

Things and De Re Modality

TONY ROY

CSU, San Bernardino

The problem of modality is a problem about truth-makers for modal propositions. Say a *modal* proposition is one whose expression includes some operator(s) for possibility or necessity. The problem arises when we ask what it is that makes such a proposition true. There are different answers, corresponding to different kinds of necessity and possibility. In this paper, however, the target is only modality of the “metaphysical” sort. I divide metaphysically modal propositions into those that are *de dicto* and those that are *de re*, assume at least an uneasy truce with *de dicto* modality, and focus on those that are *de re*. As we shall see, solutions on the one front hardly guarantee solutions on the other. A general thesis is that approaches to *de re* modality are closely related to accounts of what it is to be a thing. More particularly, I argue for one approach to thinghood and for a corresponding approach to *de re* modality. Naturally, what counts as a solution depends on the problem. So I begin with some considerations that set the stage for argumentation to follow.

I. The Problem

(A) General.

Insofar as the problem of modality involves truth makers for modal propositions, it is not epistemological; but there are related epistemological concerns. It is natural to think that knowledge of the world is derived from observation of the world. Suppose we observe that all crows are black. Is it possible that there be a non-black crow? The answer is not determined by our observation, for not every possible situation is actual. If the proposition that there can be a non-black crow is true, it is true because some non-actual possibility is such that *if* it were actual there would be a non-black crow. But we observe only the actual world; there is no observation of what is non-actual. And if there isn’t any observation of the non-actual, then there isn’t any observation of correlations between the actual

and the non-actual—it is not obvious how observation of the actual is relevant to what is merely possible. Thus e.g., David Hume might have been able to observe that all crows in some zoo are black, and maybe that all crows are black, but he would not have been able to observe non-actual crows; thus, short of a “rocket ship” that would enable him to tour possible worlds other than our own, it seems that he could not tell whether it is necessary that crows are black. More generally, consider a theory with consequences for nonmodal properties both at the actual world and at other possible worlds, and some other theories whose actual-world consequences are the same but other-world consequences are different. Insofar as observation is of actuality, there is, seemingly, no observation to distinguish among the theories.¹ So the empiricist has reason to hold that observation does not ground knowledge of truth or falsity for the various modal claims, and may find in these considerations the basis for a general skepticism about modal knowledge.

This skepticism, along with our problem for modal truth, derives from a picture on which the requirements for modal truth exceed the resources of actuality. David Lewis paints a version with his doctrine of “Humean supervenience.”

All there is to the world is a vast mosaic of local matters of particular fact, just one little thing and then another... . We have geometry: a system of external relations of spatiotemporal distance between points. Maybe points of spacetime itself, maybe point-sized bits of matter or aether or fields, maybe both. And at those points we have local qualities: perfectly natural intrinsic properties which need nothing bigger than a point at which to be instantiated. For short: we have an arrangement of qualities. And that is all. There is no difference without difference in the arrangement of qualities. All else supervenes on that (1986b, ix-x).²

On this view, a world is just an arrangement of qualities. From this, it seems to *follow* that there is no difference without difference in the arrangement of qualities. Presumably, the view isn’t merely that all difference coincides with difference in quality arrangement, but rather that all differences occur *because* of the way qualities are arranged, and are thus *grounded* in quality arrangement.³ To put the essential point in other terms, say a property is *categorical* iff at a world it is a requirement on that world’s quality arrangement, and so not on the arrangement of qualities at other worlds—having a categorical property at a world is having qualities at that world arranged appropriately. Then, insofar as having a quality arrangement is having some categorical property, the view implies that every property has a categorical ground and, in particular, that (CG) modal properties have a categorical ground.

On the “Humean” view, the qualities of which a world consists are “perfectly natural intrinsic properties which need nothing bigger than a point at which to be instantiated”; a quality at one point doesn’t incorporate relations to or requirements on other points, and so on points in other worlds or other circumstances. Given this, since a categorical property at a world depends on just that world’s quality distribution, a categorical property at a world does not depend on other

circumstances. And, similarly, a property wholly grounded in the categorical properties of just one world does not depend on other circumstances. In contrast, a modal property at a world seems to depend, at least in part, on ways qualities would or could be in other circumstances. Plausibly, *being spherical* and *being more than 10 kilograms* are categorical. But a thing is *necessarily spherical* just in case qualities would be distributed appropriately in any circumstance, and a thing is *possibly more than 10 kilograms* just in case qualities would be distributed appropriately in some circumstance. If modal properties depend on different circumstances, it follows that modal properties are not categorical, and that (NG) modal properties are not wholly grounded in the categorical properties of just one world.

Given CG and NG, if there are modal properties, they are grounded in the categorical properties of more than one world. So, on a worlds scheme, the actual world has some arrangement of categorical properties, but alternative arrangements are represented in other possible worlds, and modal properties are grounded in the many different arrangements. There is, on this view, a categorical ground, but the ground is not wholly actual.⁴ Plausibly, “worlds” or “stories” are useful for explication and illustration of modal notions (and my appeals to “worlds” in this paper are for such purposes), however, there are reasons to hold that non-actual worlds cannot contribute in the right way to a ground. I develop these points elsewhere.⁵ With respect to grounding, at least a couple of remarks are in order here. First, maybe there are no non-actual worlds. In this case, it is immediate that other worlds do not contribute to a ground. But suppose there are non-actual worlds. Still, if I were suddenly to find out that there aren’t any worlds where I take a walk now, my reaction would not be “So much the worse for its being possible that I take a walk,” but “So much the worse for the relevance of possible worlds.” Somehow, the way things are in *this* world makes it possible to take a walk. Indeed, the very idea of a property or truth not wholly grounded in actuality may seem bizarre or occult. If this is right, there is a problem about the relevance of other worlds to modal truth and (AG) actual modal properties have an actual ground.

Given NG and AG, if there are actual modal properties, their ground is not wholly categorical—and there is a problem about CG. Thus one might reject the “Humean” picture according to which a world is just an arrangement of intrinsic qualities which need nothing bigger than a point at which to be instantiated, and hold that worlds include some different fundamental features in which modal properties have their ground. Then, insofar as categorical properties remain requirements on “Humean” qualities, CG is false. Motivations for AG may, however, *support* the claim that modal properties have a categorical ground.

In order to develop this, it is important to avoid a certain ambiguity. For any categorical property *C*, one can make sense of its *necessitation*, *being necessarily C*—which a thing has iff it is *C* in every world, and its *essentialization*, *being essentially C*—which a thing has iff it is *C* in every world where it exists. One can also make sense of the *categoricalization* of such modal properties—so that *C* is

the categorialization of *being necessarily C* and of *being essentially C*. But it may not be clear whether *being NaCl*, say, is a categorial property, the essentialization of a categorial property, or something else; and given just that a thing has some *essence E* in every world where it exists, it may not be clear whether *E* is a categorial *C* had essentially, *C*'s essentialization, or something else. I propose to resolve such ambiguity as follows: Whether *E* is *C*, *being necessarily C*, *being essentially C*, or something related, $(E)^n$ is *being necessarily C*, $(E)^e$ is *being essentially C*, and $(E)^c$ is *C*. Similarly, whether *being NaCl* is the necessitation or essentialization of some categorial property, whether it is categorial or has some internal modal structure, $(\textit{being NaCl})^c$ is whatever is required categorically, without requirements on other worlds, by *being NaCl*, $(\textit{being NaCl})^n$ is the necessitation of that categorial property, etc.

Now, it seems natural to say of a tablet with $(\textit{being NaCl})^c$ that it is soluble, and that it is soluble because of its $(\textit{being NaCl})^c$. And, similarly, it seems natural to say of a person with $(\textit{arising from such-and-such genetic material})^c$ that she arises from it essentially—and this because of her $(\textit{arising from such-and-such genetic material})^c$. By way of analogy, suppose I claim to have “ultimate greatness,” and insist that my doppelgänger in a world categorically the same as ours does not have ultimate greatness (or has it only on alternate Thursdays); when pressed for those features in virtue of which I have it and he does not, I respond, “There is no difference beyond our differing with respect to ultimate greatness, it is a brute fact that I have it and he does not—or at least a fact not grounded in our categorial features.” This is hard to swallow. It is natural to think that the ultimate greatness (whatever it may be) must find its ground in categorial features. Similarly for serious moral properties. And similarly in the modal cases. In the above cases, modal features seem fixed once actual categorial ones are given, and the things seem somehow to have their modal features because of their actual categorial ones. On this account, then, AG is motivated together with CG.⁶

It is now a short step to a full-blown problem about modal truth. Just as our theories tell us that there are rocks and that these would remain if there were no minds, so they tell us that rocks have modal features and that these would remain if there were no minds. Thus it is natural to think that (MP) things actually have objective modal properties. From CG, these modal properties have a categorial ground and, from AG, they have an actual ground; so the modal properties have an actual categorial ground. But, from NG, no modal property has an actual categorial ground. “Solutions” take the form of denying (MP) that things actually have objective modal properties (as in some versions of empiricism), denying (CG) that modal properties have a categorial ground (as those who make modal facts primitive and unexplained), denying (AG) that modal properties have an actual ground (as those who expand the base into other worlds), or denying NG and arguing for the sufficiency of some actual categorial ground. I accept MP, CG and AG, and so argue for the sufficiency of some actual categorial ground. Alternatives are relatively unpalatable. Modality is deeply enough embedded in our theories to undercut the first option. Similarly, given a plausible alternative,

few philosophers would embrace possible worlds in the required sense, and it may be difficult to resist the different pressures which motivate categorical grounding; so the other options look unattractive as well. In any case, reasons for denying the existence of modal properties or denying the existence of an actual categorical ground seem related to the failure of attempts to locate an adequate ground in actuality.⁷ And an account of modal properties that respects CG and AG will itself count as a positive reason for thinking that modal properties have an actual categorical ground. An account according to which modal properties have an actual categorical ground might also leave room for a straightforward explanation of modal knowledge.⁸ So there should at least be no objection against an attempt to find a solution of this sort.

