style, but it is right that the necessary proposition is one that is true no matter what the world is like, and so it tells us nothing about reality, modal or otherwise. This may be surprising, but I don't think it is as mysterious as you suggest. The conception of content that I have been trying to defend assumes that a proposition is a way of distinguishing between possibilities—that the only way to describe the world is to distinguish a way it is from other ways that it might have been. Since there is no other way modal reality might have been, one cannot say something informative about the character of modal reality as a whole by asserting the proposition that is true in all possible worlds. But that does not mean that one cannot talk at great length about what the possible worlds, actual or otherwise, are like. One describes modal reality by distinguishing parts of it from other parts. The possible worlds differ from each other on many dimensions, so there is much to be said about contrasts between the different possible worlds. So I see no need to be mystical about logical space, or modal reality, or to add a contrasting set of impossible worlds in a vain attempt to talk about the limits of the possible from some point of view beyond them.

will: I can't say that I am convinced, but since it is clear that the author of our dialogue is on your side in this dispute, I must leave you with the last word. Perhaps we can continue our discussion some time when he is not around. ⁸

(p. 68)

Notes:

(1) Lycan ([1994](#) : 39).

(2) Quine ([1961](#) : 5).

(3) See, for example, Naylor ([1986](#)). Yagisawa ([1988](#)) argues for the conditional thesis that if modal realism is acceptable at all, an extended realism that accepts impossible

worlds as well should also be acceptable, leaving it to the reader whether to use this thesis 'as the first premise of the modus ponens, or the first premise of the modus tollens' (p. 203).

(4) Quine (1961 : 3).

(5) See Lewis (1986a : 7, n. 3). William Lycan replies to this argument in Lycan (1994 : 40).

(6) Will is following William Lycan in responding this way. But another defender of the impossible, Takashi Yagisawa, seems to accept Lewis's argument and to embrace the contradiction. He rejects Lewis's claim that no subject matter is so marvelous that we can tell the truth about it by contradicting ourselves. 'Why can you not tell the truth about an impossible thing by contradicting yourself? ... What else would you expect? Impossible things are *impossible*' (Yagisawa 1988 : 203). If Yagisawa also accepts Will's criterion for an impossible world—a world in which a contradiction is true—then it seems to follow that the actual world (and by similar reasoning every possible world) is impossible. I am tempted to call this a *reductio* of the position, but believers in actual impossibility will obviously not think that the reduction of some claim to absurdity is a reason to reject it.

(7) Quine (1961 : 5).

(8) After the original version of this dialogue was in press, I received some detailed comments from David Lewis who, while finding Louis a kindred spirit, thought that Will could have done a better job defending his side of the story. In this expanded version of the discussion, I have followed some of Lewis's suggestions, though I am not sure that I have done as well on Will's behalf as Lewis would have liked. In any case, Louis was not moved.

