

A Philosophers' Paradise

from *On the Plurality of Worlds* (1986)
by David Lewis

1.1 *The Thesis of Plurality of Worlds*

The world we live in is a very inclusive thing. Every stick and every stone you have ever seen is part of it. And so are you and I. And so are the planet Earth, the solar system, the entire Milky Way, the remote galaxies we see through telescopes, and (if there are such things) all the bits of empty space between the stars and galaxies. There is nothing so far away from us as not to be part of our world. Anything at any distance at all is to be included. Likewise the world is inclusive in time. No long-gone ancient Romans, no long-gone pterodactyls, no long-gone primordial clouds of plasma are too far in the past, nor are the dead dark stars too far in the future, to be part of this same world. Maybe, as I myself think, the world is a big physical object; or maybe some parts of it are entelechies or spirits or auras or deities or other things unknown to physics. But nothing is so alien in kind as not to be part of our world, provided only that it does exist at some distance and direction from here, or at some time before or after or simultaneous with now.

The way things are, at its most inclusive, means the way this entire world is. But things might have been different, in ever so many ways. This book of mine might have been finished on schedule. Or, had I not been such a commonsensical chap, I might be defending not only a plurality of possible worlds, but also a plurality of impossible worlds, whereof you speak truly by contradicting yourself. Or I might not have existed at all – neither I myself, nor any counterpart of me. Or there might never have been any people. Or the physical constants might have had somewhat different values, incompatible with the emergence of life. Or there might have been altogether different laws of nature; and instead of electrons and quarks, there might have been alien particles, without charge or mass or spin but with alien physical properties that nothing in this world shares. There are ever so many ways that a world might be; and one of these many ways is the way that this world is.

Are there other worlds that are other ways? I say there are. I advocate a thesis of plurality of worlds, or *modal realism*,¹ which holds that our world is but one world among many. There are countless other worlds, other very inclusive things. Our world consists of us and all our surroundings, however remote in time and space; just as it is one big thing having lesser things as parts, so likewise do other worlds have lesser otherworldly things as parts. The worlds are something like remote planets; except that most of them are much bigger than mere planets, and they are not remote. Neither are they nearby. They are not at any spatial distance whatever from here. They are not far in the past or future, nor for that matter near; they are not at any temporal distance whatever from now. They are isolated: there are no spatiotemporal relations at all between things that belong to different worlds. Nor does anything that happens at one world cause anything to happen at another. Nor

¹ Or 'extreme' modal realism, as Stalnaker calls it — but in what dimension does its extremity lie?

do they overlap; they have no parts in common, with the exception, perhaps, of immanent universals exercising their characteristic privilege of repeated occurrence.

The worlds are many and varied. There are enough of them to afford worlds where (roughly speaking) I finish on schedule, or I write on behalf of *impossibilia*, or I do not exist, or there are no people at all, or the physical constants do not permit life, or totally different laws govern the doings of alien particles with alien properties. There are so many other worlds, in fact, that absolutely *every* way that a world could possibly be is a way that some world *is*. And as with worlds, so it is with parts of worlds. There are ever so many ways that a part of a world could be; and so many and so varied are the other worlds that absolutely every way that a part of a world could possibly be is a way that some part of some world is.

The other worlds are of a kind with this world of ours. To be sure, there are differences of kind between things that are parts of different worlds – one world has electrons and another has none, one has spirits and another has none – but these differences of kind are no more than sometimes arise between things that are parts of one single world, for instance in a world where electrons coexist with spirits. The difference between this and the other worlds is not a categorial difference.

Nor does this world differ from the others in its manner of existing. I do not have the slightest idea what a difference in manner of existing is supposed to be. Some things exist here on earth, other things exist extraterrestrially, perhaps some exist no place in particular; but that is no difference in manner of existing, merely a difference in location or lack of it between things that exist. Likewise some things exist here at our world, others exist at other worlds; again, I take this to be a difference between things that exist, not a difference in their existing. You might say that strictly speaking, only this-worldly things *really* exist; and I am ready enough to agree; but on my view this ‘strict’ speaking is *restricted* speaking, on a par with saying that all the beer is in the fridge and ignoring most of all the beer there is. When we quantify over less than all there is, we leave out things that (unrestrictedly speaking) exist *simpliciter*. If I am right, other-worldly things exist *simpliciter*, though often it is very sensible to ignore them and quantify restrictedly over our worldmates. And if I am wrong, other-worldly things fail *simpliciter* to exist. They exist, as the Russell set does, only according to a false theory. That is not to exist in some inferior manner – what exists only according to some false theory just does not exist at all.

