

Might I have been non-actual?

Josh Parsons

April 13, 2013

1 Introduction

Analytic philosophers usually think about modality in terms of possible worlds. According to the possible worlds framework, a proposition is necessary if it is true according to all possible worlds; it is possible if it is true according to some possible world. There are as many possible worlds as there are ways the actual world might be. Only one world is actual.

This paper is about the relationship between two questions that arise given this framework for thinking about modality. The first question is “what is a possible world?” It has many answers, but the two I am considering are: 1) modal realism (a.k.a. genuine modal realism), according to which possible worlds are concrete existents just like the actual world; and 2) modal ersatzism (a.k.a. moderate modal realism) according to which possible worlds are abstract representations of the actual world, and are themselves part of the actual world. The appeal of ersatzism is that it offers to make the possible worlds framework compatible with actualism, the doctrine that everything is actual.

The second question is “what is it for a world to be actual?” and the answers I will consider are 1) indexicalism, according to which utterances of “the actual world” pick out the world in which the utterance is made (i.e. “the actual world” could be treated as synonymous with “the world *I* am in”) and 2) absolutism, according to which “the actual world” is like a definite description, picking out the world that has the property of actuality.

Later on, I will have to go back on some of the things I have just said. But what I have said here should suffice to indicate the questions I am interested in, as they are currently understood in the literature.

I am going to argue that, though the two questions are distinct, it’s no accident that modal realists tend to be indexicalists, and ersatzists tend to be absolutists. It’s relatively easy to show that a modal realist should be an indexicalist, and I do this in section 2. I also think that an ersatzist should be a absolutist, though this depends on some slightly idiosyncratic claims about how ersatzism should work. In section 3 I defend those claims, and reply to an argument of Robert Stalnaker’s to the conclusion that even an ersatzist should believe that “is actual” is an indexical.

The arguments touch on the question of whether I might have been non-actual. It's difficult for a theory of actuality to treat this question correctly. There are two pitfalls. On the one hand, it oughtn't to be too coincidental that I am actual, or it would make sense to doubt whether I am actual, and how could such a doubt ever be satisfied? On the other hand, it ought to be a contingent matter of fact that I am actual, for I am no necessary existent.

I should point out that one feature of "actual" that I'm not trying to explain here is its use as a "scope-jumping" adverb, as in "my office could have been bigger than it actually is" — here "actually" functions to jump out of the scope of the possibility operator and allow me to refer to the size of my office from within a context where "the size of my office" refers instead to a size my office might have had.

2 Modal realists should be indexicalists

David Lewis argues quite effectively that a modal realist should embrace indexicalism. His worry is that if there is absolute actuality, which is only had by one possible world, then it makes sense to doubt whether our world is the one that has this property. But this doubt doesn't (or shouldn't) make sense — so there is no absolute actuality.

What a remarkable bit of luck for us if the very world we are part of is the one that is absolutely actual! Out of all the people there are in all the worlds, the great majority are doomed to live in worlds that lack absolute actuality, but we are the select few. What reason could we ever have to think it was so? How could we ever know?
(Lewis 1986, p. 93)

There are three objections to this argument that be easily answered.

First, you might think that Lewis is relying on a contentious epistemic constraint on theorising here. But that's not the case. We should think of this argument as a *reductio*. It's not as if he thinks that a theory of actuality must be able to explain how we know that we are actual. Rather, he thinks that to even raise that question is absurd, and the theory of absolute actuality that allows the question to be raised has, therefore, absurd consequences.

Second, you might worry about the whether the absolutist and indexicalist are talking past each other. As I described these two doctrines above, they are semantic; they are views about the semantic nature of "the actual world". But Lewis's argument is against a metaphysical doctrine — the view that there is a property of absolute actuality — that one world is special. Aren't we mixing our semantic apples with metaphysical oranges here? No: absolutism, while being a semantic doctrine, has a metaphysical presupposition which indexicalism lacks, namely, that worlds differ as regards the property of being actual. Lewis is attacking that presupposition. He is not mixing apples and oranges, merely putting the metaphysical horse properly before the semantic cart.

