

THE MODAL-KNOWNO PROBLEM

Robert William Fischer

Texas State University

Felipe Leon

El Camino College

[Penultimate Draft. Please cite the final version, forthcoming in *Southwest Philosophy Review*].

Let's suppose that you can conceive of a scenario that seems to involve a bar of iron floating in water. Should you conclude, on that basis, that iron *could* float in water? Someone might not be so sure. Consider these details:

Changing the properties of a bar of iron so as to make it float requires changing its gravitational properties, which in turn requires changing its specific density, which in turn requires changing either the size of its unit cells or the number and kinds of atoms within them. Changing the number and kinds of atoms requires changing a feature that seems to be constitutive of being iron. (Iron just is the chemical element with atomic number 26.) Likewise, changing the size of its unit cells results in a change in the features determined by the lattice structure of those cells (cleavage, crystal habit, optical properties, etc.). Iron is a transition metal, lying between manganese and cobalt on the Periodic Table. Thus, the range of possible densities for iron is highly restricted by these neighboring transition elements. But such leeway for changes in density isn't anywhere near what's required to make iron float. So either way, changing the properties of iron so as to make it float appears to result in something that isn't iron.

Of course, these details don't show that the scenario is impossible. There might well be considerations overlooked in the sketch above. Still, they do seem to constitute a serious defeater for the inference from conceivability to possibility—or, for that matter, from imaginability to possibility—at least where (a) we have reason to think that such details are relevant to whether the possibility claim is

true and (b) we have no reason to think that these details can be worked out in a way that's compatible with the truth of the possibility claim. But then we have a serious defeater for *many* inferences from conceivability to possibility, since there are often going to be complex physical, chemical, and biological facts that are relevant to whether a possibility claim is true, and we often have nothing more than our conceiving to offer in defense of the compatibility. (A natural reply is to insist that the laws could be different, and so it's trivial to satisfy Condition (b). But it's worth asking why we're justified in believing that the laws could be different. If the answer is that it's *conceivable* that they be different, then concerns just outlined can be repeated here. Perhaps it isn't so easy to change the relevant laws—there are, after all, various complex relations between them. And if it's conceivable that *all* the laws are different, then we have to consider why we think it's possible that the entities in question could survive a transition to a world with radically different laws.) Of course, none of this is news: George Seddon (1972) made these sorts of points over forty years ago, and Peter van Inwagen has reiterated them many times (1977, 1979, 1991, 1997, 1998, 2008).

Still, plenty of philosophers ignore them. Granted, no one ignores them the way they did in the 1970s. Philosophy contains fewer people-seedsⁱ and teletransportersⁱⁱ than it once did, but openness to such modalizing remains. Consider, for example, just about any of the standard skeptical scenarios—we're deceived by an evil demon, we're all brains in vats, etc. These scenarios are worthless if they aren't possible, and we take them to be possible on nothing more than their conceivability. Surely, though, (a) we have reason to think that various

details are relevant to whether the possibility claim is true and (b) we have no particular reason to think that these details can be worked out in a way that's compatible with the truth of the possibility claim. Or consider David Lewis's sorcerer:

A sorcerer takes a liking to a fragile glass, one that is a perfect intrinsic duplicate of all the other fragile glasses off the same production line. He does nothing at all to change the dispositional character of his glass. He only watches and waits, resolved that if ever his glass is struck, then, quick as a flash, he will cast a spell that changes the glass, renders it no longer fragile, and thereby aborts the process of breaking. So his finkishly fragile glass would not break if struck—but no thanks to any protective disposition of the glass itself. Thanks, instead, to a disposition of the sorcerer (Lewis, 1997, p. 147).

The puzzle that Lewis tries to solve isn't a genuine one unless such cases are possible. And why think they are? Presumably, because the scenario is conceivable. And again: our two conditions apply.