(B) *De Re*.

Traditionally, philosophers have distinguished between modality *de dicto* and modality *de re*—where the proposition expressed by ‘Necessarily whatever is green is colored’ is *de dicto* and the one expressed by ‘Possibly Quine is a rock’ is *de re*. There are different ways to characterize the difference between the propositions. Intuitively, *de re* modality is supposed to depend on the modal properties of things (or on modes of their properties), where *de dicto* modality is supposed to depend on features of a proposition or saying. On a worlds picture, *de re* modality “traces” particular objects across worlds, where *de dicto* modality does not. So, e.g., the proposition expressed by ‘Possibly Quine is a rock’ traces Quine from world to world, and concerns whether there is one in which he is a rock. In contrast, the proposition expressed by ‘Necessarily whatever is green is colored’ focuses on the green things in one world, the green things in another, etc., without respect to which things are which across worlds. On the usual scheme, this distinction corresponds to a formal one according to which a sentence (is *de re* and) expresses a proposition that is *de re* iff it has a proper name inside the scope of a modal operator, or a variable in the scope of a modal operator not bound by a quantifier in the operator’s scope; and a sentence (is *de dicto* and) expresses a proposition that is *de dicto* iff it is not *de re*. On this basis, ‘Possibly Quine is a rock’ and ‘There is a man such that possibly he is a rock’ with their natural symbolizations, ‘ $\diamond Rq$ ’ and ‘ $\exists x(Mx \ \& \ \diamond Rx)$ ’ are *de re*. ‘Necessarily whatever is green is colored’ with its natural symbolization, ‘ $\Box \forall x(Gx \supset Cx)$ ’ is *de dicto*. Let’s begin with the assumption that these characterizations capture the same distinction, and focus on the *de re*.

Though he is not enthusiastic about necessity and possibility on any account, it is well known that Quine, and many others, have thought *de re* modality to be particularly problematic.⁹ So, e.g., one might hold that meanings, or property structures (or whatever) underwrite *de dicto* modal principles of the sort, ‘ $\Box \forall x(x \text{ is colored} \equiv (x \text{ is red} \vee x \text{ is blue} \vee \dots))$ ’, ‘ $\Box \forall x(x \text{ is a bachelor} \equiv (x \text{ is male} \ \& \ x \text{ is unmarried}))$ ’, etc. It is then natural to say something like, “for any proposition \mathcal{P} , \mathcal{P} is *necessary* iff its necessity follows from the principles, and \mathcal{P} is *possible* iff its negation isn’t necessary.” The meanings or property structures (or whatever)

might, in some extended sense, count as “categorical” features of the world and be legitimate candidates for a ground. Maybe, so far so good.¹⁰ But the approach does not obviously suffice for the *de re* case. Insofar as the principles are necessary *de dicto*, they have nothing to do with the properties of particular individuals. So it does not follow from the principles that $\Box \sim Rq$. So, on the suggested account, $\Diamond Rq$. Maybe we get that necessarily no person is a rock—that there is no world where something is both a person and a rock. But it does not follow that a thing that is a person in one world, is not a rock in another. Presumably, though, nothing that is a person could be a rock. As such, then, a solution to the problem of *de dicto* modality leaves the problem of *de re* modality intact.

But the difficulty is not merely that a solution to one leaves the other intact. Rather, Quine argues that there are special difficulties for the *de re* case. By the indiscernibility of identicals, if x is identical to y , x has the same properties as y . Quine thinks this principle fails for supposed modal properties, and therefore that the very idea of a modal property is absurd. (If things do not have modal properties and things are assigned to variables and proper names, then there are corresponding problems for formally *de re* sentences—quantified and otherwise.) Quine’s own cases tend to depend, in one way or another, on sentences involving definite descriptions, and there are well-known replies. Here’s a case, not Quine’s, that illustrates the difficulty: The proposition expressed by ‘Necessarily the inventor of bifocals invents bifocals’ seems true, and the one expressed by ‘Necessarily the first postmaster general invents bifocals’, false. But the inventor of bifocals is the first postmaster general. At one level, then, Quine would like to see us as first granting and then withholding *being necessarily the inventor of bifocals* to the same individual and so, as violating the principle. Depending on scope considerations, however, these sentences are *de dicto*: propositions expressed by them do not require tracing any individual from world to world, but rather only “checking” worlds to see which person or persons happen to be their inventor of bifocals and first postmaster general. So, in this case, there seems to be no question of a modal property of a particular thing, and so no violation of the indiscernibility of identicals. Against Quine, then, Marcus, Kripke and others have responded that it is important to separate proper names (which trace individuals across worlds) from definite descriptions (which need not); they suggest that if one does keep them and their roles distinct, problems evaporate. So I turn to a case that seems to avoid these replies.

Suppose god creates *ex-nihilo* a clay statue, and later annihilates it into nothing.¹¹ On some occasion, a person points to the statue and says, “Let this statue be called ‘ s ’.” The name enters into the language and is transmitted in the usual way. *Prima facie*, ‘ s ’ is as good a proper name as any. Similarly, on some occasion, a person points to the thing and says, “Let this lump of clay be called ‘ l ’.” The name enters the language and is transmitted in the usual way. *Prima facie*, ‘ l ’ is as good a proper name as ‘ s ’. The thing named by ‘ s ’ and the thing named by ‘ l ’ have their actual categorical features: shape, weight, spatiotemporal location, etc.

in common, and it is natural to think that $s = l$. But there is a problem if we admit the *de re* claims,

(1) Necessarily s is not as flat as a pancake,

and,

(2) Possibly l is as flat as a pancake,

for then we seem to allow that l has *being possibly as flat as a pancake*, but s does not. With $s = l$, then, there is a problem about the indiscernibility of identicals. And even without $s = l$, insofar as s and l seem categorically the same but modally different, there is a difficulty about AG and CG—about the claim that modal properties have an actual categorical ground. Where both designators are proper names, it is not obvious how the standard anti-Quinean strategies apply. So it is important for the lump-statue case that ‘ s ’ and ‘ l ’ are proper names, and that the one is as good a proper name as the other.¹² The different approaches to thinghood set up different responses to this case.

II. Four Approaches to Thinghood: Three Essentialist, One Not

Suppose we have in hand some viable account of *de dicto* modality. Then it is natural to build a response to the problem of *de re* modality on the already existing *de dicto* account. Say we are worried about whether Quine can be a rock. As above, purely *de dicto* modal principles do not give the result that $\sim \Diamond Rq$. The problem would go away with the addition of *de re* principles including something like, ‘ $\Box \forall x(x \text{ is-quine} \equiv x = q)$ ’; then if ‘ $\Box \forall x(x \text{ is-quine} \supset \sim(x \text{ is a rock}))$ ’ follows from already accepted *de dicto* principles, we get the result that ‘ $\Box \sim Rq$ ’ follows from all the modal principles taken together, and therefore the result that it is not possible for Quine to be a rock. If there is some property such that necessarily a thing has it iff it is Quine (say, *being Quine* or *being that person*) the *de dicto* solution takes us the rest of the way.¹³

This case suggests a schema for what I will call an “essentialist” solution to the problem of *de re* modality. The idea is that things have “linked” to them some properties already associated with the *de dicto* solution (*essences* if you will), and that modal constraints are precisely the constraints already associated with those properties. Where ‘ $a \approx b$ ’ indicates that a and b have all their categorical properties in common, it is enough to hold that any thing a is linked to an essence E so that $\Box \forall x(Ex \equiv x \approx a)$; then, for categorical P , ‘ $\Box Pa$ ’ is equivalent to the *de dicto* ‘ $\Box \forall x(Ex \supset Px)$ ’. If categorical sameness is sufficient for identity then, as above, $\Box \forall x(Ex \equiv x = a)$ —and the equivalence holds for any P . At any rate, the essentialist strategy is to move from some *de re* principles about essence, through the *de dicto* solution, to the full range of *de re* modality.¹⁴ The strategy does not itself

“solve” the problem of *de re* modality; rather, it only locates it. The full range of *de re* modality is explained with the *de dicto* solution and some “basic” *de re* principles about essence. Assuming a *de dicto* solution, the issue centers on the ground for the basic principles, and therefore on the link between essences and things.¹⁵ Of course, Quine could hardly lack a property required to be Quine, and the essentialist might argue that essences figure in what it is to be a thing, or in a thing’s specification, so as to justify the required principles. In order to flesh this out, and to move in the direction of a positive account, I turn to some particular accounts of what it is to be a thing.

