# ON THE IMPOSSIBILITY OF NONACTUAL EPISTEMIC POSSIBILITIES\*

onsider the following two passages from Saul Kripke, each representing a distinct approach to nonactual epistemic possibility. The first is from "Identity and Necessity." Towards the end of the passage in which he argues that a given wooden lectern is necessarily not made of ice, Kripke says:

If someone protests, regarding the lectern, that it *could* after all have *turned out* to have been made of ice, and therefore could have been made of ice, I would reply that what he really means is that *a lectern* could have looked just like this one, and have been placed in the same position as this one, and yet have been made of ice. In short, I could have been in the *same epistemological situation* in relation to *a lectern made of ice* as I actually am in relation to *this* lectern (*ibid.*, p. 93).

Much of this paper will be devoted to showing that the approach to nonactual epistemic possibility encapsulated in this passage rests on a mistake. What Kripke describes as the possibility of being in the same epistemic situation in relation to a lectern made of ice as he actually is in relation to the wooden lectern is really impossible. It is just not the case that Kripke might have been in the same epistemic situation in relation to a lectern made of ice as he actually is in relation to the wooden lectern.

The second passage is from Naming and Necessity:<sup>2</sup>

What, then, does the intuition that the table might have turned out to have been made of ice or of anything else, that it might even have turned out not to be made of molecules, amount to? I think that it means simply that there might have been *a table* looking and feeling just like this one and placed in this very position in the room, which was in fact made of ice. In other words, I (or some conscious being) could have been *qualitatively in the same epistemic situation* that in fact obtains, I could

<sup>\*</sup> Material from this paper was delivered as talks at Western Washington University, Tel Aviv University, Simon Fraser University, Reed College, University of Calgary, University of California/Los Angeles, and University of California/Santa Barbara. I would like to thank audiences at these institutions for stimulating discussions that improved the paper, and the following individuals for further exchanges and comments: Joseph Almog, Louis deRosset, Mark Greenberg, David Kaplan, Ali Kazmi, Mohan Matthen, Shelly Rosenblum, Christopher Stephens, and Abraham Stone.

<sup>&</sup>lt;sup>1</sup> In Stephen P. Schwartz, ed., *Naming, Necessity, and Natural Kinds* (Ithaca: Cornell, 1977), pp. 66–101.

<sup>&</sup>lt;sup>2</sup> Cambridge: Harvard, 1980.

have the same sensory evidence that I in fact have, about *a table* which was made of ice (*ibid.*, p. 42).

No longer is it suggested that it is possible to be in the very same epistemic situation regarding an artifact made of ice as one actually is regarding a wooden artifact. What is proposed instead is that it is possible to be *qualitatively* in the same epistemic situation regarding a table made of ice as one actually is regarding a wooden table. It is in this modified sense, then, that it is supposedly epistemically possible that the wooden table is made of ice. Later in the paper I will argue that while the second construal of nonactual epistemic possibility may initially seem more promising than the first, initial appearances are misleading. There is little reason for thinking that any plausible account of qualitative sameness in epistemic situation is forthcoming in order to elucidate the notion of nonactual epistemic possibility. Nor is there much hope for any other construal of nonactual epistemic possibility that it should fare any better. After considering briefly some of the other alternatives, I conclude that we lack a workable notion of nonactual epistemic possibility that can be adduced in order to explain away intuitions of contingency when it comes to necessities that we are committed to on other philosophical grounds.

### I. TWO PICTURES OF ABOUTNESS

There is a certain tendency in contemporary philosophy of language and mind to deradicalize a familiar revolution in our thinking about our cognitive being-in-the-world, a revolution initiated by such philosophers as Keith Donnellan, David Kaplan, Kripke, Ruth Barcan Marcus, and Hilary Putnam during the 1960s and 1970s. It is a revolution whose repercussions for contemporary philosophy of language and mind are difficult to exaggerate. Prior to the work of these revolutionaries it was commonly held that our terms, whether linguistic or mental, generally pose conditions (or "criteria") entertained in our minds, conditions which things in the world must satisfy in order to be what the terms are about, and which are constituted independently of the things to which the terms apply. Concomitantly it was held that our attitudes are paradigmatically *de dicto*—that they are relations that hold between subjects and certain complexes of such independently constituted conditions. And these de dicto attitudes were thought to be primary in the order of explanation to de re ones.

What the revolution sought to achieve was nothing short of turning this picture on its head. No longer were subjects to be thought of as condemned to a mediated cognitive relation to their surroundings, having direct rapport only with conditions that things in the world either happen to satisfy—if the world cooperates—or not. Rather, it was now claimed that we should be thought of as bearing direct cognitive relations to things, having immediate cognitive rapport with

our surroundings. In particular, our attitudes were now to be thought of as primarily *de re*, and *de dicto* attitudes were to be thought of as parasitic upon, and explanatorily posterior to, *de re* ones.

To formulate the contrast between the two opposing pictures of the relation between the mind and the world in something resembling a slogan, we might say that on the first picture terms are associated with antecedently determined contents that specify what the terms are about by way of posing conditions on things, whereas on the second picture the things that terms are about determine their content. For present purposes I should like to sidestep the thorny question of whether significance (or "content" in the mass occurrence of that noun) should be thought of as requiring "contents" (in the count occurrence) as specially suited entities, and if so, entities of which type. The important issue for present purposes is not the constitution of content per se but rather those relations between our terms and portions of the world that are often referred to as their "aboutness" or "intentionality." The relevant contrast between the two opposing pictures of aboutness is that the one views aboutness as a matter of satisfaction of antecedently determined conditions, while the other views aboutness as achieved paradigmatically via terms being of what they are about, and sees content as emerging from the worldly relations that obtain between the terms and the things that they are about.<sup>3</sup>

By way of illustration of the alternative to aboutness-as-satisfaction, consider the example of a passport photograph taken of one of two identical twins.<sup>4</sup> Suppose that the twins are so similar, or the photograph so imprecise, that had a photograph been taken of the other twin under suitable conditions it would have been molecule-for-molecule identical to the actual photograph. Thus, as a mere visual condition, the photograph does not discriminate between the two twins. Yet for all that, it is only about one of them. We do not think of the aboutness of photographs as a matter of satisfaction of visual conditions. Rather, we think of it as having to do with the photograph's ofness. The photograph is about the twin it happens to be of. It is about whichever of the two twins was the relevant causal-historical antecedent to the photograph's formation as causal-historical consequent. Such examples can be multiplied as needed. The overall idea is that intentional items such as photographs or thoughts are generally determined to be what they are relationally, rather than as a sole matter of their intrinsic properties.

In sum, the history of philosophy has offered two distinct options

 $<sup>^3\,\</sup>mathrm{For}$  this use of the term 'of' see David Kaplan, "Quantifying In," Synthese, xix (1969): 178–214.

 $<sup>^4\,\</sup>mathrm{This}$  appeal to photography is inspired by a similar appeal made in Kaplan's "Quantifying In."

for thinking about the relation between what we say or cognize and the world we inhabit. One option construes episodes in the mind of a person, say, as being about the person's surroundings only to the extent that they are imbued with contents that portions of these surroundings happen to satisfy. On this option, contents are thought of as conditions that must be satisfied in order for the episodes in question to be about whatever in the world they are about. The conditions themselves, and thus the episodes that carry them, are thought of as fully determined to be what they are independently of what they are about, so we may think of this as a kind of cognitive independence. It is perfectly possible on this view that the conditions we entertain in our thoughts, which make up what we are thinking, should be just as they are in the complete absence of any world to satisfy them. On this view, our cognitive access to the world is inevitably mediated by our immediate access to those conditions.

The second option construes episodes in the mind as being about the thinker's surroundings to the extent that they bear the right relations to those surroundings. On this option, attitudes are essentially relational. In particular, they are paradigmatically of whatever they are about, where this ofness is a crucial determinant of their aboutness. In this way, content, and so whatever episode carries it, is not generally determined to be what it is independently of what the episode is about. This implies, among other things, that we do not eniov any "privileged access" to what we are cognizing or saving, at least not in the way envisioned by the tradition. If the relations that enter into determining content are radically different from what we take them to be, then what we are cognizing or saying is radically different from what we take it to be. And if the requisite worldly relations are absent, then, despite how it may seem to us, episodes in our minds or in our mouths are empty. On this view, while our cognitive relation to the world may be direct, in the sense that what we are cognizing or saying is directly informed by what our surroundings are like, our access to what we are cognizing or saving is of a piece with our access to the world more generally. Such is the price of worldly immediacy. But it is a price that should seem far more reasonable than it does initially, if only due to this tradeoff's close association with neighboring and more familiar tradeoffs.