Finally, consider express attempts to *avoid* conceivability's troubles—such as Joshua Rasmussen's (2013) discussion of principles of modal continuity. Very roughly, his view is that you're justified in believing that p is possible if (a) you're justified in believing that q is possible and (b) the difference between q and p is somehow quantitative—e.g., q concerns the possibility of a certain object weighing ten pounds, and p concerns the possibility of that object weighing eleven. This sounds plausible enough, but it ignores the challenge above: there may well be structural reasons why the object could *only* weigh ten pounds, or less than ten but never more, or whatever. (Perhaps its frame couldn't support more than that, so it would be crushed were it at all heavier.) Unless we have some reason to think—of the particular object in question—that the relevant

details can be worked out in a way that's compatible with the truth of the possibility claim, it's hard to see what a principle of modal continuity offers us.

What will it take to reign in our modalizing? We suspect that the challenge here is dialectical. We're all operating in a philosophical climate that allows you to dismiss skeptical challenges precisely because they lead to skepticism. So it's no good to press skeptical challenges against those who defend particular modal claims, or general principles that are supposed to sanction modal claims. Better to run an argument that leads *them* to develop a skeptical reply, and then to point out that reply's implications. That's our aim here. We offer a dilemma: either you can conceive of a modal-knownno, or you can't. If you can, then modal skepticism follows. If you can't, then the reason why will lead you to accept the same epistemic caution that Seddon and van Inwagen recommend.

The Dilemma

Our argument extends a criticism that Peter van Inwagen makes against the modal ontological argument. The crucial premise of that argument is that there could be a perfect being, where a being is perfect only if it exists necessarily. Against this premise, van Inwagen writes:

. . . there can be no presumption in favor of possibility . . . To see that this is a fact, consider the concept of a "knownno": the concept of a being who knows that there is no perfect being. There would seem to be no reason, on the face of it, to suppose that there being a knownno is an intrinsically impossible state of affairs, like there being a liquid wine bottle. But consider. If a knownno is not intrinsically impossible, there is a knownno in some possible world. But then there is a possible world in which there is no perfect being, since, if someone knows something, then what that person knows is true . . . It follows that if a knownno is possible, a perfect being is impossible – and that if a perfect being is possible, a knownno is impossible . . . We have, therefore, a pair of concepts –

the concept of a perfect being and the concept of a knowno – such that either one of them is possible only if the other is impossible. And we have no argument for the impossibility of either concept. If we adopted the general rule “A concept is to be assumed to be possible in the absence of an argument for its impossibility”, we should have to assume both these concepts to be possible, and we know that it is false that they are both possible (Van Inwagen, 2008, pp. 207-208).

We aren't interested in whether a knowno is in fact possible. Nor are we interested in the specific point that van Inwagen is making here. In this passage, his point is that we can't simply *assume* that propositions are possible, since for any proposition you like, you can identify one with which it's incompatible. True enough, but not terribly interesting.

What's more interesting is to consider whether you can conceive of a knowno. Let's suppose you can. If so, then you can also conceive of a *modal-knowno*—i.e., a being who knows, of some proposition p , that p is impossible. Now suppose it's conceivable that p —the very p that the modal-knowno knows to be impossible. If p is possible, then there can't be such a being; likewise, if there could be such a being, then p is impossible. Plainly, you can't be justified in believing that both are possible, and that means that you can't be justified in believing that either is possible. Moreover, this is true for any value of p . So, we now have a general argument against conceiving as a guide to possibility: the conceivability of modal-knownos provides an undercutting defeater for *every* inference from conceivability to possibility, which means that conceivability is an unreliable guide to possibility. It isn't just that the presumption of possibility goes by the board, across the board, as in van Inwagen's original argument. Rather, it's that we have to change our default stance concerning the reliability of this mental

operation. Instead of being allowed to assume that it's innocent until proven guilty, we ought to assume the converse. Call this *the modal-knownno problem*.ⁱⁱⁱ

Now: either we face the modal-knownno problem, or we don't. If we do, then we need to offer positive arguments for possibility claims; that they're conceivable isn't sufficient. So suppose we don't face the modal-knownno problem. Presumably, this is because (a) there's a special problem with the inference from the conceivability of the modal-knownno to the possibility thereof or (b) we aren't justified in believing that we've conceived of a modal-knownno. We have no idea what the former could be, so we ignore it. But it's easy to see why someone might press the latter point.

