



Hale's Necessity: It's Indispensable, But Is It Real?

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Following Ian McFetridge, Bob Hale (1999) has crafted a subtle argument for the indispensability of logical necessity. Very roughly, the argument goes like this. The skeptic about logical necessity is committed to the claim that for any rule of inference R , there is at least one proposition p , such that rule R fails to preserve truth under the supposition that p . Now, either the skeptic knows exactly which propositions are such that R fails to preserve truth under the supposition that they are true, or the skeptic does *not* know exactly which propositions are such that R fails to preserve truth under the supposition that they are true. If the skeptic *does* know which propositions are such, then there will be another rule, with somewhat fewer applications, which preserves truth under any supposition whatsoever.¹ In that case, the skeptic must concede that there are rules of inference that preserve truth under any supposition whatsoever, thus relinquishing her skepticism about logical necessity.

So suppose the skeptic says that she does *not* know exactly which propositions are such that R fails to preserve truth under the supposition that they are true. Then when the skeptic goes to reason from a supposition that p , what rules will the skeptic follow in reasoning? The skeptic cannot follow rule R until she knows whether or not p is one of those propositions under which rule R fails to preserve truth. So before she can follow rule R under the supposition that p , she must discern whether or not R preserves truth under the supposition that p . But in order to discern this, she must discern what would be the case if p were true, and whether or not that would involve R preserving truth. Of course, this requires some reasoning. What rules will she follow in reasoning from p ? Obviously, she cannot follow R , since its

¹ That will just be the rule, R^* , that permits you to *follow R in conjunction with the assumption that $\text{not-}p$* , for every p which is such that R fails under the supposition that p .

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reliability under the supposition that p is what is in question. But the same problem will arise for any other rule that the skeptic chooses to follow in reasoning from the supposition that p . For any rule of inference whatsoever, the question will arise “Does this rule preserve truth under the supposition that p ?” After all, the skeptic is committed to the claim that for *every* rule of inference, there is at least one proposition p , such that the rule fails to preserve truth under the supposition that p . It should be clear that at this rate the skeptic is headed for a vicious infinite regress. Hale’s conclusion is that the skeptic cannot reason from any supposition at all. Of course, Hale takes this to be a *reductio* of such skepticism. Surely we *can* reason from suppositions. So skepticism about logical necessity must be mistaken, since the belief in logical necessity is indispensable for reasoning itself.

At this point Hale imagines a skeptic replying as follows.

Why do you assume that if I am to use a rule R in reasoning under the supposition that p , I must first be able to ascertain whether R is, under that supposition, reliable? I don’t have to do that. It is enough that I have no positive reason to doubt that R will fail under the supposition that p . (1999, p.32)

At least on the face of it, this seems like a reasonable reply. Why couldn’t I be justified in following rule R under the supposition that p by the fact that I have no good reason to doubt that R preserves truth under p ? Why do I need some positive reason to believe that R does preserve truth under p ? In short, why isn’t R innocent until proven guilty, rather than guilty until proven innocent?

In responding to this objection, Hale begins by laying down a requirement for any skepticism that is “worthy of serious consideration.” Here is what he says.

If the sceptic’s professed falsificationist attitude towards rules of inference is not to be empty, it requires us to think that, for any one of our rules R that has thus far survived all attempts to envisage its failure, it is nevertheless conceivable that some circumstances p should obtain, in which R would recognizably fail to be reliable. Falsificationism without the possibility of recognizable falsification is not worthy of serious consideration. (1999, p.32)

This is the claim that I wish to consider in this paper. Hale seems to be asserting the following proposition, which I will call *The Recognizability Thesis*.

(RT) For any subject S , and for any rule of inference R , if there is a proposition p such that R fails to preserve truth under the supposition that p , then for some

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proposition q , it is possible for S to recognize that R fails to preserve truth under the supposition that q .