Consider the price we post-Freudians pay for the worldly immediacy of the emotions. Our emotional make-up and goings-on are thought of as grounded in the worldly conditions in which we find ourselves. What we feel and our dispositions to have certain feelings are very much shaped by our interactions with the world around us. This is an idea that Freud did much to popularize. Indeed, few ideas we have about ourselves are as basic as this one. Yet the price of this immediacy is the absence of "privileged access" to what we are feeling. In fact, it is common for us post-Freudians to consult specialists who are

trusted to be better guides than ourselves to what we are feeling and are disposed to feel. But seldom is it seriously suggested that we should, or that we could, return to some pre-Freudian naïveté. This does not mean that certain aspects of the post-Freudian outlook on our emotional life have not been and will not continue to be challenged. But two aspects of this outlook are especially important to highlight. First, the outlook in its current guise does not derive its influence from its scientific respectability. On that count it is often suggested that the Freudian picture is largely unsupported. Yet this fact, even when it is known, does not seem to make the overall picture any less compelling. Second, on the general front of emotional relationalism, there is no genuine alternative to the post-Freudian outlook. This is not to say that we may not proceed beyond it in as yet unforeseeable ways, but emotional intrinsicalism is not a genuine option.

When it comes to our cognitive rather than our emotional relations to the world, the idea of cognitive worldly immediacy clearly does not enjoy the currency of the idea of emotional worldly immediacy. But parallels between the two cases are rather striking. The relationalist view that what we say or cognize is directly informed by features of our environment in the manner outlined above is far more appealing than its alternative, the view that understands the world as supplying mere satisfiers for independently constituted conditions entertained in the mind. The relationalist story aims to place our cognition in the world and thus to exorcise the specter of such removed conditions.

In what follows I will operate within the parameters set by the described revolution. In particular, I will assume that (1) common attitudes are individuated by their content, and (2) that their content is determined relationally by what in the world those attitudes are about. Given developments in the philosophy of language and mind of the past thirty-odd years, a full-fledged defense of these claims would surely require far more than I can offer here. Different versions of them have been advocated with much vigor within many otherwise distinct philosophical projects. My aim here is not so much to defend a general relationalism about content but rather to tease out implications of it that are still easily overlooked.

<sup>&</sup>lt;sup>5</sup> Cf. Adolf Grünbaum, *The Foundations of Psychoanalysis: A Philosophical Critique* (Berkeley: California UP, 1984).

<sup>&</sup>lt;sup>6</sup> These remarks are not meant to belittle the achievements of scientific efforts to understand how emotional dispositions are shaped by environmental factors. The relevant point is just that the general currency of the notion of emotional relationalism cannot be explained as a legacy of these efforts, but is, rather, at the ground level of our thinking about our emotional situation in the world.

### II. STRICT INVARIANCE IN THE EPISTEMIC SITUATION

Here is a familiar story about theoretical identification. Consider Frege's example of the identity of Hesperus and Phosphorus. The planet Venus was dubbed twice. It was dubbed 'Hesperus' as it was seen in the evening and 'Phosphorus' as it was seen in the morning. But establishing that Hesperus is Phosphorus was a matter of astronomical discovery. So the identity in question is an a posteriori truth. However, as was proven by Marcus, identities are necessary. So that Hesperus is Phosphorus, while a posteriori, is a necessary truth. This is supposed by many to be deeply problematic. Why it is so supposed is an intriguing question to which I shall return shortly. And the necessity in question is also supposed by many to conflict with a certain pretheoretical intuition of contingency, the intuition that Hesperus might have turned out not to be Phosphorus, and so might not have been Phosphorus.

This pretheoretical intuition that it might have turned out that Hesperus is not Phosphorus is accommodated in the cited passage from Kripke's "Identity and Necessity" as follows. It is impossible for Hesperus not to be Phosphorus due to the necessity of identity. But what *is* possible, however, is that our epistemic situation regarding some heavenly body seen in the evening should be just as it actually is regarding Venus as seen in the evening, while our epistemic situation regarding some other heavenly body seen in the morning should be just as it actually is regarding Venus as seen in the morning. If things were that way, with the dubbing story as before, 'Hesperus' and 'Phosphorus' would not be coreferential and 'Hesperus is not Phosphorus' would be true rather than false. In this way it is held that while it is impossible for Hesperus not to be Phosphorus, it is nevertheless *epistemically* possible for Hesperus not to be Phosphorus.

Similar observations apply to predicative theoretical identification more generally. For ease of discussion I focus on the worn example of water and  $\rm H_2O$ . That water is  $\rm H_2O$  is a posteriori. But if the identification is true, it is necessarily true—nothing would qualify as water without being  $\rm H_2O$ . In this way, there is no possibility of water not being  $\rm H_2O$ . If it is  $\rm H_2O$ , it is necessarily so. Yet our epistemic situation vis-à-vis water might have been just as it actually is in the global absence of  $\rm H_2O$  and the concomitant presence of some microstructurally distinct but superficially indistinguishable substance, 'XYZ' for short. So while it is impossible for water to be XYZ due to the necessity of water

<sup>&</sup>lt;sup>7</sup> Marcus's original proof of 'x=y →  $\square(x=y)$ ' appears in Ruth C. Barcan (Marcus), "The Identity of Individuals in a Strict Functional Calculus of Second Order," *Journal of Symbolic Logic*, XII (1947): 12–15. She defines identity within a system of second-order quantified modal logic and proves the laws identity. A proof of the necessity of identity adapted to first-order modal logic plus identity is then straightforward.

being H<sub>2</sub>O and the distinctness of H<sub>2</sub>O and XYZ, that water is XYZ is nevertheless epistemically possible.

Yet how are we to decide whether having with something other than water the very same epistemic rapport we actually have with water is a genuine possibility? Recall that relationalism about content maintains that (1) attitudes are individuated by their content, and (2) their content is determined by what in the world they are about. So by the lights of this view it is surely impossible for my overall epistemic situation vis-à-vis water to be just as it actually is in the global absence of water and the concomitant presence of some superficially similar substance XYZ.<sup>8</sup> For let my overall epistemic situation regarding water include thinking that water is wet. Then this episode of thinking is the episode that it is due to its significance, by (1). And by (2), its significance is determined by what it is about, namely, water. So in the absence of water there can be no thinking that water is wet. And so it is impossible for my overall epistemic situation regarding water to be just as it actually is in the global absence of water.

So we can say that if nonactual epistemic possibility is cashed out in terms of strict sameness in epistemic situation, then the alleged nonactual epistemic possibility that water is XYZ, that Hesperus is not Phosphorus, or that a given wooden lectern is made of ice, is not really possible after all. There is no possibility that my epistemic situation regarding something other than water is just as it actually is regarding water; there is no possibility that my epistemic situation regarding two distinct planets is just as it actually is regarding Venus seen in the morning and Venus seen in the evening; and there is no possibility that my epistemic situation regarding a lectern made of ice is just as it actually is regarding the wooden lectern right in front of me.

We are now also in a position to appreciate at least half the story of why being simultaneously necessary and a posteriori has seemed so problematic to some. (The other half of the story will have to be deferred until after the next section.) I have been operating under the assumptions of relationalism, specifically under the dual assumption that attitudes are determined to be what they are by their content, which is shaped, in turn, by what the attitudes are about. An immediate implication of these assumptions has been that relations between common attitudes and whatever in the world they are about are paradigmatically necessary rather than contingent. But this feature of the relationalist picture is easily overlooked. Once it is overlooked, the necessary a posteriori can seem deeply puzzling.

Think of whatever determines the truth of the thought that

 $<sup>^8\,\</sup>mathrm{For}$  present purposes I ignore the distracting complication that I am constituted mostly of water.

Hesperus is Phosphorus as the product of two factors. On the one hand there is the relation between thinking such a thing and what in the world this thinking is about, in this case the planet Venus. Call this the *aboutness factor*. On the other hand there is how things are regarding this planet, in this case being self-identical. Call this the *state-of-affairs factor*. Now suppose that the aboutness factor in this case were contingent rather than necessary, contrary to what I have been suggesting. Then whatever is responsible for the thought being true, the overall product of the two factors, would be contingent as well, regardless of the modal status of the state-of-affairs factor. It would then be easy to mislocate the source of the alleged contingency in the state-of-affairs factor.