The worlds are not of our own making. It may happen that one part of a world makes other parts, as we do; and as other-worldly gods and demiurges do on a grander scale. But if worlds are causally isolated, nothing outside a world ever makes a world; and nothing inside makes the whole of a world, for that would be an impossible kind of self-causation. We make languages and concepts and descriptions and imaginary representations that apply to worlds. We make stipulations that select some worlds rather than others for our attention. Some of us even make assertions to the effect that other worlds exist. But none of these things we make are the worlds themselves.

Why believe in a plurality of worlds? – Because the hypothesis is serviceable, and that is a reason to think that it is true. The familiar analysis of necessity as truth at all possible worlds was only the beginning. In the last two decades, philosophers have offered a great many more analyses that make reference to possible worlds, or to possible individuals that inhabit possible worlds. I find that record most impressive. I think it is clear that talk of *possibilia* has clarified questions in many parts of the philosophy of logic, of mind, of language, and of science – not to mention metaphysics itself. Even those who officially scoff often cannot resist the temptation to help themselves abashedly to this useful way of speaking.

Hilbert called the set-theoretical universe a paradise for mathematicians. And he was right (though perhaps it was not he who should have said it). We have only to believe in the vast hierarchy of sets, and there we find entities suited to meet the needs of all the branches of mathematics;¹ and we find that the very meagre primitive vocabulary of set theory, definitionally extended, suffices to meet our needs for mathematical predicates; and we find that the meagre axioms of set theory are first principles enough to yield the theorems that are the content of the subject. Set theory offers the mathematician great economy of primitives and premises, in return for accepting rather a lot of entities unknown to *Homo javanensis*. It offers an improvement in what Quine calls ideology, paid for in the coin of ontology. It's an offer you can't refuse. The price is right; the benefits in theoretical unity and economy are well worth the entities. Philosophers might like to see the subject reconstructed or reconstrued; but working mathematicians insist on pursuing their subject in paradise, and will not be driven out. Their thesis of plurality of sets is fruitful; that gives them good reason to believe that it is true.

Good reason; I do not say it is conclusive. Maybe the price is higher than it seems because set theory has unacceptable hidden implications maybe the next round of set-theoretical paradoxes will soon be upon us. Maybe the very idea of accepting controversial ontology for the sake of theoretical benefits is misguided – so a sceptical epistemologist might say, to which I reply that mathematics is better known than any premise of sceptical epistemology. Or perhaps some better paradise might be found. Some say that mathematics might be pursued in a paradise of *possibilia*, full of unactualised idealisations of things around us, or of things we do – if so, the parallel with mathematics serves my purpose better than ever! Conceivably we might find some way to accept set theory, just as is and just as nice a home for mathematics, without any ontological commitment to sets. But even if such hopes come true, my point remains. It has been the judgement of mathematicians, which modest philosophers ought to respect, that *if* that is indeed the choice before us, then it is worth believing in vast realms of controversial entities for the sake of enough benefit in unity and economy of theory.

¹ With the alleged exception of category theory - but here I wonder if the unmet needs have more to do with the motivational talk than with the real mathematics.

As the realm of sets is for mathematicians, so logical space is a paradise for philosophers. We have only to believe in the vast realm of *possibilia*, and there we find what we need to advance our endeavours. We find the wherewithal to reduce the diversity of notions we must accept as primitive, and thereby to improve the unity and economy of the theory that is our professional concern – total theory, the whole of what we take to be true. What price paradise? If we want the theoretical benefits that talk of *possibilia* brings, the most straightforward way to gain honest title to them is to accept such talk as the literal truth. It is my view that the price is right, if less spectacularly so than in the mathematical parallel. The benefits are worth their ontological cost. Modal realism is fruitful; that gives us good reason to believe that it is true.

Good reason; I do not say it is conclusive. Maybe the theoretical benefits to be gained are illusory, because the analyses that use *possibilia* do not succeed on their own terms. Maybe the price is higher than it seems, because modal realism has unacceptable hidden implications. Maybe the price is *not* right; even if I am right about what theoretical benefits can be had for what ontological cost, maybe those benefits just are not worth those costs. Maybe the very idea of accepting controversial ontology for the sake of theoretical benefits is misguided. Maybe – and this is the doubt that most interests me – the benefits are not worth the cost, because they can be had more cheaply elsewhere. Some of these doubts are too complicated to address here, or too simple to address at all; others will come in for discussion in the course of this book.