(RT) says that for any rule of inference that fails to preserve truth under at least one supposition, it is possible for us to recognize that it fails. The question that we should ask about (RT) is this. What reason do we have to believe that it is true? What reason do we have for believing that such recognition is possible for us? One might reply that the only alternative is that such recognition is *impossible* for us, and surely that is implausible. Surely we can imagine, for any falsifiable rule of inference, recognizing its failure. If the sort of possibility at issue here is logical possibility, then the mere possibility of recognizing such failure would seem to be easily justified. After all, all it takes is one logically possible world in which we recognize the failure of the rule in question, to make (RT) true.

This calls for clarification. If Hale's argument is to have force against human skeptics, with normal human cognitive powers, then the domain of subjects for (RT) should be restricted to actual human beings, with cognitive powers that are compatible with being human. Thus, possible worlds in which we have superhuman cognitive powers are irrelevant to the truth of (RT). Now, with this constraint in mind, we can see that this reply is inadequate. Perhaps we can imagine *someone* recognizing the failure of any falsifiable rule of inference, but it is not so clear that, for any rule of inference whatsoever, we can imagine *one of us* recognizing its failure. So the question remains: why should we think that, for any falsifiable rule of inference, it is possible for *one of us* to recognize that it fails? It seems to me that, broadly speaking, there are only three plausible answers to this question. Either (1) this fact of recognizability is somehow entailed by the very nature of our cognitive powers, or (2) it is an empirically discovered, contingent fact about us and our cognitive powers, or (3) it is somehow entailed by the very nature of logical possibility and, correspondingly, of logical necessity. I will consider these possibilities in this order.

The first suggestion is that we can, by our very nature, recognize the failure of any rule of inference under a supposition, if it really fails under that supposition. This is supposed to be a necessary fact about us and our cognitive powers — that we could not be utterly incapable of recognizing such failure of a rule of inference. I assume that the most plausible version of this suggestion is that it is in virtue of our nature as thinking things that we simply *must* be capable of recognizing the failure of any rule of inference that fails under some supposition. But is that really plausible? Is there any reason to think that the power of thought, as such, requires the ability to recognize the failure of any rule of inference when it fails? I do not see that

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it does. On the contrary, I believe that I can perfectly well imagine creatures with the power to think, who nonetheless cannot recognize the failure of some rules of inference that fail under some suppositions. For example, certainly a small child could have the power to think without having the power to recognize the failure of any rule of inference under a supposition under which it fails. Why couldn't we be like children with respect to some rules of inference? Until we are given an argument to the contrary, I think we should conclude that the Recognizability Thesis is not a necessary fact about us and our cognitive powers.

Now consider the second possibility — that the Recognizability Thesis is a contingent fact about us and our cognitive powers. Setting aside Kripke's contingent *a priori* truths, if this were a contingent fact about us, then it would seem that our reason for believing it would have to be broadly empirical in character. That is to say, if we had reason to believe that this was a contingent fact about us, then either our observation of ourselves, or our best scientific theory of ourselves, would have to support it. However, I know of no scientific theory that would support this claim. So that leaves us with our observation of ourselves. Now, at this point I suppose that one might try to construct some sort of track-record argument on our behalf. It would go something like this. For every falsifiable rule that we have considered, we have recognized the fact that it fails to preserve truth when it does. Therefore, probably we can recognize, for any rule whatsoever, that it fails to preserve truth when it does. Perhaps this little argument could justify us in believing that the Recognizability Thesis is a contingent fact about us.

The problem with this argument is a problem that besets many track-record arguments. It is epistemically circular. To say that an argument is epistemically circular is to say that in order to be justified in believing one of the premises of the argument, we must first be justified in believing the conclusion. In this case, the problematic premise is the claim that *every* falsifiable rule that we have considered is such that we have recognized that it fails to preserve truth when it does. In saying this, we are saying that for any rule that we have actually considered, and which is such that we have not "recognized" it to fail under any supposition, it did not, in fact, fail under any supposition. But in order to be justified in believing this, we must be justified in believing that *we can and would recognize such failure, were it to occur*. Of course, that latter claim is just the Recognizability Thesis, which is precisely the claim that this argument was supposed to justify. So the argument is epistemically circular. I conclude that the Recognizability Thesis is not an empirically discovered, contingent fact about us.