I sketch a range of thing theories and select among them. Some approaches to things allow that there are things which others do not. In setting up relatively “dense” theories it is thus difficult to avoid what advocates of “sparse” ones will see as much ado about (what is literally) no thing. To avoid this, I’ll talk in terms of general “thing-candidates”—where this talk should be eliminable, and so acceptable from each of the many perspectives. Let’s restrict attention to substantial physical things and assume some initial perspective about them. Whatever this may be, it should make sense to say of things that they have such-and-such categorical properties at such-and-such spacetime points. Given this, from any initial perspective, we should be able to make sense of the entire range. A preliminary notion is required: If a thing has some categorical properties at a spacetime point in a world, say there is a *point-candidate* in that world with just those properties. Point-candidates are identical iff their (categorical) properties are the same. Distinct things overlapping at a point where they agree categorically result in a single point-candidate there, but it is not required that overlapping things agree in this way: if things overlap where they are categorically different, there are different point-candidates there (maybe things are fields and fields so overlap). Now, for any set of point-candidates in a world, let those candidates be a *thing-candidate*. Insofar as categorical properties are requirements on point-distribution of qualities, it should make sense to say that thing-candidates have categorical properties depending on categorical properties of their points. Distinct thing-candidates differ categorically—differing in categorical properties at at least one point. There are a *lot* of thing-candidates. Some are incredibly small, and some are incredibly brief. Some correspond to persons, trees and buildings. But others are instantaneous, point-sized, or scattered across time and space. If one thing-candidate is a *part* of another just in case all of its point-candidates are point-candidates of the other, then “ordinary” thing-candidates are parts of myriads of others that are, presumably, less ordinary.

Some clarification and qualification is in order. So far, it is an open question whether the lump is distinct from the statue, whether there are point-sized or scattered objects, whether things are temporally extended, etc. So one might worry that this thing-candidate setup begs questions against certain accounts of things. But the idea is precisely to *set up* such questions. Existential claims about candidates are not existential claims about the furniture of the universe. Rather, such claims require no more than that there are or can be things (proper) with such-

and-such categorical features at such-and-such spacetime points. Perhaps there will be problems of vagueness or ambiguity about which thing-candidates have (*being the Eiffel Tower*)^c or (*being the outback*)^c. Suppose these are somehow resolved.¹⁶ Still, I do not suggest that every candidate corresponds to something people would ordinarily recognize. Maybe one is ordinary; maybe Martians would recognize it as “ordinary” though we do not. But it doesn’t matter. What matters is that we are in a position to specify all the things there are supposed to be for each of the theories to be described. The many thing-candidates are appropriate for this end. Similarly, some thing-candidates are temporally as well as spatially extended. But I do not mean to decide for a four-dimensional over a three-dimensional account of things. Given the many thing-candidates, there is sure to be a reasonable correlation between thing-candidates and the things a three dimensionalist thinks there are. The main outlines of my discussion will remain on a “three-dimensionalist” translation; so I prefer to allow that three dimensionalism may be right, and to remain neutral on this issue. Also, I do not want to engage in controversy over physics. Maybe, for whatever reasons, there are problems about point instantiation of properties. Still, in some sense, physics has to be telling us about the way ordinary things are at various spacetime locations. So let the account of ultimate reality be the true one. Then, subject to what we may think of as simplifying assumptions, this discussion begins where that one leaves off.

As I have suggested, one might think of essences as categorical properties, or as essentializations of categorical properties. The former may seem more natural—at least when one wonders whether *being under six feet tall* is “part” of some person’s essence. At any rate, it will facilitate discussion if we think of essences exclusively as categorical. Insofar as essences are categorical, thing-candidates may have them. Say an *essence* is a categorical property linked to a thing so that necessarily, the thing exists with such-and-such categorical properties iff a thing-candidate with those properties has the essence. So far, it is an open question whether there are any essences and, if so, which properties they are. If there are essences, though, no essence can be instantiated by distinct thing-candidates: if some thing-candidates have an essence, then there is a thing with just the categorical properties of the one thing-candidate, and just the categorical properties of the other thing-candidate; so the thing-candidates have just the same categorical properties; so the thing-candidates are the same—where quantifiers range over thing-candidates at worlds, $\Box \forall x \forall y ((\mathcal{E}x \ \& \ \mathcal{E}y) \supset x = y)$. Let’s say a categorical property which cannot be instantiated by distinct thing-candidates is an *essence-candidate*. Of course, again, I do not claim that everyone, or even that anyone, will grant that every essence-candidate is an essence proper. (*Being the inventor of bifocals*)^c as well as (*being Benjamin Franklin*)^c are essence-candidates. Similarly, (*being the presidents of the United States*)^c is an essence-candidate—one actually had by a spatially discontinuous thing-candidate spread over more than 200 years. The (*inventor*)^c and (*president*)^c properties are not “ordinary” essences, so not all essence-candidates are ordinary. What I do sug-

gest is that one way of thinking about our range of thing theories is to think of the theories as differing in their treatment of essence-candidates.

The approaches to thinghood divide along three lines. The “essentialist”/“non-essentialist” division has to do with whether there can be things without essences. The essentialist thinks there can be no such things, and the non-essentialist that there can. For simplicity, identify (or lump together) essence-candidates that are necessarily coextensive—thus we won’t distinguish *being Quine* from, say, *being a round square or Quine*; and, correspondingly, identify (or lump together) things which cannot differ categorically. Within essentialism, the “mad-dog”/“moderate” distinction has to do with whether there can be thing-candidates that instantiate more than one essence. The mad-dog essentialist thinks there can be such thing-candidates, and the moderate that there cannot. Moderate essentialism requires that essences be selected from among essence-candidates, and the “genuine”/“pseudo” division has to do with whether people somehow divide among essence-candidates to determine which are essences. The genuine essentialist thinks selection of essences from among essence-candidates is objective, and the pseudo that it is not. Thus there are non-essentialism, mad-dog essentialism, moderate genuine essentialism, and moderate pseudo-essentialism.

First, on a *mad-dog essentialist* view, (ES) necessarily, any thing is linked to an essence, and (MA) there can be thing-candidates that instantiate more than one essence. On an essentialist view, each thing is linked to some essence, but no thing is linked to more than one: suppose a thing is linked to essences E1 and E2; then at any world the thing exists with such-and-such categorical properties iff a thing-candidate with those properties has E1, and the thing exists with those categorical properties iff a thing-candidate with those very same properties has E2; so a thing-candidate has E1 iff it has E2; but any thing is linked to some essence, and so has just the categorical properties of some thing-candidate; so at any world a thing has E1 iff it has E2; so $E1 = E2$, and the thing is linked to just one essence. Given this, different things might have all their categorical properties in common: from MA, a single thing-candidate might have essences (*being this statue*)^c and (*being this lump*)^c; then there is a thing linked to (*being this statue*)^c, and a thing linked to (*being this lump*)^c; but no thing is linked to more than one essence, so there is one thing linked to (*being this statue*)^c, and another linked to (*being this lump*)^c—where each has just the categorical properties of the thing-candidate, and so just the categorical properties of the other.¹⁷ Thus a simple solution to the lump-statue case is available: there is no problem with the indiscernibility of identicals, precisely because *s* and *l* are not identical. The lump and the statue differ modally insofar as the one has (*being this statue*)^c in every world where it exists and the other does not. In fact, the full essentialist solution is up and running: If a thing exists, it has just the categorical properties of a thing-candidate with its essence; so it has its essence. But any thing has just the categorical properties of some thing-candidate; so if a thing instantiates an essence, it has just the categorical properties of a thing-candidate with the essence; so it has just the

categorical properties of the thing linked to the essence. So, where a is linked to E , $\Box\forall x(Ex \equiv x \approx a)$, and for categorical P , $\Box Pa$ iff $\Box\forall x(Ex \supset Px)$.

MA does not rule out all selecting of essences from among essence-candidates; it requires only that essences are not selected so as to rule out the possibility of thing-candidates with more than one essence. Insofar as there is selecting among essence-candidates, there may be “genuine” and “pseudo” versions of the mad-dog view, with difficulties as discussed below. However, mad-dog essentialism does not require selecting essences from among essence-candidates. On the simplest (“maddest”) mad-dog view, every essence-candidate is an essence. Then there is no selecting among essence-candidates, and very many things share categorical properties. There are the lump and the statue, but perhaps also things corresponding to (*being this stuff*)^c, (*being these atoms*)^c, (*being these molecules*)^c, (*being in this spatiotemporal location*)^c, or whatever—all categorically the same but modally different. In this case (and whenever a thing-candidate has more than one essence) it seems impossible to separate a thing from its essence. Consider this analogy: By extensionality, a set x is identical to a set y iff x has the same members as y . So, e.g., $\{\phi\}$ cannot remain identical to $\{\phi\}$ and be “changed” into $\{\phi, \{\phi\}\}$ because being $\{\phi, \{\phi\}\}$ is being a different set from $\{\phi\}$. Switching members switches sets; thus it is natural to think that the members of a set are essential to it. Similarly, on the mad-dog view, a thing is distinguished from the full range of other things only insofar as it is linked to a unique essence, and so has the associated modal properties. Switching essences switches things; thus it is natural to think that a thing cannot exist apart from its essence—and so that people cannot decouple a thing from its essence. Given this, the maddest mad-dog view, at least, seems positioned to satisfy MP, according to which things actually have objective modal properties.¹⁸

However, there are reasons to worry. For some, it will be enough that distinct substantial physical things are supposed to have all their categorical properties in common. Maybe one allows that an immaterial soul, or a physical field, may occupy the same spatiotemporal location as a substantial physical thing. But it is more difficult to admit that one substantial physical thing may have *all* the same categorical properties as another.¹⁹ I suspect that the worry derives from concerns about grounding. The mad-dog philosopher is committed to the claim that possibly things are categorically the same but modally different. Thus the mad-dog philosopher violates the conjunction of CG and AG (generalized to apply across worlds). But the problem is not merely that objects in distinct worlds, like my doppelgänger and I, share categorical properties and differ otherwise. Rather, things in the *same* world share categorical properties and differ otherwise. This is particularly mysterious.