In short, the first half of my diagnostic conjecture as to why the necessary a posteriori tends to seem problematic is that a posteriority can easily seem to entail contingency as follows. One ponders an a posteriori thought that is true. One then assumes that it is made true by what the world happens to be like. Because what makes the thought true is a product of the two factors, the intrinsicalist assumption that the relations between the thought and relevant portions of the world are paradigmatically contingent rather than necessary can be displaced, and the alleged contingency mislocated in the state-of-affairs factor. In this way, a posteriority can seem to entail contingency. But once we see that the aboutness factor is necessary rather than contingent in the way that I have been suggesting, we become far less prone to this particular form of fallacy.<sup>9</sup>

The other half of the story of why the necessary a posteriori can seem problematic is that necessity can easily seem to entail a priority. Such an alleged entailment rests on a common tendency to see necessary truth as truth-no-matter-what-things-in-the-world-happen-to-belike. Such thing-neutral necessity is then assumed to be surveyable by reason alone, which is to say that it is a priori. But the underlying notion that what is necessary is thing-neutral in this way, as inviting as it may seem to some, is certainly not inevitable. In fact, a thing-grounded approach to modality has much more to recommend it on independent grounds. Seeing that this is so can only solidify our sense that relations between common attitudes and what they are about are necessary rather than contingent. This merits a digression.

#### III. DIGRESSION ON POSSIBILITY

We may contrast two approaches to possibility. Call the first approach *generalist* and the second approach *particularist*. A generalist approach

<sup>&</sup>lt;sup>9</sup> Kripke himself recognizes the strong tendency to suppose that a posteriority entails contingency but refrains from speculating as to its source: "There is a very strong feeling that leads one to think that, if you can't know something by *a priori* ratiocination, then it's got to be contingent: it might have turned out otherwise; but nevertheless I think this feeling is wrong"—*Naming and Necessity*, p. 101.

to possibility is guided by the thought that anything at all is possible barring violation of relevant generalizations. What qualifies as a relevant generalization for this characterization of possibility depends on the kind of possibility at issue. If possibility is understood as logical possibility in the narrow sense, then anything at all is possible barring violation of logical laws. On this understanding, while it is not possible for some object O to be red all over and not red all over at one and the same time, it is possible for O to be red all over and green all over at one and the same time (provided, of course, that 'red' and 'green' are left unanalyzed). If, on the other hand, possibility is understood as nomic, then what is possible will be constrained by natural laws. On this understanding of possibility, miracles, which are exceptions to laws of nature, will be impossible. We may streamline the characterization of this approach to possibility by saying that the generalist approach equates possibility with not giving rise to contradictions within the overall story consisting of everything projected to be the case about the subject matter at hand under relevant generalizations.

A generalist approach to possibility is one common way of distinguishing what is a genuine possibility from what is not. 10 By way of schematic illustration, consider any de re modal question as to whether it is possible for a particular object O to be  $\phi$  despite actually being not-\psi. Modal generalism will proceed as follows. First we consider a scenario just like the actual one, except that we splice out O being not- $\phi$ . Next, we splice into that scenario O being  $\phi$ . Finally, we assess the result of this cut-and-paste job for violation of relevant generalizations—that is to say, for contradictions. If no generalization is violated by the result, then a  $\phi$ -ing O is a genuine possibility. Otherwise, Obeing not-0 is necessary, in which case being not-0 is among the determinants of what O at bottom is. It is distinctive of this approach to what is possible for a thing that what the thing is derives from its modal profile, which derives, in turn, from the item's behavior under relevant generalizations in projected circumstances. On this picture, the identities of things—what they distinctly are, their "essences" flow from their modal profiles, which are determined, in turn, by their behavior under relevant generalizations.

Other illustrations of modal generalism may involve considering what is possible for the world as a whole. Is a world just like ours except springing into existence five minutes ago a genuine possibility? In this case there is only splicing-out without splicing-in. We consider

<sup>&</sup>lt;sup>10</sup> The next few paragraphs employ a flagrantly epistemic idiom, including such locutions as 'distinguishing what is possible from what is not', 'considering a scenario', 'testing for violation', and so forth. This should not detract from the main focus of this section, which is to consider the determinants of possibility itself.

a scenario that is just like the actual world, except that we splice out its history prior to five minutes ago. We then proceed to assess the result for some violation of relevant generalizations (say, thermodynamic laws). If no generalizations are violated, then such a historically truncated scenario represents a genuine possibility for the world as a whole—otherwise not.

A particularist approach to possibility proceeds quite differently from a generalist approach. On a generalist approach, what a thing is derives from its modal profile. This latter derives from some analogue of the splicing procedure illustrated above, testing for the violation of generalizations and so determining a modal profile for a thing and consequently what the thing itself is. Modal particularism, on the other hand, is guided by the thought that we can have a prior handle on what things are independently of considering how they behave under relevant generalizations. The idea is that what is possible for a thing is secondary to what the thing itself already is. Perhaps another way of putting the point is to say that on a particularist approach the modal profile of a thing is taken to derive from what the thing is rather than the other way around, even though there might be ways in which even generalists can subscribe to some variant of the latter formulation.<sup>11</sup>

Modal particularism tackles the *de re* modal question as to whether or not it is possible for O that is actually not- $\emptyset$  to be  $\emptyset$ , by considering O itself and asking: Given what O is, is it possible for it to be  $\emptyset$ ? An answer here will clearly depend not only on factors that pertain to distinguishing O from everything else, but also on how a  $\emptyset$ -ing O interacts with the rest of O's putative environment. So this way of answering the question of possible  $\emptyset$ -ness for O may seem not so very different from the splicing methodology of the generalist approach of checking for resultant violation of generalizations. But it is actually different in the priority it allots to the consideration of a thing *qua* what it is and the secondary role it allots to generalizations and their violation. To better appreciate the contrast between the two approaches we need to consider some cases in which they yield divergent results.

Is it possible that I should exist just as I am now without any history

<sup>&</sup>lt;sup>11</sup> Both Joseph Almog and Kit Fine are explicit in refusing to subjugate essence to modality. See Almog, "The What and the How II: Mights and Reals," *Noûs*, xxx (1996): 413–33, and "The Structure-in-Things: Existence, Essence, and Logic," *Proceedings of the Aristotelian Society, Supplementary Volume* (forthcoming); and Fine, "Essence and Modality," *Philosophical Perspectives*, VIII (1994): 1–16. But while Almog can be seen as pursuing a particularist approach to modality, Fine's definitional approach seems to be at bottom a refined form of generalism. See footnote 2 of Fine's paper for Fine's take on the differences between his approach and Almog's. Comparison of the two approaches is an interesting topic that cannot be pursued further here.

prior to the present moment? On the generalist approach this can seem like a genuine possibility. Take a scenario that is just like the actual one, except splice out my life from its beginning up to the present moment. This may seem to require some pretty hefty tinkering—meetings that I have kept over the years will have to be spliced out and some surrogate events will have to be spliced in, memories that I have generated will have to be spliced out and some surrogate memories spliced into the minds of various witnesses, and so forth. Perhaps the most economical way of achieving the feat is by splicing out my life until the present moment and splicing in its stead the life of someone else who is just like me in the relevant respects and who ceases to exist the moment "I" enter the scene, with the requisite compensatory adjustments to others' interactions with me. Checking the result for violation of relevant generalizations is not likely to reveal any. So such a scenario represents a genuine possibility of my existing without any history.

How would a particularist approach handle the case? It would proceed as follows. What I am is a person. This means that I am something whose origin and subsequent development over time is crucial to its identity. It is not possible for such an item to enter the scene without suitable causal-historical precedents. These precedents are presupposed by what I am in the strictest sense. So a scenario in which I exist just as I actually am except without any history is impossible. This is not to say that it is impossible for a molecule-for-molecule physical replica of me to exist without any history. But if such a replica is possible under such conditions, it would certainly not be *me*.

Or consider the whole world as it actually is except without any history prior to my existence. Such a scenario may represent a genuine possibility on the generalist approach—just splice out the history of the world prior to the point in time at which I began to exist. Even if no violation of generalizations is forthcoming here and the scenario in question is deemed possible on a generalist approach, on a particularist approach such a scenario would be impossible because it could not contain me for the reasons already given.