Third, one might think that Lewis's argument is all too similar to another argument he rejects. That argument is an objection to modal realism put forward by Peter Forrest and others. According to this objection, modal realism entails scepticism. What luck, say Forrest and friends, that we live in a world free from radical deception! Out of all the people there are in all the worlds, many are hopelessly deceived by Cartesian demons, vat-wielding super-scientists, and so on, but we are the select few. What reason could we ever have to think it was so? How could we ever know? (Lewis 1986, pp. 115–123)

I don't want to get into the business of defending modal realism against such objections — leave that to Lewis. What I will do is defuse the *tu quoque* by explaining how Lewis's answer to this objection does not apply in the case of the argument against absolute actuality.

Lewis's reply to Forrest consists, in part, in pointing out that the sceptical argument survives translation back into neutral terms. It's not modal realism that tells us we *might* have been deceived — that's neutral ground. But that we might have been radically deceived is all that's required to provoke the reaction that we are lucky not to be. Scepticism of this kind is everyone's problem.

This does not seem to be the case for Lewis's argument against absolute actuality. It's neutral ground that we might not have been actual. Should we be worried, just on the basis of this neutral fact, about whether we know that we are actual? No: setting modal realism aside, this is like worrying whether you are or are not a fictional character. The worry really only gets going once we add modal realism to the mix, and suppose that non-actual people are just as real, just as much people, as we are.

2.1 A hybrid view?

Perhaps the modal realist could accept a property of absolute actuality if we only spoke about that property indexically? Here is how this might work: perhaps there are many simple properties of actuality, and which is picked out by the predicate "is actual" is determined indexically. When we say truly "a world of black swans is actual" we are referring indexically to a different property to that referred to by our other-worldly counterparts who say truly "a world of blue swans is actual". We are the select few who have the property we refer to using "is actual" — but there's no sceptical problem, because our other-worldly counterparts don't even believe themselves to have that property.

It's hard to know what to make of this proposal. I think that it is unattractive because with such a countless infinity of properties of actuality, I lose my grip on what makes them deserve that name. We need an independent reason to think about actuality in this way, and for the life of me, I can't see what it could be.

The draw out this point, I think it would be helpful to have a contrasting case, where the hybrid indexical / absolute view makes more sense. Many people have commented on the parallel between actuality and presence — the property of the present time in virtue of which it is present. Though I think the absolute theory of presence is in trouble on other grounds, I don't think that

it is subject to a Lewis-like argument. (Parsons 2002, pp. 14–16) The reason is that presence, if it exists at all, comes in degrees. The present surely has vague boundaries — when I think of the present I think of what’s happening now: the sun shining, a truck passing in the street outside. But on reflection I realise that the evidence of these events takes time to reach me (several minutes in the case of sunlight). I am experiencing the past, but some things are more past than others. The sunlight and the truck are better cases of presence than, say, Caesar’s crossing the Rubicon, but only as a matter of degree.

Because of this, it’s not crazy to say there are many simple properties which are degrees of presence, and that when ‘is present’ is uttered at a time t , it refers to the degree of presence that t has. We are the select few who have the property we refer to using “is present” — but there’s no sceptical problem, because our past selves never believed themselves to have that property.

By contrast, degrees of actuality make no sense. So, in the case of actuality, the hybrid view seems strikingly unmotivated.

3 Modal ersatzists should not be indexicalists

I now turn to the more difficult part of my project. I will now argue that ersatzists should believe in absolutism. I begin with a more detailed characterisation of ersatzism, which is intended to abstract away from the details of various different ersatzist proposals. That characterisation leads to some puzzles, which I solve by making some distinctions, including the distinction between “actuality” and “actualisation” (section 3.1). Having done that, I argue that the debate between indexicalism and absolutism should be understood as a debate about the semantics of “is actualised”; and suggest, persuasively, I hope, that any plausible ersatzism will have the resources to believe in absolute actualisation (section 3.2).

This positive argument is weak — it exhibits an attractive theory rather than demonstrating its truth — but I also use the ersatzist framework I’ve developed to show how to resist Stalnaker’s arguments that an ersatzist should believe the indexical theory (section 3.3). Finally, I discuss an odd feature of my view, which I attempt to display as an advantage (section 3.4).

3.1 How to think about ersatzism

The idea of ersatzism is to hold that there are possible worlds, and enough of them for possible worlds semantics for modality to work, without also holding that there are such things as blue swans or talking donkeys. Merely possible worlds, according to the ersatzist, are “abstract representations” (Lewis 1986, p. 136) of worlds — they are not themselves worlds (or at least, not in the same way that the actual world is a world).