It is enough to make a couple of related points about grounding. First, it is natural to accept a grounding principle according to which complex things have their properties by virtue of the properties and relations, categorical or otherwise, of their parts. If this is so, and the lump and statue have the *very same* atoms as parts, their properties should be the same. But, on the mad-dog view, they are

not.²⁰ So either the lump and the statue do not have the same atoms as parts, or complex things do not have their modal properties by virtue of the properties and relations of their parts. In the former case, one might suggest that there are some “latoms” and “satoms” which are categorically the same but modally different, where the lump has the former as parts and the statue the latter. This is at least odd. And if we think of the world as an arrangement of qualities, categorical or otherwise, by virtue of which there are the things there are, it isn’t clear whether such differences can be pushed “all the way down”—whether and how such differences find a ground in the actual distribution of qualities (and similarly, if we think of the world as an arrangement of masses or stuffs with different fundamental features). But maybe things do not have their modal properties by virtue of the properties and relations of their parts. Perhaps things which agree categorically and differ modally somehow rest on a “modally inert” quality distribution, in which their essences are instantiated—so that the existing of a thing just *is* the instantiating of its essence. In this case, the principle according to which complex things have their properties by virtue of the properties and relations of their parts fails, and we seem to allow that modal properties may differ where actual quality distribution is the same. In either case, then, there is a question about AG, taken apart from CG.

At any rate, the conjunction of AG and CG (generalized to apply across worlds) is denied. Maybe some mad-dog theory accounts for ordinary applications of ‘thing’. Still, *we* began with a question about grounds for modal properties—and the inventor-of-bifocals and lump-statue cases may seem precisely intended to distinguish modal properties which are grounded from those which are not. Thus, on the mad-dog approach to *de re* modality, the subject seems somehow to have changed: things “have” modal properties, but have them apart from the relevant grounds. Given the mad-dog approach to things, there is room to reintroduce the original problem—perhaps with the introduction of some “shmings,” all of whose properties are grounded, and talk of “de shming” modality.

Within the essentialist framework, though, it is possible to alleviate some of this pressure on grounding by being more selective about the essences. In this way, one might hope to avoid the consequence that things may agree categorically and differ modally. On a *moderate essentialist* view, (ES) necessarily, any thing is linked to an essence, and (MO) necessarily, no thing-candidate instantiates more than one essence. On an essentialist view, any essence is linked to some thing, but no essence is linked to more than one: suppose some things are linked to essence E; then at any world the one exists with such-and-such categorical properties iff a thing-candidate with those properties has E, and the other exists with such-and-such categorical properties iff a thing-candidate with those properties has E; so at any world the things have just the same categorical properties; so the things are the same, and the essence is linked to just one thing. Given this, different things differ categorically: from ES, any thing is linked to some essence; but no essence is linked to more than one thing, so different things are linked to different essences; so, given MO, different things have just the categorical prop-

erties of different thing-candidates; so different things differ categorically. In this case, though, essence tracks identity. As before, if a thing exists, it has just the categorical properties of a thing-candidate with its essence; so it has its essence. But if a thing has an essence, it has just the categorical properties of a thing-candidate with the essence; so it has just the categorical properties of the thing linked to the essence; and, since different things differ categorically, it *is* the thing linked to the essence. So, where a is linked to E , $\Box\forall x(Ex \equiv x = a)$, and $\Box Pa$ iff $\Box\forall x(Ex \supset Px)$.

For a view of this kind, one might focus on properties of the sort (*being in this space-time location*)^c, or (*being this stuff*)^c as the only properties that are essences.²¹ On a more traditional approach, one might try for a mixed collection of properties, say, (*being this person*)^c, (*being this chair*)^c, etc. But on any such account, not both (*being this lump*)^c and (*being this statue*)^c are essences.²² So, seemingly, not both (1) and (2) are true. Suppose (*being this lump*)^c is the essence. Then the thing exists in a world just in case (*being this lump*)^c is instantiated there. Plausibly, there is a world where (*being this lump*)^c is instantiated in something as flat as a pancake. So (2) is true. As a claim about the *thing*, however, (1) is not—for we have allowed that the thing can be as flat as a pancake. Similarly, if (*being this statue*)^c is the essence, (1) is true, and (2) seems not. Or perhaps (*being this stuff*)^c is the essence, and we shall have to allow that the thing could have been a scattered object. Etc.

Suppose the essence is (*being this lump*)^c, and that it is therefore possible for the thing to be as flat as a pancake. If (1) is true, any view that denies it is mistaken. So it is natural for the moderate essentialist to offer some account of (1) according to which it is not, strictly speaking, about the thing. One option is to suggest that reference for relevant terms “switches” so that (1) is a true claim about some “fictional object,” “process” or the like.²³ Then, as for the mad-dog essentialist, there is no problem with the indiscernibility of identicals because $s \neq l$. Michael Jubien (1993) suggests another option. In effect, he appeals to essence-candidates that are not essences, and analyzes the claim that necessarily s is not as flat as a pancake as a *de dicto* statement of the sort ‘ $\Box\forall x(x \text{ is-the-statue} \supset \sim(x \text{ is as flat as a pancake}))$ ’. On this basis, as with the inventor of bifocals, there is no problem about the indiscernibility of identicals because no object is traced from world to world. At any rate, corresponding to the moderate essentialist’s selecting among essence-candidates, is some selecting among the formally *de re* claims we might have been inclined to make: either some are false, or some are analyzed into something other than straightforward *de re* modal claims about things.

Insofar as selecting essences from among essence-candidates avoids the consequence that things may differ modally without categorical difference, moderate essentialism avoids the objections brought against mad-dog essentialism. But selecting essences from among essence-candidates raises problems of its own. In addition to ES and MO, the moderate *genuine* essentialist accepts that (GE) selection of essences from among essence-candidates is objective. But it is natural

to worry that any selecting among essence-candidates is arbitrary. If the view is to accommodate a response to the problem of modality, there must be a ground for the selection among essences, and so for the required *de re* principles. But why select properties of the sort (*being this stuff*)^c over (*being in this space-time location*)^c? Or why select (*being this lump*)^c over (*being this statue*)^c? A thing, presumably, has many essence-candidates. Insofar as each is sufficient to drive an account of things and *de re* modality, each seems an equally strong candidate for essencehood. Say there are two murders, differing only in that one is a stabbing and the other a strangulation. Insofar as we think the difference between stabbing and strangulation is morally irrelevant, we are under pressure to hold that the moral evaluation of the events is the same. No categorical property makes one better than the other. And similarly for modality. Insofar as we think there is nothing *modally relevant* distinguishing among the various essence-candidates, there is reason to think that moderate genuine essentialism is false (and perhaps pressure in the direction of mad-dog essentialism). No categorical property makes one candidate necessary and the other not. Of course, one might hold out for the primitive moral fact that, say, all other things being equal, strangulation is better than stabbing; and similarly, one might hold out for a primitive modal fact that some properties are essences and others are not. Perhaps there are some such facts. For our purposes, though, there is trouble insofar as the grounding requirement from CG and AG fails.²⁴

However, Jubien, at least, is not a genuine essentialist. In places, he suggests that the selecting of essences from among essence-candidates is conventional. Thus his position is pseudo-essentialist. In addition to ES and MO, the moderate *pseudo*-essentialist accepts that (PS) selection of essences from among essence-candidates is not objective. Perhaps the pseudo-essentialist reasons as follows: Either the world selects certain properties as essential to things or it does not. If it does, then some genuine essentialist position is right. If it does not, then things are “multiform.” A thing may have the properties, (*being this statue*)^c, (*being this lump*)^c, (*being this stuff*)^c, and whatever, but the point of calling a thing “multiform” is that none of these is singled out by the world as essential to it—or as uniquely determining what it is to be it. *Prima facie*, this is a problem: It is by association with a unique essence, that the essentialist has so far been able to account for a thing’s modal properties. And if a thing traces across worlds, the tracing itself selects a unique essence—the one had by *it* in each world; so, on this view, things do not by themselves trace across worlds. Thus there is a question about how things have their modal properties. But the moderate pseudo-essentialist accepts that things are, in fact, linked with essences. Perhaps it is convention which supplies that “missing” element that justifies the selection of just one essence from among a thing’s essence-candidates. Given this, proceed as before: On Jubien’s view, essences are properties of the sort (*being this particular stuff*)^c. The stuff, that is the thing, which actually is (predicatively) this statue and this lump, might have been scattered; so it is appropriate to say of it that possibly it is a scattered object; but one wouldn’t want to say that something scattered could

have (*being this statue*)^c or (*being this lump*)^c, and Jubien gives sentences like (1) and (2) *de dicto* readings of the sort, “necessarily, whatever is-the-statue (or is-the-lump) has such-and-such features.” Of course, other moderate options are available.²⁵