After all, someone might insist that you can't be confident that you've conceived of a modal-knownno unless you're *already* confident that whatever that being *believes* to be impossible *is* impossible. In other words, despite the apparent conceivability of some particular modal-knownno, you should doubt that your conceiving has been successful unless you are reasonably confident that the conditions obtain that *make that modal-knownno possible*. If you aren't so confident, then there remains a relevant possibility that you've failed to eliminate—namely, that the modal-knownno merely *believes* that the claim is false, and is mistaken about this.

An Objection and a Reply

The point here is reminiscent of the traditional problem of skepticism regarding our beliefs about the external world. You can put the problem in terms of the inability to rule out alternatives: you don't know if your experiences are of your

hands, since that would require that your evidence is sufficient to rule out alternatives to your belief that you have hands. But your evidence is qualitatively identical to the evidence you would have if, say, you were a brain in a vat hooked up to a computer that caused hand-experiences within you. So, you're not justified in believing that you have hands.

However, you might reply that you don't need to rule out *all* alternatives in order to have perceptual justification. Rather, you need only rule out all *relevant* alternatives—i.e., all alternatives that are live possibilities for the context in question, given your background evidence. So, for example, while at the zoo, you can know that you see a zebra, and not a mule painted to look like a zebra, since your background evidence doesn't make it likely that there are painted mules in the zoo.^{iv} With respect to the modal-knownno, then, we need something similar: we need our background evidence to rule out the live (epistemic) possibility that a given proposition is (metaphysically) possible, even though the modal-knownno thinks otherwise.

What sort of evidence should that be? Well, suppose that you can conceive of a group of scientists standing around a computer and shouting, "It's a counterexample to Goldbach's Conjecture!" That wouldn't offer even *prima facie* justification for the claim that Goldbach's Conjecture could be false, for the thought experiment is equally supportive of, for example, the alternative that there's a glitch in the computer program that caused it to derive the *mistaken* conclusion that Goldbach's Conjecture is false. No: you need to imagine the counterexample itself, or at least something that raises the probability that there is

a counterexample.^v (The case imagined doesn't, and this not least because you can equally well imagine a group of dejected scientists lamenting their inability to find such a counterexample. If the former case raises the possibility of there being a conjecture, then this one lowers it. So neither does either.) Anything less leads us back to the modal-knownno problem: if you can get evidence for a counterexample to Goldbach's Conjecture by conceiving of elated scientists, then you can get evidence for the possibility of a modal-knownno. That way lies defeat.

So: if you're justified in taking yourself to have conceived of a modal-knownno, then you can rule out the possibility that you are conceiving of a being who believes falsely that p is impossible. But if that's right, then the same should be true for *other* extraordinary modal claims. That is, it should be true *generally* that you need to rule out all the live possibilities that are compatible with your conceiving before your conceiving is evidence. It looks like the bar is high indeed.

Let's take stock. Either we face the modal-knownno problem, or we don't. If we do, then we have reason to think that conceiving is an unreliable guide to possibility, and we need to offer other positive arguments for possibility claims. We doubt that anyone will take this horn of the dilemma. So suppose we don't face the modal-knownno problem. If not, then this is probably because we aren't justified in thinking that we've conceived of a modal-knownno. And if that's so, it's probably because we can't rule out the possibility that we are conceiving of a being who believes falsely that p is impossible. However, there is no reason to think that the modal-knownno case is special: if eliminating possibilities is the

standard for conceiving in this case, it should be the standard across the board. So, it's generally the case that being able to eliminate possibilities is the standard for conceiving.

But that conclusion, of course, is *exactly* what motivates Seddon and van Inwagen to insist that people consider the details behind particular modal claims. In many cases, we have no reason to think that there is a set of compossible properties that could undergird a particular individual or kind of individual referred to in the relevant thought experiment. This forces us to consider a relevant possibility: that we are not conceiving of whatever it is of which we take ourselves to be conceiving. Van Inwagen gives a large number of cases in support this claim: cases involving claims about the possibility of transparent iron^{vi}, a human being drinking lots of alcohol (relative to one's height and weight) without it affecting their sobriety^{vii}, a moon made out of cheese^{viii}, science-fiction brain-state-transfer cases of various sorts discussed in the personal identity literature^{ix}, and naturally purple cows^x.