In fact, it’s incidental to ersatzism that possible worlds are abstract. What’s essential is that a merely possible world is a mere representation of a world — that it is no more a world than a toy tiger is a tiger. It would be a version of ersatzism to say, for example, that somewhere there is a

very large art gallery containing an infinite number of extremely detailed depictions of the world as it might have been, and it is these depictions that we mean by “possible worlds”.

Different versions of ersatzism will differ on the details of what the possible worlds are (if not artworks) but they all agree that, in some sense, possible worlds *represent* the world (because we must be able to make sense of propositions being true according to a world) and that possible worlds are part of the actual world. This is the sense in which ersatzism saves actualism: possible worlds are actual objects, but that’s not to say that the events they represent actually occur (just as a painting of a chimera is an actual object, but that’s not to say that there’s an actual chimera).

Supposing that merely possible worlds are abstract objects (and not concrete artworks) there appears to be an important and absolute distinction between merely possible worlds and the actual world, and indeed between merely possible worlds and most of the actual objects they represent. They are abstract, we are not. This appears to vindicate the absolute theory of actuality, given ersatzism — it gives us for free the metaphysical resource we need: an absolute difference between actual and non-actual worlds.

Not so fast! The distinction between the actual and the merely possible should not be conflated with the distinction between the concrete and the abstract, even given ersatzism. I offer four reasons for this, in increasing importance. First, as I’ve already mentioned, the view that merely possible worlds are abstract is not part of ersatzism (though perhaps it’s part of all plausible versions of ersatzism). So the ersatzist qua ersatzist is not immediately committed to making an absolute distinction between the merely possible and the actual.

Second, people usually think that objects are concrete or abstract essentially. That which is abstract could not fail to be abstract, and that which is concrete could not fail to be concrete. Only a pathological anti-essentialist would find nothing surprising in the thought that I might have been a number, or Mt. Everest the rest mass of an electron. But if to be an actual world is to be concrete, then that which is actual could not fail to be so, and that which is merely possible could not fail to be so. Which world is actual turns out to be a non-contingent matter, and that seems wrong.¹ (Lewis 1979, p. 148)

Third, if merely possible worlds are abstract, it’s just not true that the actual world is concrete. The whole point of ersatzism is to save actualism by making merely possible worlds *part of* the actual world, so that we can truly say that all there is is actual, and that the actual world is the totality of all there is. But then if merely possible worlds are abstract, the actual world is partly abstract and partly concrete.

Fourth, something must have gone wrong. Wasn’t the ersatzist trying to say that everything is actual? But they don’t believe that everything is concrete!

We have gotten ourselves into a mess here by using “actual” ambiguously. Here are three distinctions that might be in the air:

¹What makes the conclusion of this reductio absurd? Perhaps because it might entail logical fatalism — that no actual event (including seemingly free actions) could fail to occur. I won’t waste my time assessing the rights and wrongs of this matter, as I think the reductio is unsound on multiple other grounds anyway. For the most important of those, see below.

- **Possible worlds vs. miscellaneous other things.** There's the distinction between those things that are possible worlds, and those (like you, or, I, or the totality of everything that's actual) that are not. This is nothing to do with what's actual and what isn't (it's to do with what's a possible world, and what isn't).
- **Actualised vs. unactualised worlds.** There's the distinction among possible worlds, between those that accurately represent how things are, and those that *mis*represent how things really are. Following Lewis, I'll call this the distinction between actualised and unactualised worlds.
- **Actual vs. non-actual things.** And there's the distinction between things that are as the actualised world represents them, and things that are not as the actualised world represents them. I'll call this the distinction between the actual and the non-actual.

Notice that the definition of “actual” makes it parasitic on “actualised”. This is a positive benefit, because ersatzists often have trouble saying what they mean by “actual” without seeming to quantify over merely possible things, which would be incompatible with actualism. Also, I've left what it is for a possible world to be actualised deliberately vague. This is something that should be filled in by a specific version of ersatzism — I'm trying to characterise a framework that any ersatzist can use. For example, if possible worlds are world-properties, or ways the world could be — as in, for example, Forrest (1986) — then actualisation might be instantiation.