This brings me to the third, and final possibility. Perhaps this is the possibility that any defender of Hale's argument must ultimately embrace.

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The idea is that the Recognizability Thesis is a discernible consequence of the very nature of logical possibility and necessity. I will explain. One way to paraphrase the Recognizability Thesis would be to say that for any rule of inference that is not logically necessary, it is possible for us to recognize that it is not logically necessary.² Of course, to say that a rule of inference is not logically necessary is just to say that the negation of that rule is logically possible. So this paraphrase of the Recognizability Thesis is equivalent to the claim that if the negation of a rule of inference is logically possible, then we can recognize that it is logically possible. It is at this point that one might say that this latter claim is entailed by the very nature of possibility. In short, *it is of the very nature of logical possibility to be recognizable by us, at least in principle*. This is what ultimately grounds and justifies the Recognizability Thesis. That is the idea.

Those who are familiar with the ongoing debates over realism and antirealism will wonder if this claim about the nature of logical possibility threatens the mind-independence of logical possibility. If logical possibility, by its very nature, cannot outrun our ability to recognize it, then is logical possibility really an objective, mind-independent phenomenon? This way of justifying the Recognizability Thesis threatens to commit us to some sort of modal antirealism. But is this threat real or illusory? Could logical possibility be essentially recognizable by us, yet also be an objective, mind-independent feature of the world? That is a vexed question. In what follows I will sketch one line of argument for a negative answer. More precisely, I will argue that *if* we were justified in believing in the essential recognizability of logical possibility, then logical possibility would not be an objective, mind-independent phenomenon. Thus, the only way to reconcile the essential recognizability of logical possibility with a realist view of that same modality, is to deny that we are actually justified in believing in the essential recognizability of logical possibility. So the essential recognizability of logical necessity requires modal antirealism, on pain of being unjustifiable. So I will argue.

My argument begins with an assumption concerning what it would take to be justified in believing in the essential recognizability of logical possibility. I believe that this assumption can be supported with argument, but it is beyond the scope of this paper to try to prove it here. So for present purposes I will simply assume that it is true. The assumption is this. In order to be justified in believing in the essential recognizability of logical possi-

² When I speak of a rule of inference as logically necessary, I mean to say that the conditional corresponding to this rule of inference is logically necessary, and likewise for logical possibility. With this said, I will continue to speak this way.

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bility, our conception of logical possibility would have to be such that, upon grasping it, we find it inconceivable that any logical possibility would be unrecognizable by us. Furthermore, this conception of logical possibility must be the *correct* conception of logical possibility. The correct conception of logical possibility must make it inconceivable that a logical possibility be unrecognizable.

Now, what conception of logical possibility would have this result? How must we conceive of logical possibility in order for it to be *inconceivable* that a logical possibility be unrecognizable by us? It seems that the only conception of logical possibility that would have this consequence is one on which logical possibility is somehow a function of our disposition or tendency to recognize it as such. If, by contrast, logical possibility is conceived of as entirely mind-independent, then surely it will be conceivable that a logical possibility be unrecognizable by us. In sum, we could be justified in believing in the essential recognizability of logical possibility only if we conceive of logical possibility as a function of our own dispositions or tendencies. Of course, that is just to conceive of logical possibility as a mind-dependent phenomenon. So it looks as if the only way to justify the claim that logical possibility is essentially recognizable is to deny that it is mind-independently real. Thus, even if the rest of Hale's defense of the indispensability of logical necessity is sound, the entire defense must be predicated on an antirealist view of that same modality. So Hale's necessity might be indispensable, but it isn't real.