Conclusion

The result here isn't *complete* modal skepticism. Rather, it's a choice. Insofar as we take *all* our modal knowledge to come by way of certain mental operations—conceiving, imagining, etc.—then we should be moderate modal skeptics unless, for particular modal claims, we can tell reasonably detailed stories about their truthmakers. That is, we should think that we usually aren't justified in believing modal claims, though there may be a few exceptions where we have reasonably good accounts of why they're true. (What's reasonable is likely to depend on the

context, but it's bound to be something more detailed than a mere description of the scene.) Alternately, we might *not* take all our modal knowledge to come by way of certain mental operations. You might be a Moorean about some modal claims—as van Inwagen himself seems to be—and hold the rest to the standards discussed here. Alternately, you might think that inductive reasoning underwrites some of our modal justification, though it will be tricky to tell when inductive arguments are legitimate. Perhaps the only secure ones will be those where we can often confirm the inference by actualizing the relevant possibility. So, e.g., you can be justified in believing that the furniture could be reconfigured because you've reconfigured the furniture before, and in *those* cases your earlier and analogous inferences were confirmed.

References

- Dretske, Fred (1970). "Epistemic Operators", *The Journal of Philosophy* 67(24): 1007–1023.
- Lewis, David (1997). "Finkish Dispositions", *The Philosophical Quarterly* 47(187): 143-58.
- Parfit, Derek A. (1984). *Reasons and Persons*, Oxford: Oxford University Press.
- Rasmussen, Joshua (2013). "Modal Continuity as a Guide to Possibility", *Australasian Journal of Philosophy* 92(3): 525-38.
- Seddon, John (1972). "Logical Possibility", *Mind* 81(324): 481-94.
- Thomson, Judith (1971). "A Defense of Abortion", *Philosophy & Public Affairs* 1(1): 47-66.

- Van Inwagen, Peter (1977). "Ontological Arguments", *Nous* 11(4): 375-95.
- Van Inwagen, Peter (1979). "Review of Richard Swinburne's *The Coherence of Theism*", *The Philosophical Review* 88(4): 668-72.
- Van Inwagen, Peter (1991). "The Problem of Evil, the Problem of Air, and the Problem of Silence", *Philosophical Perspectives* 5: 135-165.
- Van Inwagen, Peter (1997). "Materialism and the Psychological Continuity Account of Personal Identity", *Philosophical Perspectives* 11: 309-17.
- Van Inwagen, Peter (1998). "Modal Epistemology", *Philosophical Studies* 92: 67-84.
- Van Inwagen, Peter (2008). *Metaphysics*, 3rd ed. Boulder: Westview Press.
- Yablo, Stephen (1993). "Is Conceivability a Guide to Possibility?", *Philosophy & Phenomenological Research* 53(1): 1-42.

ⁱ Thomson (1971).

ⁱⁱ Parfit (1984).

ⁱⁱⁱ To be clear: the concept of modal-knownno is not of a being who knows, for all p , that p is impossible. Rather, the concept is of a being who knows, of some particular claim, p , that p is impossible. This explains why it doesn't matter whether, for some values of p , the concept of a modal-knownno is self-referentially incoherent. (Consider, for example, the claim that *there is a modal-knownno*.) All this shows is that there couldn't be a being who knew *that particular claim* to be false—not that there couldn't be modal-knownnos generally. Indeed, if you think you know that there *couldn't* be such a modal-knownno, then you think you know that a particular claim is impossible; hence, *you* are a modal-knownno.

^{iv} Cf. Dretske (1970).

^v Cf. Yablo (1993); Van Inwagen (1998).

^{vi} Van Inwagen (1977), pp. 32-33; (1998), pp. 79-80.

^{vii} Van Inwagen (1979), p. 671.

^{viii} *Ibid.*

^{ix} Van Inwagen (1997), pp. 146-148.

^x Van Inwagen (1998), p. 78.