In this case, what people say may itself count as an actual categorical ground. If it does, CG and AG are satisfied. Perhaps some moderate pseudo-essentialist theory is correct as an account of talk about things.²⁶ But, again, there are reasons for *us* to worry. First, anyone who thinks that a tablet with (*being NaCl*)^c is soluble because of its (*being NaCl*)^c, and/or that a person with (*arising from such-and-such genetic material*)^c arises from it essentially because of her (*arising from such-and-such genetic material*)^c, is likely to think that the moderate pseudo-essentialist mislocates the actual categorical ground: the ground is to be found in the (*being NaCl*)^c, and (*arising from such-and-such genetic material*)^c, rather than in what people say or do. Whatever one says about this, on the moderate pseudo-essentialist view, it is not the case that (MP) things actually have objective modal properties. Given a particular thing, on the moderate pseudo-essentialist view, it is not objective that one property is its essence rather than another; so it is not objective that the thing has certain modal properties, rather than others; so MP fails. MP is, in effect, another constraint on grounding. On the moderate pseudo view, there may be a ground, but not a ground of the sort to satisfy MP.

Problems about grounding the selection of essences from among essence-candidates disappear if there are no essences. So, finally, let’s consider a non-essentialist view. On a *non-essentialist* view, (NE) there can be things linked to no essence. In the simplest case, there are no essences. For now at least, take this to be the non-essentialist view. Then there are no problems about selecting essences from among essence-candidates, and things are multiform. In this case, it is not merely that things do not “by themselves” trace across worlds, but rather that things do not trace across worlds at all. If a thing is linked to no essence, there can be no fact about which things are it in other worlds. If there is a fact about which things are it in different worlds, then there is an essence to which it is linked—the one had by a thing in a world just in case the thing is *it* (I assume properties are “abundant” enough that there would be some such essence-candidate).²⁷ The non-essentialist can avoid the mystery of mad-dog essentialism by saying there is no more than one thing corresponding to any thing-candidate (indeed, if things do not trace across worlds, and different things can differ categorically, it is not clear how the non-essentialist can say otherwise). At any rate, insofar as things do not trace across worlds, given our characterization of *de re* modality, there are serious questions about whether things have modal properties at all.

Perhaps the non-essentialist is inspired by the suggestion that if “alternative” accounts are adequate to accommodate some formally *de re* sentences, then maybe some such account is adequate to accommodate them all. So, e.g., perhaps reference shifts so that *de re* modal claims are in general about fictional objects; or

perhaps formally *de re* modal claims can in general be analyzed into those that are *de dicto*. Either way, the non-essentialist seems to require *some* associations with essence-candidates for modal truth—the fictional object “has” one, the *de dicto* analysis incorporates one, or whatever. Perhaps a relation between essence-candidates and reference is supposed to do the job. Grant that some such account makes sense of (1) and (2). Still, there is a problem about modal properties. So far, non-essentialism seems to be a more-or-less sophisticated denial of the claim that things have modal properties, rather than a view according to which (MP) things actually have objective modal properties.²⁸

Thus we encounter a “bulge” associated with grounds for modal properties. Essentialism makes room for modal properties, but has problems with a ground; non-essentialism shifts the difficulties into difficulties for modal properties themselves. Shifting the account of things shifts the bulge, but does not seem to push it down. Without comment on the view which best accounts for ordinary uses of ‘thing’, I claim that non-essentialism, with its “bare-bones” approach to things, puts us in the best position to think about modal properties and grounds. In the next section, I develop and defend a non-essentialist account on which, I claim, things have objective modal properties, and modal properties have an actual categorical ground. Inevitably, what I say is sketchy and incomplete. But it is suggestive of responses to a significant range of questions, and I think the view thus receives support by its explanatory power.

III. Modified Essentialism

Assume a non-essentialist position on which there is exactly one thing corresponding to each thing-candidate, and there are no essences. Say the non-essentialist thinks there are connections between reference and essence-candidates so that (1) is equivalent to something like ‘ $\Box \forall x(x \text{ is-the-statue} \supset \sim(x \text{ is as flat as a pancake}))$ ’. Given this, a *de dicto* solution may seem sufficient for the problem of modality. In this section, I begin by agreeing that there are associations between reference and essence-candidates so that (1) is equivalent to something like ‘ $\Box \forall x(x \text{ is-the-statue} \supset \sim(x \text{ is as flat as a pancake}))$ ’. However, I go on to argue that the associated solution is not *de dicto*. An essentialist might hold that things with (*being this statue*)^c have cross-world identity. Given our non-essentialist assumption, we cannot allow that this is so; still, there are other cross-world relations. I suggest that things with (*being this statue*)^c stand in a cross-world “same statue” relation which itself grounds *de re* modality. Insofar as both the essentialist and the non-essentialist allow that things have (*being this statue*)^c just in case they stand in cross-world relations which ground *de re* modality, but disagree about the relation, one might see the proposed view as a sort of “modified” essentialism, with (*being this statue*)^c as a sort of “modified” essence. But be clear: insofar as the relation isn’t identity, modified essentialism isn’t essentialism, and modified essences aren’t essences.

Some associations between reference and essence-candidates may seem to be part of the data. If (1) and (2) are true, ‘s’ works differently from ‘l’; somehow, ‘s’ makes (*being this statue*)^c matter for (1) where (*being this lump*)^c matters for (2). And similarly when modal claims seem to fail. It is natural to ask whether *this statue* could have been as flat as a pancake, and to ask whether *this lump* or *this stuff* could have had that shape. In contrast, there is something odd about the question of whether the thing that is this stuff, i.e. the thing that is this lump, i.e. the thing that is this statue, could have been as flat as a pancake. Presumably, there is no problem about whether it is red or two feet tall. In the modal case, however, the thing is identified, but without recourse to any one essence-candidate—where this seems to explain the oddity. Naturally, the different approaches to things have different ways to account for the data. However, insofar as each explains the full range of data (and pending developed accounts of reference), it may be that each introduces associations between essence-candidates and reference: the mad-dog essentialist to distinguish things that agree categorically, the moderate essentialist and non-essentialist to distinguish among different, maybe alternative, accounts. Insofar as each requires such associations, none is at a relative disadvantage for doing so. Still, it is hardly clear how the associations are supposed to work. If ordinary names are associated with essence-candidates, what prevents using the candidates to do away with names altogether? And, post-Kripke, how can there be associations between reference and essence-candidates of the sort modified essentialism (or any account) requires?

In one place (1981, 17), Robert Adams suggests thinking of a thing’s *thisness*—the property of *being identical with it*—as a pair that has, as one member, the relation of identity, and as the other, the thing. Whatever one thinks about this identification, it is natural to treat (*being this statue*)^c, (*being this lump*)^c, (*being this stuff*)^c, etc., as corresponding to pairs $\langle \alpha, k \rangle$ of thing and kind property. The first member of the pair *is* the thing, and the second is the kind—(*being a lump*)^c, (*being a statue*)^c, or whatever—so the pair does not depend on language. Plausibly, though, necessary for reference to the pair, and for reference to the corresponding property, is reference to the thing. (*Being this statue*)^c is one thing and (*being that statue*)^c is another; *this statue* has (*being this statue*)^c and *that statue* has (*being that statue*)^c. Similarly, if this is a world of two-way eternal recurrence, it is one thing to be this statue, and another to be the corresponding statue in a previous age. The point is not that the property *is* the pair, or that properties somehow have things as “constituents,” but rather that reference to the things (or something like it) is required to disambiguate the properties. If this is right, we are in a position to explain the use of names in formally *de re* claims. Even if truth conditions for propositions expressed by modal sentences depend on relations between properties, still, for certain properties—properties “gotten” only by way of things, reference to the things seems required for expressing the relations. But then it may be natural to express such relations by means of a device that includes at least some directly referential component. Of course, even granted that ordinary proper names fill this role, we do not have that names are sufficient for

expressing the relations, because getting at these properties requires getting at kinds as well. But perhaps it is not implausible to think that ordinary names do get kinds as well.

Building on Kripke's picture, it is natural to think that kind properties are necessary features of ordinary name baptism and transmission.²⁹ Say a Δt -slice of a thing (relative to some reference frame) is that thing over the span Δt (in that frame). Suppose my mother is naming me. She lovingly says, "Let the person of which that (she points) is a Δt -slice be T.R." It turns out that she names a person. But (however unlikely) she might have said, "Let the *stuff* of which that baby slice is now composed be T.R." In this case, with sufficient gesticulation and philosophical explanation, she might have named some stuff—stuff which an interested scientist could determine to be a rock (or fertilizer) at a later time. Apparently, the *person* and *stuff* properties figure in getting the name onto the thing that "spreads out" from the slice in the right way (given the many things of which the slice is a part). Naturally, the issue is not so simple: Kind properties may be suppressed in baptisms. Or one might point and say, "Let that *star* be Hesperus"—and end up naming a planet. Perhaps there is some complex interaction between the world, convention, what people say, etc. But, where a kind property just *is* a property which figures in getting a name onto the thing that "spreads out" from a slice in the right way, all I am after is that some kind property is a feature of that process whereby a name is attached to a thing. Perhaps this much is plausible.