In the remainder of this short paper, I want to suggest one way of salvaging Hale's argument for modal realists. On one interpretation, what Hale's argument aims to prove is primarily an *epistemic* claim, to wit, that we must be *justified* in believing in logical necessities in order to be *justified* in reasoning from any supposition at all. In keeping with this epistemological interpretation of the argument, suppose that we replace the Recognizability Thesis with a more purely epistemic claim. Perhaps there is an epistemic truth — a truth concerning conditions of justification, which will play the same role in the argument that was played by the Recognizability Thesis, without having the same antirealist consequences as the Recognizability Thesis.

Consider the following, familiar sort of case. You are watching a series of objects move down an assembly line, and all of these objects appear to be red. However, you are subsequently informed that all of these objects are being bathed in red light. Given this new information, you are no longer justified in believing that these objects are red. Why not? The reason is that you are no longer justified in believing that *if* these objects were not red (in relevantly similar circumstances), *then* you would be able to recognize that

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they were not red. In short, you are no longer justified in believing that you could "track the truth" in relevantly similar circumstances, and this undercuts your justification for believing that these objects are actually red. This would seem to support the following, general epistemic principle.

(P) For any subject S, and for any proposition P, if S is justified in believing that P, then S is justified in believing that if it were not the case that P (in relevantly similar circumstances), then S could recognize that it was not the case that P.³

Now apply (P) to the issue at hand. Omitting some simple transformations, the following principle would appear to be a substitution instance of (P).

(ERT) For any subject S, and for any rule of inference R, and for any proposition P, if S is justified in believing that R preserves truth under the supposition that P, then S is justified in believing that, if R did not preserve truth under the supposition that P (in relevantly similar circumstances), then S would be able to recognize that R failed to preserve truth under the supposition that P.

I believe that (ERT) captures what is correct in Hale's Recognizability Thesis, without having the antirealist consequences that it has. The basic idea is that in order to be justified in following a rule of inference under a supposition, we must be justified in believing that *if* R failed to preserve truth under that supposition, *then* we would be able to recognize that fact. This seems like a very plausible constraint on our justification for following a rule of inference. That is because it is simply a substitution instance of a very plausible constraint on our justification for believing any proposition whatsoever. However, it concerns, and arises from the conditions of *justification* for following a rule of inference, not the conditions of *truth* for following a rule of inference. Thus, it does not ultimately require any sort of modal antirealism.

But is (ERT) sufficient to resuscitate Hale's argument? I think that it is. (ERT) implies that the modal skeptic is justified in following a rule of inference under a supposition only if he is justified in believing that *if* the rule failed under that supposition, *then* he would be able to recognize that fact. But as Hale goes on to show, unless there are some rules that we are justified in following under any supposition whatsoever, it would be impos-

³ In formulating (P), I have used the undefined locution "relevantly similar circumstances." I doubt that I can define this locution in a noncircular way. However, clearly there are some such relevantly similar circumstances, and we are capable of distinguishing them from irrelevant circumstances. So the undefinability of this locution (if it be such) is no reason to doubt the truth of (P).

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sible, even in principle, to “recognize” the failure of a rule of inference under a supposition. So, in sum, (ERT) specifies a necessary condition for justifiably following a rule of inference, and the rest of Hale’s argument shows that the modal skeptic cannot, even in principle, satisfy this necessary condition. Thus, the modal skeptic cannot justifiably follow any rules of inference.

Throughout this paper I have spoken as a realist about modality. In distinguishing sharply between the conditions of justification and the conditions of truth, I am presupposing a realist view. I have not tried to defend that view here, but only to show that Hale’s argument, as stated, appears to be inimical to such a view. But if some sort of modal realism is correct, and if my suggested revision of Hale’s argument is adequate, then we have reason to believe that logical necessity is both indispensable and real.

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