Theses concerning the essentiality of origins of certain items, such as a human being or an artifact, have been floating around for a long time. Origin essentialism may be seen as one delivery of a particularist approach to possibility. <sup>12</sup> Origin essentialists claim that certain aspects

<sup>&</sup>lt;sup>12</sup> By present lights it is therefore ironic that Kripke's influential argument for origin essentialism in *Naming and Necessity*, pp. 114–15, and much of the subsequent literature on the topic, operates under a generalist principle of recombination according to which any recombination of possibilia is itself a distinct possibility, barring violation of generalizations. Kripke's approach to possibility is on the whole particularist rather than generalist, so his argument for origin essentialism is in deep tension with much of the rest of the surrounding work. That work has had the general effect of shrinking the range of possibilities from what the generalist combinatorialism would espouse. Thus, for example, we can say post-Kripke that while there may be

of origination are essential to certain things. For me to exist, for example, something else has to be in place—a certain origination from a particular source. And while there may be no violation of relevant generalizations in a scenario in which a molecule-for-molecule physical replica of me comes spontaneously into existence, if origin essentialism is correct, then no such scenario would qualify as a genuine possibility of my existence. For me to exist, it is not enough for some hunk of organic matter to exist regardless of whatever else has been going on before. Something else has to be in place already—an origination from a particular source. So only scenarios containing such origination are candidates for being genuine possibilities of my existence, although other conditions for my existence surely restrict the range of possibilities even further. On such a view, splicing some organic matter into a not-inhospitable environment will just not do as a genuine possibility of my coming into existence (spontaneously, as it were).13

As a final illustration of the difference between a generalist and a particularist approach to possibility, consider the following question: Is it possible for a scenario that is and has always been entirely devoid of people to be such that one of my hands comes into existence for a split second before flickering out of existence again? A generalist approach may answer in the affirmative. No violation of relevant generalizations need be introduced by the spontaneous coming together for a split second of the molecules making up one of my hands in the requisite lattice-like structure. Yet particularism gives us pause. Given what my hand is, it has to bear some relation to me, whether the relation of possession in being attached to me, or the relation of severance in having been amputated from me. Whatever this relation is, in order for my hand to be what it is it has to be related to me in some such way. So its existence presupposes mine. But given that what I am is a person, I cannot exist in a scenario devoid of people. So a scenario entirely devoid of people in which one of my hands

nothing contradictory in the combination of Elizabeth II and being born to the Trumans, there is no genuine possibility of Elizabeth II being born to the Trumans (given that she was not born to them).

<sup>&</sup>lt;sup>13</sup> There is an affinity between the points made here and the kinds of considerations advanced in Michael Thompson, "The Representation of Life," in Rosalind Hursthouse, Gavin Lawrence, and Warren Quinn, eds., *Virtues and Reasons: Philippa Foot and Moral Philosophy* (New York: Oxford, 1995), pp. 247–96, regarding attributions of life. Thompson's paper makes a strong case for the contention that attribution of life to a thing depends on the wider context of the thing in question. Thus, for example, on Thompson's view, a molecule-for-molecule physical replica of me emerging from the swamp would not count as being alive—let alone a creature that can think my thoughts—due to the absence of this wider context. (The potential charge of moral abhorrence that such a treatment of the case may give rise to is misdirected on my view, but I cannot address this issue here.)

comes in-and-out of existence for a split second is impossible. Once again, this is not to deny that a scenario entirely devoid of people cannot contain a molecule-for-molecule physical replica of one of my hands for a split second. But such a replica would not be my hand.

The use of the expression "molecule-for-molecule" in such contexts is significant. It points to the fact that were we to identify such things as myself or my hand with aggregates of molecules in lattice-like structures—as a general commitment to the most common version of physicalism would—then the divergence between the two approaches to possibility over such cases would vanish. If we consider my hand as merely a molecular aggregate, then an answer to the question whether or not it is possible for such an item to exist for a split second in a scenario devoid of people seems to depend only on the behavior of the item under the relevant generalizations (certain physical laws). This is because there is nothing for such an item to be, as it were, over and above its microstructure and the physical properties that are instantiated by the particles so arranged. <sup>14</sup> This by itself is hardly surprising, given the ideal of mathematization of nature that is built into the physicalist worldview. What is less commonly appreciated is the extent to which generalist approaches to possibility take their inspiration from such a worldview. 15

I have been urging that there is a difference between two approaches to what is possible. If this is right, and if the two approaches can disagree over specific cases, the question immediately arises as to whether there is a way of deciding which of them is generally preferable. I believe that there is good reason for preferring modal particularism to modal generalism on general methodological grounds. The particularist approach is recommended by the sounder philosophical methodology. And even though an adequate defense of this claim requires far more than I can offer here, the following considerations point in that general direction.

A particularist approach can be seen as striving to remain neutral

<sup>&</sup>lt;sup>14</sup> Something similar may be said regarding cases of subsumption under the laws of the special sciences, even if we assume them to be autonomous. If we suppose, for example, that what it is to be a given mountain is exhausted by its subsumption under geological laws, then the verdicts of particularism and generalism as to what is possible for the mountain will similarly converge.

The Propositional Objects," in Ontological Relativity and Other Essays (New York: Columbia, 1969), pp. 147–55. Here is a rather naïve sketch of how an antecedent commitment to physicalism can inspire a generalist approach to possibility. The physicalist begins by considering particles to be mere nodes for the instantiation of physical properties and relations. There is nothing for such items to be, as it were, over and above whatever properties and relations they instantiate, except numerically. So there is a certain relative intersubstitutivity of entities that is built into the physicalist's outlook. A generalist approach to possibility merely extends this picture.

with respect to substantive metaphysical commitments such as physicalism, doctrines whereby to be is to be governed by certain generalizations. In thinking about what is possible along particularist lines we do not presume in advance that our subject matter is subsumable under certain generalizations. So if we accept that determinations of what is possible for something are not (and should not be) so constrained in advance, as I take it we should, then we have good reason for preferring a particularist approach to possibility. Particularism can respect fundamental everyday verdicts as to what is or is not possible for something—say, that it is impossible for one of my hands to come into existence for a split second without the antecedent existence of anyone—as they stand. As a matter of general policy it certainly seems advisable to strive for neutrality regarding more specific metaphysical commitments when it comes to adopting such a general stance as a stance to possibility. There ought to be substantive reasons for thinking that a given subject matter is subsumable under relevant generalizations. An approach to possibility should not assume in advance that any subject matter is thus subsumable.

To illustrate the latter point in terms of the specific question of physicalism, a nonphysicalist ought to prefer a particularist approach to a generalist approach because the particularist approach will apply correctly where the generalist approach will deliver the wrong result. On the other hand, as we saw earlier regarding the example of my hand under the physicalist assumption that my hand is nothing over and above its molecular constitution, if physicalism is *assumed*, then the verdicts of the two approaches to what is possible will tend to converge. So even the physicalist should have no quarrel with the particularist approach regarding specific cases. <sup>16</sup> In short, the kind of neutrality that a particularist approach enjoys makes it a preferable approach to modality on general methodological grounds.

# IV. THE IMPOSSIBILITY OF STRICT INVARIANCE IN THE EPISTEMIC SITUATION

Having gone through this detour on possibility, we are now in a better position to assess the tendency to consider the necessary a posteriori as deeply problematic. Earlier we saw that the a-posteriority-to-contingency alleged entailment can be driven by the false assumption that the relation between an attitude and what it is about is contingent rather than necessary. Now we see that the necessity-to-a-priority alleged entailment can be driven by an approach to necessity that is

 $<sup>^{16}</sup>$  For the committed physicalist, the *de re* modal question about possible  $\phi$ -ness for the non- $\phi$ -ing O becomes under a particularist approach: Given what O is, namely, a physical system governed by such-and-such laws and nothing more, is it possible for such a thing to  $\phi$ ? The answer here will only depend on whether  $\phi$ -ing conflicts with the existence of the physical system that O is identified with.

thing-neutral, or generalist. The underlying thought behind such an approach is that to be necessary is to be true no matter what things in the world happen to be like, that is, to be true as a matter of free-floating generalizations, something that can be ascertained by reason alone. But of course under the auspices of particularism, necessities are thought to issue precisely from what particular things are like. Adopting a particularist approach to possibility will thus make us far less inclined to think of necessity as entailing a priority. In short, thinking of the relation between attitudes and what they are about as necessary rather than contingent, and thinking of modality along the lines of particularism, should alleviate once and for all the common unease surrounding the necessary a posteriority.