With these distinctions in hand, we can sort out the mess. To reply to point 4: the actualist is committed to holding that everything is actual, but not that everything is actualised. Only some, perhaps only one, possible world is actualised. To reply to points 3 and 1: the distinction between abstract objects and concrete ones can perhaps play some role in saying which things are possible worlds and which are rabbits or volcanoes. But that's neither the distinction between the actual and the non-actual (because possible worlds, rabbits, and volcanoes are all alike in being actual), nor the distinction between actualised and unactualised possible worlds (because actualised worlds are no more concrete than unactualised ones). And to reply to point 2: it is perhaps, not a contingent matter which things are possible worlds. Perhaps no possible world could have been a rabbit or a volcano, or the actual world. But it doesn't follow that the actualised world could not have been an unactualised world.

3.2 Ersatzism, actuality, and actualisation

We can also explain what it is for an ersatzist to believe the absolute theory of actuality. The ersatzist should think of the issue as being about actualisation: what kind of difference is there between a world that's actualised, and a world that isn't? Is it an absolute matter? Intuitively, that seems like the sensible thing for an ersatzist to say. If possible worlds are like depictions of the actual world, then just as there's an absolute difference between a accurate picture, and an inaccurate one, there's an absolute difference between an actualised world and an unactualised one.

To put the issue in terms of actualisation is not to change the subject. The modal realist can think of the matter in this way too. It's just that, because a modal realist thinks that a possible world represents things as being a way by being that way, the difference between actuality and actualisation disappears.

For a modal realist, questions about actuality are questions about actualisation, and vice versa. For an ersatzist, the two come apart, but questions about actuality are not very interesting, because, for the ersatzist, everything is actual, nothing is non-actual. As I mentioned above, it's an attractive feature of casting the distinctions the way I have that an ersatzist can state her actualism in a way that makes it substantive. Some ersatzists think talk of a distinction between actual and non-actual objects is senseless (Lycan 1979, p. 290) (while of course they should accept the distinction between actualised and unactualised worlds if they're not to be creepy relativists). For these reasons, the absolute theory of actuality is best understood as an account of what it is for a world to be *actualised* — it would be better called the absolute theory of actualisation.

3.3 Ersatzism and the indexical theory

I've given what I think is a persuasive description of an ersatzist theory that incorporates absolute actualisation. But it remains nothing more than that. Is there a conclusive argument to the effect that an ersatzist must deny that "is actualised" is an indexical?

I think not, but I stand by my persuasive description. I know of no reason why an ersatzist should prefer to have an indexical account of actualisation (even if one is open to her). Reasons have been offered; in this section I will explain why I am not convinced.

Stalnaker (1987, pp. 47–49) and Dyke (1998, p. 104) both point out that merely being an actualist does not prevent an ersatzist having an indexical view of actuality. They appeal to an analogy with other kinds of indexical: even a solipsist can accept that "I" is an indexical — the solipsist just happens to think that she is its only utterer. This move may be too fast: one would like to distinguish between a solipsist who thinks that she is the only person as a mere matter of fact, and a more principled solipsist who thinks that this is a deep and necessary metaphysical truth (as ersatzists think actualism is). But let's grant that even the principled solipsist can accept that "I" is an indexical. Let's also put to one side any arguments about how and whether one can tell, from linguistic and phenomenological evidence alone, whether a term is context dependent or not.²

It should be noticed that Stalnaker and Dyke are saying that "is actual" is an indexical — they are not talking about "is actualised". And it's this that sustains the comparison with solipsism. Ersatzists are not solipsists about the actualised world — they think it is one among many. But the doctrine Stalnaker and Dyke are suggesting can be reconstructed as a doctrine about actualisation. Supposing that actualisation consists in some kind of fit or correspondence between a possible world and the actual world, here are two ways it could be characterised: "*w* is actualised

²For an attempt to refute the indexical theory on the basis of such evidence, see Davies (1983).

if it corresponds to the biggest thing there is” *versus* “*w* is actualised if it corresponds to the biggest thing that I am part of”. I take Stalnaker and Dyke as recommending the latter, rather than the former.

This is certainly possible. But why should we prefer the latter? Dyke mentions “pragmatic benefits” of combining the indexical theory of actuality with modal realism. (1998, p. 104) But it’s not clear what benefits she has in mind, or whether they would accrue even to the conjunction of ersatzism with the indexical theory. Stalnaker is also a little cagey. But some of his comments on the results of endorsing the indexical theory suggest that he believes that denying it would lead to unattractive results.