Even so, our non-essentialist requires that kinds continue to matter for ordinary usage. First, it is natural to think that name transmission chains trace to baptisms, and to things through or by means of the baptisms. But if baptisms figure in the continued working of names, and kinds in the working of baptisms, then it seems that in some sense kinds continue to figure in the working of names. Modal evidence to the side, it may be possible to motivate this directly. Suppose someone overhears in a market, "Quine is very good" and takes it as an evaluation of some Australian wine; upon remarking to his wife at a later time that he would "try to pick up some Quine," he will surely not have succeeded in referring to Quine—despite his intention to use the word the way it was used by those from whom he heard it.³⁰ Or consider Socrates just before his death and suppose someone says that Socrates, *the stuff*, is now a scattered object. Perhaps this is so. But perhaps not; perhaps 'Socrates' resists association with stuffhood. At any rate, the ability to block reference (as with the 'Quine' case), the ability to switch reference (as with 'Socrates' on the former interpretation), and even the phenomenon of resistance (as with 'Socrates' on the latter interpretation), are compatible with a model on which kinds continue to matter for reference. Again, no doubt there is a complex interaction between context, convention, history, etc. For our purposes, though, it is sufficient that, in modal contexts, use of an ordinary proper name somehow "finds" a kind as surely as it finds a thing. For finding a thing and a kind (which the thing has) is sufficient for finding an essence-candidate, and may thus be sufficient for an account of the sort our non-essentialist proposes.

I am not sure whether this approach to names fits the Frege-Russell picture because it allows that a name has something like a sense, or Kripke's because it makes chains reaching back to things matter. In either case, I do *not* offer an account of how reference works or an analysis of sentences containing ordinary proper names. It is sufficient that, in effect, ordinary proper names "supply" or "return" objects just in case the objects have the associated essence-candidates. Let's indicate the essence-candidate associated with a name by a subscript: where pairs $\langle \alpha, k \rangle$ correspond to essence-candidates as above, let ' $[\alpha, k]$ ' be both a name and predicate for the essence-candidate corresponding to $\langle \alpha, k \rangle$, and ' $a_{[\alpha, k]}$ ' be a name associated with $[\alpha, k]$. Then it is sufficient that ' $a_{[\alpha, k]}$ ' returns objects so that $\Box \forall x ([\alpha, k]x \equiv x = a_{[\alpha, k]})$. Given this, for the postulated connection between reference and essence-candidates, no special *analysis* of ' $\Box Pa_{[\alpha, k]}$ ' is required; rather, it *follows* that $\Box Pa_{[\alpha, k]}$ iff $\Box \forall x ([\alpha, k]x \supset Px)$. The discussion of kinds and reference only makes room for the suggestion that names do return objects in this way. Also, so far, our non-essentialist is not subject to the sort of objections Kripke brings against Frege and Russell. One worry concerns the connection between what speakers grasp and what is required for reference. However, insofar as essence-candidates appear only at the "ends" of reference chains, there is no reason to think that speakers grasp them. And kinds might be located at the "ends" as well. A related worry is that descriptions associated with, e.g., 'Nixon', could characterize persons other than the one that is, intuitively, *that person*. But our non-essentialist is committed precisely to the claim that 'Nixon' attaches to whatever has the property of being that person; so the objection does not get off the ground.³¹

We are now in a position to make progress in the direction of objectual *de re* modality. First, let's take it as given that it is possible for a thing to have (*being this lump*)^c without the precise location or shape this lump actually has; similarly, it is possible for a thing to be this lump without being this statue and, insofar as the lump might outlast the statue, for one thing to be this lump and another to be this statue. The different approaches to thinghood all allow this much, and differ about how it matters. An essentialist can hold that (*being this lump*)^c or (*being this statue*)^c are linked to things which exist in association with the properties. If there are no essences, then a thing can have (*being this lump*)^c or (*being this statue*)^c where there is no fact about whether it is identical to or distinct from the actual thing. But denying these facts about identity is not the same as denying—what is assumed on each of the views—that there are facts about whether some things count as the same lump or statue.³² Second, just as there may be a (*being taller than Jim*)^c which applies across worlds but depends on Jim's actual height, so I suggest that (*being this lump*)^c and (*being this statue*)^c apply across worlds but depend on the actual thing. Just as there is a cross-world "taller than" relation associated with (*being taller than Jim*)^c which explains how it depends on Jim, so I suggest that there are cross-world "same-lump" and "same-statue" relations associated with (*being this lump*)^c and (*being this statue*)^c which explain how they depend on the actual thing. As the essentialist thinks there are facts about the

cross-world identity of things, so the modified essentialist thinks there are these cross-world relations, and that *de re* modality is grounded in them. Let's focus on this second point.

For any kind *K*, one expects (*being a K*)^c to involve having certain general features and/or standing in relations to individuals of certain sorts, where (*being a particular K*)^c requires having those general features and standing in those relations to particular individuals. Given a kind's role in naming, these features and relations should be sufficient for reference to "spread" in the appropriate directions in arbitrary contexts. Suppose (*being a person*)^c requires having a certain sort of continuity; then for any person, (*being that person*)^c requires having that continuity; necessarily, anyone who is that person has that continuity.³³ Suppose (*being a person*)^c requires having some fixed (genetic) sex; then for any particular person, (*being that person*)^c requires having a particular sex; necessarily, anything that is that person has that sex. And suppose (*being a person*)^c involves having some one mother; then for any particular person, (*being that person*)^c requires having a particular mother; necessarily, anything that is that person has that mother. From kinds alone we obtain general principles of the sort,

- (3) $\forall x(Px \supset \Box \forall y(SP_{yx} \supset Cy))$
- (4) $\forall x[(Px \ \& \ Fx) \supset \Box \forall y(SP_{yx} \supset Fy)]$
- (5) $\forall x \forall y[(Px \ \& \ Py \ \& \ Myx) \supset \Box \forall z(SP_{zx} \supset \exists w(SP_{wy} \ \& \ Mwz))]$

If anything is a person, then necessarily anything that is the same person as it has the right sort of continuity; if anything is a person and female, then necessarily anything that is the same person as it is female; and if *x* and *y* are persons and *y* is the mother of *x*, then necessarily if *z* is the same person as *x* there is some *w* such that *w* is the same person as *y* and *w* is the mother of *z*.³⁴ Formally, (3), (4) and (5) are *de re*. But notice: having assigned some actual thing to a variable or constant, we do not relocate that thing in other worlds; rather, we locate other-worldly things which stand in the "same person" relation to the actual one. Thus, again, given our characterizations of *de re* modality, there is a question about the sense in which we have identified a legitimate modal feature of a thing.

The suggestion we have identified such a feature is reinforced by grounding considerations. Grounds for (3) - (5) may be like those associated with the *de dicto* solution. But such principles make what it is to be a particular *K* follow from the nature of that kind property *and* nonmodal categorical features of the thing. So, e.g., it is because some thing is a person, that necessarily whatever is that person has the right sort of continuity: if $P\alpha$, from (3), $\Box \forall y(SP_{y\alpha} \supset Cy)$; but being a particular person and being the same person as it are related so that $\Box \forall x(SP_{x\alpha} \equiv [\alpha, p]x)$;³⁵ so if $P\alpha$, $\Box \forall y([\alpha, p]y \supset Cy)$. Similarly, it is because a person actually has some sex, that having that particular sex is part of what it is to be that person. And it is because a person actually has a particular mother,

that having that particular mother is part of what it is to be that person.³⁶ Perhaps it is of the nature of *being morally depraved* that anyone who plucks out the eyes of innocent children is morally depraved—this much may depend on the property alone; still, anyone who plucks out the eyes of innocent children *is morally depraved*, with their depravity firmly grounded in the categorical way they are. Similarly, from principles like (3) - (5), a thing's *being such that necessarily anything which is the same K as it is P* might depend on the categorical way that thing is, and so count as a legitimate *de re* modal feature of the thing.