We are now also in a better position to appreciate the constitutive nature of the relations between common attitudes and what in the world they are about. The postrevolutionary line on content holds that it is impossible for my overall epistemic situation regarding water to be just as it actually is in the global absence of water. This can give rise to the following generalist worry. In claiming that there can be no thinking that water is wet in the global absence of water, the claimant surely incurs an explanatory burden of showing that certain generalizations would be violated by a scenario that includes thinking that water is wet in the global absence of water. But it is an open question whether such items as the relationally determined episodes of thinking that water is wet are subsumable under relevant generalizations at all. (Even those who are most optimistic about the prospects of such a subsumption should regard this as an open question.) So as long as we lack compelling reasons for holding that such items are subsumable under relevant generalizations, the case for the impossibility of thinking that water is wet in the global absence of water has not been clinched. A certain burden of proof has not been discharged.

Such a complaint against the postrevolutionary line can have a certain *prima facie* appeal. If we claim that a scenario is impossible, and if possibility is a matter of faring under relevant generalizations without violation, then it does seem incumbent on us to provide reasons for thinking that some contradiction would ensue had the scenario obtained. Only then would the argument for its impossibility have any genuine force. In the case at hand it would be incumbent on us to provide reasons for thinking that some generalization would be violated by a scenario in which we have the very same cognitive rapport we actually have with water in the XYZ-scenario.

The key to meeting the complaint lies in resisting the notion of possibility as a matter of simply faring under relevant generalizations without violation. Armed with a particularist approach to possibility we can now say that it is indeed impossible for my epistemic situation regarding water to be just as it actually is in the global absence of water. Assuming that thinking that water is wet figures prominently

in my actual epistemic situation regarding water, I reflect on the possibility that such thinking be had in the XYZ-scenario. In order for anything to be the episode of thinking that water is wet, it has to bear the right contextual relations to water. But no such contextual relations to water can obtain in the XYZ-scenario because that environment is devoid of water. So whatever anyone thinks with the words 'Water is wet' in the XYZ-scenario, it cannot be thinking that water is wet—there is no such thinking to be had in such an environment. *Ipso facto*, it is impossible for my epistemic situation to be just as it actually is regarding water in the global absence of water and the concomitant presence of XYZ.

A particularist approach to possibility considers the episode of thinking that water is wet and asks about it: Is it possible for this very episode to be just as it is in the absence of water and the concomitant presence of XYZ? That this is impossible, given what the item in question is, depends on its being determined to be what it is relationally—on it being constitutive of such an item that it should bear the requisite relations to whatever it is about. The case is similar in outline to the verdict that it is not possible for my hand to exist in a scenario that is just like the actual one yet entirely devoid for all time of people. That the latter scenario is impossible for my hand depends on its being determined to be what it is relationally—on it being constitutive of the item in question that it should bear some relation to me. In each case, the sense that a scenario is impossible for a given item is aided by reflections on what makes the item in question the very item that it is. And what the relationalist ought to say is that such reflections need not culminate in the subsumption of their subject matter under relevant generalizations in order to gain their respective legitimacy.

## V. QUALITATIVE INVARIANCE IN THE EPISTEMIC SITUATION

I now turn to consider a second and perhaps more cautious construal of nonactual epistemic possibility, the construal encapsulated in the passage from Kripke's *Naming and Necessity* cited in the beginning. According to this construal, even if it is strictly impossible that I should be in the very same epistemic situation regarding a table made of ice as I actually am regarding a wooden table, it is possible that my epistemic situation regarding some table made of ice should be *qualitatively* identical to my actual epistemic situation regarding the wooden table. So the current suggestion is that it is in this sense that the impossibility of the wooden table being made of ice is compatible with its epistemic possibility. But to assess the proposal we need to ask just what this qualitative sameness in epistemic situation is supposed to be. This requires going beyond Kripke's brief indications.

A natural way to understand qualitative sameness in epistemic situation begins by considering qualitative sameness in the situation itself. On the face of it, qualitative sameness in the situation is an invariance in *qualities* under a variability of aspects of the situation that those qualities are qualities of. For example, perhaps the qualities of having a certain brownish hue, of having a certain table-like size and shape, and of being positioned in a certain location in the room, can remain invariant across the actual situation of a wooden table positioned in the room and the nonactual situation of an ice-counterpart of the table positioned in the same way in the room. Something similar can be said about the other cases we have been considering throughout, such as qualitative sameness across the actual situation of Venus positioned at a certain location in the evening sky and positioned at a certain location in the morning sky and the nonactual situation of two distinct planets occupying each of those distinct spatiotemporal locations. This is what qualitative sameness in the situation itself amounts to. So far, nothing distinctly *epistemic* has entered the story.

A familiar way of turning qualitative invariance into a distinctly epistemic sort of invariance is to adhere to the traditional ("prerevolutionary") account of cognitive access whereby the mind comes into contact with portions of the world only via apprehending qualities and complexes of qualities that those portions happen to satisfy. The idea would then be that having a mental episode about the wooden table right in front of me, say, consists in my apprehending a certain complex of qualities—having a certain brownish hue, having a certain table-like shape, being positioned at such-and-such a location, and so forth—which the wooden table happens to satisfy uniquely. What happens in the nonactual situation is that a table made of ice happens to satisfy uniquely the complex of qualities apprehended in my mind that the wooden table actually satisfies uniquely. So it is in this sense, then, that being made of ice will be epistemically possible for the table—my table-cognitions, which can reach only as far as the qualities of the actual wooden table, might have been about an ice table instead of the wooden table by virtue of the ice table satisfying the complex of qualities that the wooden table actually satisfies. If things were that way, then the table right in front of me would turn out to have been made of ice in the sense that whatever uniquely satisfies the relevant complex of qualities would have been made of ice. Similar considerations apply to the other cases we have been considering.

But the idea that portions of our surroundings are given to us in this purely qualitative manner, with its concomitant notion of aboutness-as-satisfaction, is just the picture that the revolution described at the beginning of the paper sought to undermine. And while limitations of space preclude me from explaining just why and how it is a misleading picture of cognitive access, the following type of evidence against it is well known and compelling. The view in question requires that our minds should routinely apprehend complexes of qualities that particular things satisfy uniquely. But we are rarely, if ever, in cognitive

rapport with complexes of qualities that particular things satisfy uniquely. Such considerations should of course be familiar from Kripke's attack on descriptivism. The present account of qualitative sameness in epistemic situation rests on the view of aboutness that Kripke's work sought to displace. We must look further for a more plausible way of unpacking epistemic possibility in terms of qualitative sameness in epistemic situation.

It is probably fair to say that in recent years the leading strategy for accommodating the notion of qualitative sameness in epistemic situation is to make a certain concession to intrinsicalism about content while purporting to preserve central features of the postrevolutionary outlook. The lessons of relationalism, it is claimed, still hold for one aspect of content, the "wide" aspect. But there is another aspect of content, the "narrow" aspect, which is supposed to be determined to be what it is independently of environmental factors. And herein lies the key to qualitative sameness in epistemic situation. Narrow content is supposed to be world-neutral—it does not depend for what it is on what in the world outside the skin of the agent it happens to apply to.<sup>17</sup> So to say that it is epistemically possible for water not to be H<sub>2</sub>O despite necessarily being H<sub>2</sub>O is to say that it is possible for me to be in the qualitatively same epistemic situation regarding some substance other than water as I actually am regarding water, which is just to say that the narrow content associated with 'water'—we may think of it as some property of seeming water-like can remain fixed while what the world happens to be like can vary in the following way: the world might have contained a substance other than water instead of water such that the narrow content of seeming water-like would be instantiated by that other substance.

If we now evaluate the claim that water is not H<sub>2</sub>O relative to this possibility we can say that the claim is indeed false at the level of wide content. But this is compatible with its being true at the level of narrow content. In short, the compatibility of the strict impossibility of water not being H<sub>2</sub>O and the epistemic possibility of water not being H<sub>2</sub>O is the compatibility of an impossibility at the level of wide content with a possibility at the level of narrow content. <sup>18</sup> Once we

 $<sup>^{\</sup>rm 17}\, But$  in what follows I ignore, once again, the complication that from the skin inward I am mostly made of water.