The first such result is the necessity of actuality mentioned above. Stalnaker quotes an argument of Lewis to the effect that, if ersatzism were true, then it would be a non-contingent matter which world is actual. He says that this argument is mistaken, but it seems he thinks it is mistaken because it supposes that an ersatzist would not accept indexicalism. So we may take Stalnaker as arguing that if indexicalism is false, then actuality is necessary. Stalnaker’s argument turns on the idea of a “standpoint”. Absolute truths are true from every standpoint, whereas truths that contain an indexical may be true from some standpoint and not from others. If actuality is absolute, then the very same world is actual from every standpoint. But then, Stalnaker thinks, it would be actual, in particular, from the standpoint of every non-actual world. So this world — the actual world — is necessarily actual.

The trouble with this argument is that it fails to make the distinction between actuality and actualisation. Suppose we take Stalnaker to mean what I mean by “actual”. Then his argument fails because, according to the ersatzist, there are no non-actual worlds to have standpoints. Even if there were, it would be irrelevant to whether this world is necessarily actual. Ersatzists are precisely those who deny that necessity has something to do with what is going on in existent, but non-actual universes.

Suppose, then, that by “actual”, Stalnaker means what I would mean by “actualised”. He would be saying that, if actualisation is absolute, then the very same world is actualised from every standpoint. But then, it would be actualised even from the standpoint of every unactualised world. So the world that is actually³ actualised is necessarily actualised.

This time the problem is different. If the actualised world were represented as actualised by every non-actualised world (and by itself) it would follow that the actualised world is necessarily actualised. Now the problem is that it doesn’t follow from ϕ is true from every standpoint that every world represents ϕ as true. For unactualised worlds are not standpoints on the world, they are misrepresentations of it. One way to misrepresent the actual world is to represent the wrong thing as being actualised, and presumably, that is what unactualised worlds do.⁴

Think again of the art gallery metaphor. The actual world is like a big art gallery full of depictions, some inaccurate, of the actual world.⁵ There are things in the gallery that are not

³I am here using the word “actually” as a scope-jumping adverb, as discussed in the introduction.

⁴For why I must qualify this claim with “presumably”, see section 3.4.

⁵Note that I am not claiming that possible worlds are like artworks in having the same structure as what they

depictions — which is to say that there are things in the actual world that are not possible worlds — concrete things, for example. The absolute theory of actualisation amounts to the claim that some of the depictions are special in a way that transcends their representational properties. Some are actualised. It's as if there were a plaque saying “actualised” alongside some but not all of the artworks.⁶

If the artworks are as detailed as possible worlds are supposed to be, they should depict the whole of the actual world, not just, say, the things that are not possible worlds. Of course, they are free to misrepresent it. In particular, each artwork can depict itself as an artwork hanging in an art gallery, and it can depict itself as an artwork with the “actualised” plaque alongside it. Such a world represents itself as actualised, and unless it *is* the actualised world, it represents falsely — not falsely from some standpoint (say, of the actual world), but just plain falsely.

Because worlds vary as regards which worlds they represent as actualised, it is a contingent matter which world is actualised, and it takes no appeal to an indexical account of actuality to show this.

The other result that Stalnaker mentions is to do with how possible worlds represent the truth values of their inhabitants' claims to be actual. On his indexical view, he says, “[w]e can grant that fictional characters are as right, from their points of view, to affirm their full-blooded reality, as we are to affirm ours.” (Stalnaker 1987, p. 47) The implication is that we cannot grant this without accepting the indexical theory. I think this argument rests on the same confusion between actuality and actualisation I have just debunked. Stalnaker is saying that if an unactualised world *w* represents someone saying “*w* is actualised”, it had better represent them as speaking truly. He is right, but we need no indexical element in “is actualised” to ensure this; all we need is that *w* represent itself as being actualised, and there is nothing to stop an unactualised world doing that.

Let me put this last argument another way. Think back to the argument that a modal realist must be an indexicalist from section 2. Suppose there is someone in another possible world who performs all the feats that Sherlock Holmes performs according to the Sherlock Holmes stories. Call this person Holmes. Lewis's point was that “I am actual” had better be true in Holmes's mouth (provided he's speaking English) or else we face the absurd conclusion that we do not know whether we are actual. The ersatzist does not face that problem because she denies that there is any such person. One might think (and perhaps this is behind Stalnaker's argument) that the same problem can easily be posed to the ersatzist by putting it in the form of a counterfactual: if Holmes were to exist, then “I am actual” would be true in his mouth.