If this is right, (1) may be *de re*. Suppose ' $a_{[\alpha,k]}$ ' returns objects so that $\Box \forall x([\alpha,k]x \equiv x = a_{[\alpha,k]})$; then, as above, $\Box Pa_{[\alpha,k]}$ iff $\Box \forall x([\alpha,k]x \supset Px)$ —and we have just argued that ' $\Box \forall x([\alpha,k]x \supset Px)$ ' might be grounded in the categorical way α actually is. So, e.g., perhaps (*being a statue*)^c requires a certain continuity of shape, so that if a thing is a statue and has a certain shape, then necessarily anything which is that statue has (roughly) that shape, and perhaps 's' attaches to a thing just in case it has (*being that statue*)^c. From the latter, (1) is true just in case necessarily anything which is that statue is not as flat as a pancake; from the former, the statue's being such that necessarily anything which is that statue is not as flat as a pancake, depends on the categorical way the statue actually is. Notice: though ' $a_{[\alpha,k]}$ ' is not "directly referential"—in the sense that it contributes just a thing (or a thing without essence-candidate) to truth conditions—' α ' is.³⁷ Thus substitution for ' α ' is unproblematic: if $\alpha = \beta$ then $\Box \forall x(SKx\alpha \supset Px)$ iff $\Box \forall x(SKx\beta \supset Px)$. Similarly, nothing prevents accepting both ' $\Box \forall x(SKx\alpha \supset Px)$ ' and ' $\sim \Box \forall x(SJx\alpha \supset Px)$ '. It is incoherent to say that some one thing is both possibly as flat as a pancake and necessarily not as flat as a pancake. But there is nothing incoherent about the suggestion that one thing is such that possibly something is the same lump as it and as flat as a pancake, and such that necessarily nothing is the same statue as it and as flat as a pancake. These may seem to be straightforward modal properties of the thing.³⁸

De re modality though this may be, it is not everything typically associated with quantified modal logic. The modified essentialist offers an account of modal expressions, like ' $\Box Pa_{[\alpha,k]}$ ', whose only individual terms are ordinary proper names. And there is room for modal expressions, like ' $\Box \forall x(SKx\alpha \supset Px)$ ', with "objectual" reference and quantification. But, insofar as there is no fact of the matter about whether a thing α exists in different worlds, there may be no fact about truth or falsity for expressions, like ' $\Box P\alpha$ ', which do not "build in" which things are under consideration across worlds. (Although not based on a general rejection of modal properties, this seems to be a point of contact with Quine.) One recovers much of ordinary quantified modal logic if restricted to expressions with individual constants of the sort ' $a_{[\alpha,k]}$ ' and, perhaps, a substitutional quantifier—or, what might come to the same thing, if thing/kind pairs are assigned to variables and individual terms.³⁹ Still, the necessity of identity does not obtain. It might therefore be objected that the modified essentialist is committed to an unacceptable version of "relative" or "contingent" identity.

It is typically held that $\Box(a = b)$ follows from $a = b$. Reasoning, due to Marcus, is simple: suppose $a = b$; then a and b have all their properties in common; but a is necessarily a ; so b is necessarily a . Depending on the nature of the terms, however, the modified essentialist has different replies. First, for directly referential ' α ' there is a problem about even ' $\Box(\alpha = \alpha)$ '. If there is no fact about whether α exists in some world, it is hard to see how there could be a fact about whether α has some property or relation—even one so basic as identity—at that world. Thus there is room to reject Marcus's premise. In this case, however, the modified essentialist does *not* allow that identity is contingent. Rather, the suggestion that identity is contingent or necessary seems to presuppose that things trace across worlds. Insofar as this presupposition constitutes a challenge to our assumed non-essentialism, the modified essentialist resists. Second, from $a_{[\alpha,k]} = b_{[\beta,j]}$ it does not follow that $\Box(a_{[\alpha,k]} = b_{[\beta,j]})$. On the modified essentialist's view, ' $a_{[\alpha,k]}$ ' returns an object just in case it has $[\alpha,k]$ and similarly for ' $b_{[\beta,j]}$ '; given this, $\Box(a_{[\alpha,k]} = b_{[\beta,j]})$ iff $\Box \forall x ([\alpha,k]x \equiv [\beta,j]x)$ —and ' $\Box(a_{[\alpha,k]} = b_{[\beta,j]})$ ' isn't a *de re* identity statement (relative or otherwise) at all; rather, it requires that properties be necessarily coinstantiated. But it is uncontroversial that actually coinstantiated properties may come apart in other worlds; e.g., something might have (*being this lump*)^c without (*being this statue*)^c. As for 'the first Postmaster General = the inventor of bifocals', then, the indiscernibility of identicals does not apply, and the Marcus argument does not go through.

In fact, the modified essentialist predicts two ways to have $a_{[\alpha,k]} = b_{[\beta,j]}$ without $\Box(a_{[\alpha,k]} = b_{[\beta,j]})$. The first is when $k \neq j$. This is the case for the lump and the statue. Though $\alpha = \beta$, if $k \neq j$ then $[\alpha,k] \neq [\beta,j]$ and from $a_{[\alpha,k]} = b_{[\beta,j]}$ it does not follow that $\Box(a_{[\alpha,k]} = b_{[\beta,j]})$. Suppose we have some reason for moving from $a_{[\alpha,k]} = b_{[\beta,j]}$ to $\alpha = \beta$. Then perhaps it is natural to appeal to some convention proposal, or claim about implied premises, to explain a tendency to think that the kinds are the same, and so to move from $a_{[\alpha,k]} = b_{[\beta,j]}$ to $\Box(a_{[\alpha,k]} = b_{[\beta,j]})$. So, e.g., if there is a hierarchy of kinds such that one kind is "selected" for each thing, then from $a_{[\alpha,k]} = b_{[\beta,j]}$ it follows that the kinds are the same. On the modified essentialist view, though, no one convention is such that naming must, in some metaphysical sense, proceed by means of it. Maybe *typically* naming is governed by such a convention so that *typically* it is appropriate to move from $a_{[\alpha,k]} = b_{[\beta,j]}$ to the conclusion that the kinds are the same. But the lump-statue case suggests that whatever conventions of this sort there may be, they are not inviolable.⁴⁰

The second way to have $a_{[\alpha,k]} = b_{[\beta,j]}$ without $\Box(a_{[\alpha,k]} = b_{[\beta,j]})$ is illustrated by another puzzle: It is natural to admit that a wooden lectern could have been plus or minus a few of its molecules. Intuitively, however, a lectern with completely different molecules would be a different lectern. Pretend a lectern is the same just in case it retains at least 75% of its molecules. Now consider a series of worlds, where lecterns in adjacent worlds differ by only a few molecules and so are the same, but lecterns in worlds at the endpoints are composed of completely different molecules and so are distinct. Identity is transitive, so something is wrong (cf., Chisholm 1967). But the solution is immediate. Consider any two worlds in

the series—say, *this* one and *that* one. Insofar as (*being this lectern*)^c is grounded in the particular molecules of this lectern, and (*being that lectern*)^c is grounded in the molecules of that one, and the lecterns are composed of different molecules, (*being this lectern*)^c is a different property from (*being that lectern*)^c: (*being this lectern*)^c requires having at least 75% of these molecules, and (*being that lectern*)^c having at least 75% of those molecules.⁴¹ Perhaps the properties are coinstantiated in some worlds; still, there is no reason to think that there are not worlds where they come apart. In particular, a lectern at one endpoint may lack the property of being the one at the other. Perhaps problems of vagueness remain. But, given the modified essentialist’s account of ‘this K = that J’, problems about the necessity of identity and cross-world identification evaporate. Say $a_{[\alpha,k]} = b_{[\beta,k]}$; if α and β are in distinct worlds, we do not have that $\alpha = \beta$; so we do not have that $[\alpha,k] = [\beta,k]$, and it does not follow that $\Box(a_{[\alpha,k]} = b_{[\beta,k]})$. Of course, in ordinary cases, α and β are actual. If anything has $[\alpha,k]$ at a world where α exists, it is α , and similarly for β ; so if α and β are actual and $a_{[\alpha,k]} = b_{[\beta,j]}$, then $\alpha = \beta$. In this case, with the addition of a convention or implied premise about kinds, it is appropriate to move from $a_{[\alpha,k]} = b_{[\beta,j]}$ to both $\alpha = \beta$ and $k = j$, and so to $\Box(a_{[\alpha,k]} = b_{[\beta,j]})$. Thus the modified essentialist might have no problem with a move from Cicero = Tully to $\Box(\text{Cicero} = \text{Tully})$, and similarly for other standard examples of the necessity of identity.

The position I defend in this paper corresponds to some extent with each of the others considered. With the mad-dog essentialist I allow that different essence-candidates may be “created” equal, but with the moderate essentialist that there is at most one thing for each thing-candidate. With the moderate genuine essentialist I allow that things by themselves have modal properties, but with the moderate pseudo-essentialist that things are multiform. And, of course, the position is non-essentialist. It is a point of contact with Quine that there are problems about quantified modal logic, but with his opponents that some objectual *de re* modal claims make sense. Naturally, I hope the resultant position holds together, having the virtues of each and the vices of none. At least there is a response to the mystery with which we began. NG is false, and the argument for it is unsound: modal facts are indeed facts about other circumstances, but these facts “depend,” in the relevant sense, on the way things actually are. Each of the approaches to thinghood accepts principles of the sort, ‘ $\Box \forall x([\alpha,k]x \supset Px)$ ’. The non-essentialist might stop there, and hold that the only modality is *de dicto*; the essentialist obtains *de re* modality by associating $[\alpha,k]$ (or some essence-candidate) with identity. I argue that ‘ $\Box \forall x([\alpha,k]x \supset Px)$ ’ is already *de re*. Insofar as the essentialist’s difficulties about grounding attach to the “extra” claims about identity, one might think that a thing’s *being such that necessarily anything that is the same K as it is P* is both the beginning and the end of what is grounded about *de re* modality for any of the views. Perhaps it is failure to recognize such modal properties which tempts the essentialist into problematic claims about identity, and the non-essentialist to deny that things have modal properties at all.⁴²

Notes

¹This way of setting up the epistemological problem reflects McGinn (1981, 177-182).

²Lewis states the view, then qualifies it. Still, we actually have just an arrangement of qualities. See also Lewis (1994). This picture is stronger than required to get the problem of modality off the ground. But it is intuitive and vivid. If *de re* modality makes sense against this background, it should make sense against others as well.