<sup>&</sup>lt;sup>18</sup> Contemporary two-dimensionalists such as Frank Jackson and David Chalmers attempt to construe the narrow/wide distinction by using the apparatus of 2-D modal logic. Within their framework wide contents are represented by the top rows of matrices that purport to capture the variability of extensions of terms relative to two dimensions of variability of possible worlds—horizontal worlds as circumstances of evaluation ("worlds as counterfactual") and vertical worlds as contexts of use ("worlds as actual"). Narrow contents are then represented by the diagonals of these matrices, representing the variability of extensions of terms relative to "what the actual world happens to be like." Why this is supposed to capture how things seem to the agent is an interesting question that cannot be addressed here. The objection developed

see how the explanation goes for general cases such as water not being  $H_2O$ , we see how it would go for singular cases as well, such as Hesperus not being Phosphorus or the wooden table in front of me not being made of wood. The key to the explanation lies in the fact that singular contents on the present view are at bottom just general contents that apply singly. In other words, singular narrow contents are given descriptively. The narrow content associated with 'this table', for example, would be a compositionally generated content of some such descriptive surrogate as 'the x such that  $P_1(x)$  and...and  $P_n(x)$ ', where the contents of ' $P_1$ ',..., ' $P_n$ ' are themselves narrow.<sup>19</sup>

Despite the elegance and the seeming explanatory power of this proposal, there is good reason for remaining highly suspicious of it. This reason has little to do with scrupulous details and everything to do with the overall underlying idea that we bear immediate cognitive relations to contents that do not depend for what they are on what the world is like. To see what is at stake here we need to enlist the familiar distinction between semantics and metasemantics and focus on the latter. As it is commonly understood, semantics is concerned with specifying semantic contents and their modes of composition whereas metasemantics is concerned with the general issue of content-determination. So, for example, the thesis that the semantic value of a name is its bearer rather than some reference-fixing condition is a semantic thesis. But the thesis that the name gains its semantic value via a causal-historical chain of communication originating from an initial act of linguistic baptizing is a metasemantic thesis.

How are we to think of content-determination for a typical common noun? Let us begin with so-called wide content. To the extent that we think that such content depends for what it is on what the terms it animates are about, extension-determination is going to play a key role in the overall account of wide content-determination. Take 'water'. To the extent that the wide content of 'water' depends for what it is on the extension of the term, an account of how 'water' comes to apply to all and only samples of water will play a pivotal role in any plausible story about the way in which the term gains its wide

below targets the 2-D variant of the narrow/wide distinction as well, but has little to do with the specific details of the framework.

<sup>&</sup>lt;sup>19</sup> If narrow singular contents are thought of as primitive rather than as compositionally generated, then while the considerations in the main part of the present section may not obviously apply to them, the considerations in the last two paragraphs of this section do.

<sup>&</sup>lt;sup>20</sup> The distinction is introduced under a slightly different terminology in Almog, "Semantical Anthropology," *Midwest Studies in Philosophy*, IX (1984): 479–89. It is also discussed in David Kaplan, "Afterthoughts," in Almog, John Perry, and Howard Wettstein, eds., *Themes from Kaplan* (New York: Oxford, 1989), pp. 565–614, and in Robert Stalnaker, "On Considering a Possible World as Actual," *Proceedings of the Aristotelian Society*, Supplementary Volume, LXXV (2001): 141–56.

content. The following sketch of an account of extension-determination, building on the one offered by Putnam in "The Meaning of 'Meaning'," is as good a schematic beginning as any. <sup>21</sup> Speakers employ a term such as 'water' with the referential intention to pick out whatever is relevantly similar to paradigmatic instances of the kind in their environment. How to think of the relevant similarity relation here is a matter of controversy, but we may assume it to be some relation of microstructural similarity. It is also a matter of some controversy how to think about such referential intentions in light of speakers' overall epistemic situation, specifically their massive chemical ignorance. But as should be clear even from this rough sketch, 'water' gains its wide content via exposure of speakers to instances of water.

If we now turn to the metasemantic question of content-determination for the supposed narrow content of 'water' we face a dilemma. Simply put, either narrow content-determination depends on extension-determination along the lines suggested above in the case of wide content-determination, or else the narrow content of 'water' is determined in some other way independently of extension-determination. Think again of the narrow content of 'water' as some property of seeming water-like. Then the options are these: Either 'water' gains this property as its narrow content via exposure to its instances, or else it gains it as its narrow content independently of any such exposure.

Consider the second option first. Unless more is said on its behalf to alleviate the unmistakable sense of metasemantic mystery it can be set aside. For consider what is being suggested by a proponent of this idea—that some property of seeming water-like becomes associated with 'water' independently of anything actually seeming water-like to anyone. It is very hard to see how such content-determination for 'water' is supposed to proceed. There had better be something more to say about this than the mere assertion that it does, fortified perhaps by some emphatic insistence that the property in question is just "there" to latch on to without requiring any exposure to instances of it. From the present perspective, such a metasemantic option is a nonstarter.

This takes us to the remaining option—that narrow content-determination for 'water' proceeds via extension-determination. The proponent of the idea that 'water' has some such content that does not depend on what water is actually like but only on what seems water-like will now offer the following metasemantic sketch. Just as wide content-determination depended on extension-determination, so narrow content-determination depends on extension-determination. And extension-determination in the latter case can be characterized along

<sup>&</sup>lt;sup>21</sup> In Putnam, *Mind, Language and Reality: Philosophical Papers, Volume 2* (New York: Cambridge, 1975), pp. 215–71.

the same lines as before: speakers employ 'water' in its narrow sense with the referential intention to pick out whatever they deem relevantly similar to paradigmatic instances of *seeming water-like*. But now, when we pause to consider how extension-determination is supposed to proceed in this case, we run into the sort of trouble that so famously exercised the later Wittgenstein.<sup>22</sup>

Extension-determination for a typical common noun requires that there be some independent standard to distinguish cases in which instances only seem to be relevantly similar to one another from cases in which this is in fact the case. (In the case of 'water' it can be assumed that such an independent standard is provided by the microstructure of the substance.) Without this, no extension would be secured, and consequently no content. For without any means of sustaining a seems/is distinction in extension-determination for 'water', the term would apply to anything seeming to be relevantly similar to what seem to be paradigmatic instances of the kind. In this way, whatever seems to be an instance of water would thereby be an instance of water because the possibility of error through misapplication of the term has not been facilitated. But without such a possibility of error, there can be no correctness in applying 'water' either. In short, if such were the case regarding 'water', the term would not contribute to the truth conditions of claims in which it partakes. It would thus lack content altogether.<sup>23</sup>

<sup>22</sup> As, for example, in passages such as the following from Ludwig Wittgenstein, *Philosophical Investigations*, Third Edition (Oxford: Blackwell, 1953):

Let us imagine a table (something like a dictionary) that exists only in our imagination. A dictionary can be used to justify the translation of a word X by a word Y. But are we also to call it a justification if such a table is to be looked up only in the imagination?—'Well, yes; then it is a subjective justification.'—But justification consists in appealing to something independent.—'But surely I can appeal from one memory to another. For example, I don't know if I have remembered the time of departure of a train right and to check it I call to mind how a page of the time-table looked. Isn't it the same here?'—No; for this process has got to produce a memory which is actually *correct*. If the mental image of the time-table could not itself be *tested* for correctness, how could it confirm the correctness of the first memory? (As if someone were to buy several copies of the morning paper to assure himself that what it said was true.) (§265)

 $^{23}$  The transition from the claim that a given term applies by seeming to apply to the claim that the term has no content might give rise to the following worry. Let 'N\*' apply by seeming to apply. Could I not still misapply it, say by intending to misapply 'N\*'? But if that is so, then it appears that a genuine contrast between application and misapplication for 'N\*' can be facilitated, in which case 'N\*' can gain a determinate extension, and so a determinate content, after all. However, further reflection will reveal this to be gratuitous. Under such conditions, what could the possibility of misapplying 'N\*' amount to? Suppose I resolve to misapply 'N\*' in a given instance. In what (or against what) might my misapplication of it consist? The only available answer is that 'N\*' seems to misapply in the given case. In other words, 'N\*' applies by seeming to apply and misapplies by seeming to misapply. And

Turning to extension-determination for the narrow content of 'water' we see that this is precisely the sort of situation we are facing. 'Water' in its narrow sense is supposed to apply to anything relevantly similar to paradigmatic instances of seeming water-like. In order for the term in its narrow sense to gain a determinate extension, there has to be an independent standard to sustain a seems/is distinction that would permit us to hold that something can only seem to be relevantly similar to paradigmatic instances of seeming water-like, that is, only seem to seem water-like, without in fact seeming water-like. But if something seems to seem water-like, then it ipso facto seems water-like! In other words, there is no place to insert the seems/is wedge here. Seeming to seem so-and-so is just seeming so-and-so all over again—genuine seeming does not genuinely iterate. What this means, in effect, is that extension-determination for the narrow sense of 'water', and so narrow content-determination, cannot take place after all. The metasemantic question regarding 'water' in its narrow sense remains unanswered. So for all that has been offered so far, 'water' cannot come to possess a narrow content after all. And what goes for 'water' goes for other general terms as well.