It is easy to check whether this counterfactual is true under the assumption of ersatzism. Assuming a Stalnaker-Lewis-style semantics for counterfactuals, in effect what it is saying that

would accurately represent (for example, I'm not claiming that a world according to which there is a blue swan has a proper part which represents a blue swan). To say that would be to endorse what Lewis calls pictorial ersatzism. My intention is to remain neutral with regard to Lewis's distinctions between linguistic, pictorial, and magical ersatzism (for which, see Lewis (1986, p. 141)).

⁶The actualised worlds would make strange-looking artworks. They could be like mirrors, except that, like the mirror in Magritte's painting, *Not to be reproduced*, they would need to reflect the world without showing a mirror image of it.

the nearest possible world that represents Holmes as existing represents itself as actualised, so that it represents Holmes as speaking truly. That's not to say that there's a standpoint from which Holmes is actual — rather there are worlds according to which Holmes is actual from every standpoint, and worlds according to which he is actual from no standpoint.

3.4 Disrespectable worlds

I've argued that unactualised worlds can represent themselves as actualised. But must they? The gallery metaphor suggests not: an artwork can depict a unicorn without depicting as actualised a depiction of a unicorn. Suppose that there is an unactualised possible world w according to which there are unicorns. It's a further question whether it is true, according to w , that according to w , there are unicorns. But that would be odd: it would follow that it is merely contingent that "there are unicorns iff the actualised world represents that there are unicorns".

Of course, the gallery metaphor is just a metaphor, not a plausible theory of ersatz possible worlds. The details of a real ersatzist theory of modality could come to our aid here. There are two things an ersatzist might say. They might take care that their account of the nature of possible worlds and of what it is for them to be actualised ensures that every world represents itself as actualised. Alternatively, they might make a distinction between respectable possible worlds that represent themselves as actualised, and disrespectful ones that might not.

A disrespectful world is not incoherent — it is a world according to which not everything is actual, because it depicts a mismatch between what there is, and which world is actualised. A disrespectful enough world may represent that a modal-realist-like metaphysics is true, by representing that for every possible world, there is something that that world truly represents, regardless of whether that world is actualised.

My proposal is that an ersatzist may make a virtue of believing in such worlds, by using them to account for the possibility that some other metaphysics of modality might have obtained. Let us distinguish between that which is metaphysically possible (that which obtains in some respectable world) and that which is meta-metaphysically possible (that which obtains in some world, even disrespectful ones).

4 Conclusion

It is no accident that ersatzists (mostly) believe absolutism, and modal realists believe indexicalism. There's perhaps nothing stopping an ersatzist from believing indexicalism — but why should she? For the modal realist an indexical element in "is actual" or "is actualised" is indispensable — for an ersatzists it would be an excrescence in their modal semantics.

The main problems that remain for ersatzism, I think, are first, to resist nominalistic objections that its ontology is as bloated as modal realism (and all the worse for being bloated with

such insubstantial abstract things); and second, to resist Lewis's arguments that ersatzism cannot genuinely analyse modality.

References

- Davies, M. (1983). Actuality and context dependence II. *Analysis* 43, 128–133.
- Dyke, H. (1998). Real times and possible worlds. In R. le Poidevin (Ed.), *Questions of Time and Tense*, pp. 93–117. Oxford: Oxford University Press.
- Forrest, P. (1986). Ways worlds could be. *Australasian Journal of Philosophy* 64(1), 15–24.
- Lewis, D. (1979). Attitudes de dicto and de se. In *Philosophical Papers*, Volume 1. Oxford: Oxford University Press.
- Lewis, D. (1986). *On the Plurality of Worlds*. Oxford: Blackwell.
- Lycan, W. (1979). The trouble with possible worlds. In M. J. Loux (Ed.), *The Possible and the Actual*, pp. 274–316. Ithaca: Cornell University Press.
- Parsons, J. (2002). A-theory for B-theorists. *Philosophical Quarterly* 52, 1–20.
- Stalnaker, R. C. (1987). *Inquiry*. Cambridge MA: MIT Press.