So there is no world-neutral content associated with 'water' that would make 'Water is not  $H_2O$ ' true in the XYZ-scenario in the way envisaged above. And assuming descriptivism about singular contents, there are no world-neutral contents associated with 'Hesperus' and 'Phosphorus' that would make 'Hesperus is not Phosphorus' true in the two-distinct-planets-scenario. Nor is there a world-neutral content associated with 'this table' that would make 'This table is not made of wood' true in the ice/table-scenario. In short, the attempt to adduce a narrow/wide distinction to explain the compatibility of these impossibilities with their correlative nonactual epistemic possibilities fails.

It should be obvious that the kind of metasemantic trouble we found ourselves in regarding the narrow sense of 'water' would affect other renditions of mere qualitative sameness in epistemic situation, so long as the common denominator among actual and nonactual epistemic situations is construed as a matter of content-invariance. The source of the trouble lies not in the theoretical rendition of narrow contents, but lies, rather, in the underlying idea that we bear immediate cognitive relations to contents that purport to capture how things seem to us, regardless of what they really are.<sup>24</sup> Mere qualitative

this can only mean that there is no room for genuine application or misapplication here.

<sup>&</sup>lt;sup>24</sup> If this is correct, then recent attempts to employ the framework of 2-D modal logic to revive the narrow/wide distinction fail too. In the current literature on the topic the 2-D content program has been mainly subjected to semantic scrutiny and criticism—objections that question whether it is indeed reasonable to think of a term such as 'water' as imbued with a semantic value that is alleged to be represented by the diagonal of the 2-D matrix for 'water'. The present objection is, by contrast, a distinctly metasemantic objection.

sameness in overall epistemic situation may have initially appeared to be a more promising strategy for capturing nonactual epistemic possibility than strict sameness in epistemic situation. But upon closer scrutiny it was revealed as ridden with privacy-trouble at its core.

There is an unmistakable pull to the idea that aspects of the epistemic situation of an agent can remain invariant under variability of what they are about, that such an aspect of the overall epistemic situation enjoys a measure of independence from what in the world it is directed at. To say this is to say that the cognitive state can be the same while what it is about varies, which is, on the face of it, a modal claim. It specifies that there is a possible scenario in which the cognitive state is the same while whatever it is directed at is different. This is a modal formulation of the thesis of cognitive independence. Two interrelated points demand further clarification, First, in all strictness cognitive independence ought to be understood slightly differently from the way it is presented by the modal reconstruction. For example, according to the thesis it should turn out that even if modal determinism is true and there is no possibility of cognitive invariance under the relevant variability on entirely general grounds, a cognitive state is independent of what it is about. What is needed for the successful formulation of the independence thesis is really independence of the state from the object it is about as a determiner of the state, that is, as a thing that determines the state to be what it is. In other words, cognitive independence is better understood not in modal terms but rather in straightforwardly essentialist terms. It is not the modal variability of portions of the world under cognitive invariance that is the real issue. Modal variability under cognitive invariance is just a symptom of the deeper essentialist point, a symptom that fails if modal determinism holds. Rather, cognitive independence is the independence of what the cognitive state is from what the relevant portion of the world is. It is on such terms that the thesis ought to be assessed.25

Once the essentialist reconstruction is undertaken, it should become clear why the "narrow" amendment to the cognitive independence thesis could not be right, never mind the privacy argument offered above. The very idea that there is some aspect of our epistemic situation that is determined to be what it is entirely independently of what it is about, but that also furnishes us with "appearances" or "seemings" of things, should seem outlandish. How can an item that

<sup>&</sup>lt;sup>25</sup> An exceptionally clear formulation of the thesis is found in Gabriel M.A. Segal, *A Slim Book about Narrow Content* (Cambridge: MIT, 2000), p. 11: "[B]eing in a state with a specific cognitive content does not essentially involve standing in any real relation to anything external. Cognitive content is fully determined by intrinsic, microstructural properties: duplicate a subject in respect of those properties and you thereby duplicate their cognitive contents too."

is supposed to represent how things in the agent's environment appear to the agent be determined to be what it is entirely independently of whatever it purports to represent? It is not unlike supposing that while hammers are tools that are ideally suited to drive in nails, their nature is entirely independent of nails; or that while the purpose of litmus paper is to be responsive to acidity, its nature is entirely independent of acidity; or that while a portrait of a man captures him with great accuracy, the nature of the portrait is entirely independent of the man. If there were such aspects of our epistemic situation that are determined to be what they are independently of the things to which they apply, but which are nevertheless *about* those things, this would certainly seem to be a kind of miracle of metaphysical synchronization. Some special pleading would surely be required.<sup>26</sup>

For contrast, consider the case of mathematical objects and their applicability to the natural world, undoubtedly one of the "hard problems" in the philosophy of mathematics. Here we have what appear to be entities that enjoy a great measure of independence from the natural world yet which also *apply* to the natural world. Philosophers have found this deeply puzzling, and much of the philosophy of mathematics is devoted to studying this troubling issue. That aspects of our epistemic situation are determined to be what they are independently of whatever they are about, but which are nevertheless about those things, should seem just as troubling as the applicability of mathematics. And while in the philosophy of mathematics we do not just take such difficulties lying down, in the philosophy of mind and language we do to the point that we cease to see any parallel difficulty. But of course the applicability of mathematics is undeniable, whereas if relationalism is right, then the intrinsicalist idea that aspects of our epistemic situation are determined to be what they are entirely independently from what they are about is simply misbegotten.<sup>27</sup>

<sup>27</sup> The problem of the applicability of mathematics to the natural world should not be mistaken for a different issue that philosophers have found themselves grappling with, one that arises in the context of reductionist programs in the philosophy

 $<sup>^{26}</sup>$  I hear the following objection: "Why could not hammers be determined to be what they are entirely independently of nails? Let us suppose that some alien and nail-lacking civilization  $C_1$  dropped hammers to earth, which for  $C_1$  were objects of worship. And let us suppose that by some remarkable coincidence an independent alien and hammer-lacking civilization  $C_2$  dropped nails to earth, which for  $C_2$  were objects of worship. This certainly seems like a genuine possibility, albeit a highly unlikely one. Would such a possibility not attest to the falsity of the claim that hammers are not determined to be what they are independently of nails?" I would claim that whatever was dropped by  $C_1$  would not be hammers and whatever was dropped by  $C_2$  would not be nails. The envisaged scenario attests to a kind of Humean combinatorialism that ought to be rejected—holding steady a thing being a hammer while severing its essential ties to whatever determines it to be what it is. The envisaged scenario is akin to Putnam's example of the ant crawling in the sand and leaving a trail that bears a striking resemblance to Winston Churchill. Striking resemblance or no, the trail in the sand is not a picture of Winston Churchill.

#### VI. CONCLUSION

I end by considering very briefly one final stab at the epistemic accommodation of pretheoretical intuitions of contingency regarding the likes of Hesperus being Phosphorus, water being H<sub>2</sub>O, and a given wooden table being made of wood. As before, it is conceded that there is no possibility of Hesperus not being Phosphorus, of water not being H<sub>2</sub>O, and of a given wooden table not being made of wood. The present suggestion is that it might have nevertheless turned out that Hesperus is not Phosphorus in the sense that the purely descriptive (general) part of my epistemic situation regarding Venus seen in the evening and Venus seen in the morning might have been just as it actually is regarding two distinct planets. Similarly, the purely descriptive component of my epistemic situation regarding water might have been just as it actually is regarding something other than water, and the purely descriptive component of my epistemic situation regarding the wooden table might have been just as it actually is regarding a table made of ice. It is the invariance in the descriptive component of my overall epistemic situation—which is supposed to be entirely de-re-attitude-free with respect to the relevant res—through the variability of the relevant features of my environment that explains, on the present proposal, how such things are epistemically possible. The account presumably does not befall the problem of necessary relations between my attitudes and whatever in the world they are about, because what is supposedly held invariant under substitution of relevant features of the environment is meant to be purely descriptive or general. And it avoids adducing narrow contents in order to sustain the requisite invariance.

Nonetheless, the approach is, if anything, less palatable than the two approaches considered at greater length above. This can be seen even if we set aside the question of whether it is plausible to suppose that the overall epistemic situation of an agent vis-à-vis a particular thing has a purely descriptive component. What makes such an account unpalatable in the present context has to do with what all such

of mathematics. Thanks to Almog for emphasizing this to me. Suppose we identify the numbers with nodes in some privileged model of formalized number theory. Then we seem to have an applicability problem on our hands, the applicability of the nodes to the natural world. But such a problem is specious so long as it is open to us to resist the identification of numbers with their model-theoretic proxies, just as it is open to us in the parallel case of aboutness to circumvent the "metaphysical synchronization" issue by denying cognitive independence. The relevant contrast between the mathematical case and the cognitive case is that between the genuine applicability of mathematics to the natural world, outside the context of any purported reduction, and the merely alleged applicability (aboutness) of intrisicalist content. The problem in the second case is spurious if the considerations in this paper are on the right track, whereas the problem in the first case is not.

accounts are called upon to do, namely, to explain away pretheoretical intuitions of contingency regarding necessities we are committed to on other philosophical grounds.

For the sake of illustration, consider an oversimplified example of a descriptive cognitive state. I look outside my kitchen window, notice a car parked in the driveway, and think to myself that the car blocking the driveway is always such a nuisance. To get a descriptive attitude going here we need to contrast two sets of circumstances and focus on the latter. The first set of circumstances is one in which I believe the car I see in the driveway to be the same car that blocks it every time. Here in thinking that the car blocking the driveway is always such a nuisance I am thinking about the car I see in particular, whether or not it is the car blocking the driveway every time ('the car blocking the driveway' is being used referentially, as it were). The second case is one in which I am thinking about cars parked in the driveway in general—that it is always the case that whichever car blocks the driveway is a nuisance—and the particular car I see instantiates my general thought ('the car blocking the driveway' is being used attributively, as it were).

Now suppose that regarding this second case we are inclined to say that thinking that the car blocking the driveway is always such a nuisance happens to be about the car I see there, yet if another car were there instead my thinking such a thing would be about that other car. Even so, we feel no inclination whatsoever to say that "it might have turned out" that it was really the other car in the driveway despite it actually being the car I see. The reason we feel no such inclination here is that the identity of the particular car parked in the driveway is in no way in question—I see it right there. By contrast, the cases we have been examining throughout are all cases in which we have a certain "surface" cognitive rapport with a subject matter regarding which there is a "deep" story pertaining to what the subject matter is that generates the relevant necessity. Our superficial rapport with a planet seen in the evening and our superficial rapport with a planet seen in the morning are revealed upon deeper inspection to concern one and the same, and so, necessarily one and the same, planet. Our superficial rapport with a substance that abounds in our environment is revealed upon deeper inspection to be with a substance having a certain molecular constitution, and so having it necessarily. Our superficial rapport with a certain table is revealed upon deeper inspection to be with a table made of wood, and so necessarily made of wood. In all such cases correlative pretheoretical intuitions of contingency express the sense that cognitive rapport with items in our immediate vicinity is only with their surfaces, as it were, surfaces that tolerate variations at the level of depth. In rough outline this is what is supposed to explain the nagging sense that things could have turned out otherwise than they had in fact turned out.

I submit that in order for a candidate epistemic explainer of these intuitions of contingency to gain any hold at all, this surface/deep structure has to be preserved. Otherwise, the alleged epistemic explainer will seem off the mark and entirely *ad hoc*. Both the account in terms of strict sameness in the overall epistemic situation of the agent and the account in terms of qualitative sameness in the overall epistemic situation of the agent sought to preserve this surface/deep duality, which is precisely why they enjoyed a measure of initial plausibility. But the present account in terms of sameness in the purely descriptive component of the overall epistemic situation of the agent forgoes this surface/deep duality entirely. As such, it seems little more than a forced overtheorized solution to a concrete diagnostic problem. It is therefore a least likely epistemic explainer of the target intuitions of contingency.

Where does this all leave us? If I am right, then one thing to say in this area is that the so-called nonactual epistemic possibilities discussed in this paper, those that are adduced to explain intuitions of contingency in the face of strict necessities, should not be so-called. For if the considerations advanced in the first half of this paper are on the right track, then it is impossible that my overall epistemic situation remain fixed while whatever in the world it is related to varies in the relevant respects. On the other hand, if the considerations adduced later in the paper are on the right track, then even mere qualitative sameness in overall epistemic situation is not an option. Perhaps the most that can be said here is that nonactual evidential possibilities are possible, by which we mean that our evidence might have been just as it actually is yet regarding something other than what it is actually evidence for. This assumes, of course, a construal of evidence that renders it content-neutral and thus nonrelational, so that we can assume that a particular piece of evidence is not necessarily tied to whatever it is evidence for. But I must defer the question of whether or not any such construal of evidence is forthcoming to another occasion.<sup>28</sup> Or perhaps we can say that nonactual sensational possibilities are possible, by which we mean that our sensations might have been just as they actually are in a scenario in which they are caused by something other than what actually causes them. And here we need to assume that some workable account of contentneutral sensations is forthcoming. Be that as it may, to regard any

<sup>&</sup>lt;sup>28</sup> It does seem doubtful. Suppose I have evidence of a certain lectern that it is brown. This piece of evidence certainly seems content-laden to the extent that it can turn out to be false if it happens that the lectern is not brown. But then, given a commitment to relationalism about content, I take it that this evidence would not remain invariant under substitution of an ice-lectern for the actual lectern. In other words, the evidence I actually have that the lectern is brown would not be the evidence I have regarding the lectern made of ice in the nonactual situation.

such possibilities as epistemic is to characterize them in a way that is too content-laden so as not to befall the problems discussed in this paper.

But what of those nagging intuitions of contingency? If I am right, they are not to be explained in terms of nonactual epistemic possibilities at all. They might be explained, rather, in terms of nonactual *linguistic* possibilities. In the discussion following Marcus's "Modalities and Intensional Languages," W.V. Quine offers the following consideration against Marcus's claim that the identity of Hesperus and Phosphorus is necessary:<sup>29</sup>

We may tag the planet Venus, some fine evening, with the proper name 'Hesperus'. We may tag the same planet again, some day before sunrise, with the proper name 'Phosphorus'. When at last we discover that we have tagged the same planet twice, our discovery is empirical (*ibid.*, p. 327).

Here "empirical" is clearly meant by Quine to cast doubt on the necessity in question. I propose that Quine's observation, untainted as it is by subsequent theorizing about necessity, ought to be taken as strong evidence for the source of the target intuitions of contingency discussed in this paper.

When assessing the modal status of the identity of Hesperus and Phosphorus it is quite easy to attend to the linguistic expressions 'Hesperus' and 'Phosphorus' instead of to whatever they stand for. Indeed, there is a prevalent inclination to forget that in modal evaluations we must attend to the modality of the subject matter of our discourse rather than to the modality of the significance of our discourse. This should not be unfamiliar to anyone who has tried to explain these matters to novices. By far the most common misconception regarding possible-world evaluations is to suppose that the significance of a target sentence is itself open to variation across possible worlds. In this way, the intuitively plausible assessment that a token of 'Hesperus' is contingently coreferential with a token of 'Phosphorus' can easily give rise to the further and mistaken assessment that Hesperus is contingently identical with Phosphorus. What we have here is an error, a genuine error this time, conceived in the sin of confusing use and mention. And in an ironic twist not atypical of the subject, it is Quine himself who is found guilty this time of such a sin.

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<sup>&</sup>lt;sup>29</sup> Marcus, "Modalities and Intensional Languages," *Synthese*, XIII (1962): 303–22; W.V. Quine, "Reply to Professor Marcus," *Synthese*, XIII (1962): 323–30.