³For the distinction under consideration, see Kim (1990) and Horgan (1993).

⁴Strictly, this applies only to possibilistic possible worlds schemes, e.g., Lewis (1986a). Still, if the actualist grounds modality in worlds (abstract or otherwise), she presumably denies that categorical features of “ordinary” things provide an adequate ground.

⁵Roy (1993) and Roy (1995). The “walk” example which follows is from the former, where it is more developed.

⁶McGinn (1981, 171-177) defends the related thesis that modal properties supervene on those that are not.

⁷Scott Shalkowski (1994) argues that any account according to which modal properties are grounded in what is non-modal involves the illegitimate use of modal notions. His argument may run together metaphysical and epistemological dependence. Also, his rationale may be so strong as to establish that moral properties cannot be grounded in nonmoral properties, etc. Anyway, if I am successful, his argument is unsound.

⁸The epistemological skeptic might accept, as an analog to CG, that observation is appropriate only to the detection of categorical properties (whether or not there are primitive modal qualities) and, as an analog to AG, that observation is appropriate only to the detection of actual properties (whether or not there are other worlds) and so, with NG, conclude that observation does not ground modal knowledge (cf., Hume, *An Enquiry Concerning Human Understanding*, §7). If modal properties have an actual categorical ground, this reasoning, at least, collapses.

⁹See, e.g., Quine (1980) and Quine (1953).

¹⁰In (1993, 342-353) I argue that the ground for *de dicto* metaphysical modality is in the actual intrinsic structures of non-modal properties. Insofar as one is serious about properties, it is natural to hold that properties exist and that their structures are “categorical” features of actuality. Suppose that *being colored* is *being red or being blue or...*—that *being colored* has *being red, being blue*, etc. as “disjunctive constituents.” Now suppose some object *o* is red; *o* instantiates *being red*; so it instantiates a disjunctive constituent of *being colored*; so it instantiates *being colored*; so it is colored. On this view, the way *being colored* is is sufficient to guarantee that whenever a thing is red it is colored as well. The relevant principles are thus specified relative to the way actual non-modal properties are.

¹¹Thus the lump of clay and the statue coincide over their entire career. This much discussed case derives from Gibbard (1975).

¹²Michael Della Rocca (1996) emphasizes this point, or rather one put in terms of “rigid” designators that trace objects across worlds, and suggests—by analogy to Kripke’s discussion of heat and molecular motion (1980, 129-144 and 1977, 94-98)—that it is not *ad hoc* for the essentialist to construe at least one designator as not rigid: for an approach to the designators depends on prior decisions about identity. Say this is right. Even so, a differential approach to the designators is no *less ad hoc* than the decisions about identity. I take up such questions in the following. Here, it is enough to have raised the questions.

¹³Against this, one might hold that *being Quine* has *Quine* as a component, or that ‘ $\Box \forall x(x \text{ is quine} \supset \sim(x \text{ is a rock}))$ ’ masks semantic form so that it is, in some sense, *de re*. I agree, and develop the point in section III. For now, though, let’s sustain the assumption that the different characterizations of *de re* modality capture the same distinction, and grant the formally *de dicto* principles. There will be trouble enough with the suggestion that there is some property such that necessarily a thing has it iff it is Quine.

¹⁴The equivalences are subject to niceties about contexts where *a* does not exist. But these need not concern us here. For now, restrict attention to situations where *a* exists, or assume that the same

individuals exist at every situation. (Or, if you like, adopt some other solution to the “problem of variable domains” and make any necessary adjustments to the above.) See note 39. That *de re* modality requires something like the the essentialist strategy, seems implicit in Quine’s charges of “Aristotelian essentialism” (see, e.g., 1953, 175-176, and 1980, 155-158). For particular instances of the strategy, see notes attached to the different accounts of things.

¹⁵Kit Fine (1994) argues that a thing may have properties in every world in which it exists that are not part of its essence (e.g., being a member of its unit set). And one might argue that an appeal to essence for an account of *de re* modality is therefore not circular—essence may ground an account of *de re* modality but, *prima facie* boxes and diamonds are insufficient for an account of essence. Say this is right. Still, insofar as there is room to wonder what in the (categorical) world makes one property essential and another not, the *problem* of *de re* modality remains. Cf. Almog’s (1996) claim that essence is located in those properties without which a thing would not exist—and that essence isn’t therefore modal.

¹⁶So, e.g., Lewis: “The reason it’s vague where the outback begins is not that there’s this thing, the outback, with imprecise borders; rather there are many things, with different borders, and nobody has been fool enough to try to enforce a choice of one of them as the official referent of the word ‘outback’” (1986a, 212). Mark Heller (1990) concludes that, strictly speaking, there is no outback. Even so, as he suggests, one might make sense of ordinary reference by appeal to sets of “outback candidates” or the like.

¹⁷So each has (*being this lump*)^c and (*being this statue*)^c. Presumably, then, an advocate of this view will hold that *being this statue* is something like (*being this statue*)^c and similarly for *being this lump*. Then there is no pressure to allow that there are, e.g., multiple statues, one essentially so and the others not, in the same location.

¹⁸Stephen Yablo (1987) advocates a mad-dog view. Cf., Wiggins (1980, 1968), and Sidelle (1989). Michael Burke (1992) gives many references and goes so far as to call the “multiple-thing” strategy “standard” for lump-statue cases.

¹⁹Cf., J. Locke, *An Essay Concerning Human Understanding*, II.xxvii.2.

²⁰For this point, see Zimmerman (1995, 87-90), and Burke (1992).

²¹Heller (1990) suggests a position of the former sort, and Michael Jubien (1993) one like the latter. Peter van Inwagen (1990) develops another moderate account. None express their position this way.

²²This is so, not only when the properties *are*, but also when they *can be*, had by a single thing-candidate. So, e.g., if the lump actually survives the statue—where the story *might* have been as I tell it, then not both (*being this lump*)^c and (*being this statue*)^c are essences.

²³Some solutions of this sort are sketched and their viability defended in Zimmerman (1995). Heller’s (1990) appeal to “conventional” objects seems a (relatively developed) proposal of this sort.

²⁴On whether such primitive facts are *modal*, see note 15. There may be modally relevant constraints on essence in addition to those considered above. So, e.g., one might impose “contact” or “continuity” constraints. But it is unlikely that such constraints are sufficient for uniqueness. Consider, e.g., the lump and the statue.

²⁵Michael Burke (1994) advocates a view which seems moderate in spirit but does not fit neatly into my categories. To accommodate his position, I would have to speak, not of properties which are essences *simpliciter*, but rather of properties which are essences *at* worlds. Then a thing exists at every world where the property to which it is linked is an essence. I prefer to avoid this complication. Burke does not declare for a pseudo over a moderate position. But he is clear that his view is at least compatible with a pseudo stance.

²⁶Though there is room to wonder whether what people say does, in fact, select just one essence from among a thing’s essence-candidates. The lump-statue case suggests that no single selection among the candidates can account for everything we are inclined to say about things. A theory might account for what we are inclined to say by means of some combination of *de re* and alternative analyses; but then it is hard to see how data from what we say supports selecting *essences* in one way as opposed to another.

²⁷On “abundant” properties, see Lewis (1986a, 59-60). In Lewis’s modal realism, things exist in exactly one world. But I do not mean to suggest that anyone who accepts such a view is automatically an essentialist. On such a view, modal properties have to do with counterparts in different worlds, and the relevant question is whether things are linked to essences so as to fix which things are counterparts and which are not.

²⁸Familiar occupants of the non-essentialist position are those that, as above, deny that things have *de re* modal properties and adopt some alternative account—somehow linking the applicability of modal expressions with the manner in which things are designated. See, e.g., Quine (1980), and Gibbard (1975).

²⁹Treatments differ, however appeal to kinds for reference and essence is familiar. Though what I say differs from each, one might see this section as reworking or recasting motivations that underlie, e.g., Gibbard (1975), Geach (1980, 67-69), and—with his treatment of “rigid singulary categoricals”—Jubien (1993). Cf., Kripke (1980, 115-116 n. 58).

³⁰On the intention to use a word the way it was used by those from whom it was heard, see Kripke (1980, 94-97).

³¹Kripke’s own emphasis on kinds in modal contexts is congenial. So, e.g., he says, “Such terms as ‘the winner’ and ‘the loser’ don’t designate the same objects in all possible worlds. On the other hand, the term ‘Nixon’ just is a *name of this man*. When you ask whether it is necessary or contingent that *Nixon* won the election, you are asking the intuitive question whether in some counterfactual situation, *this man* would in fact have lost the election” (1980, 41, emphasis his); cf., 1980, 46, 51-52, 57 and especially 112-113.

³²There are different ways to account for these facts and properties. First, insofar as distinct things differ categorically, categorical properties should be sufficient to tell them apart. Presumably, then, quality distribution makes it the case that α in w_1 has $[\alpha, k]$ and β in w_2 has $[\beta, k]$; so far, $[\alpha, k]$ and $[\beta, k]$ seem categorical. But it’s not obvious how qualities make β in w_2 have $[\alpha, k]$. One might think (*being this statue*)^c, (*being this lump*)^c, etc., are giant disjunctions of categorical conditions which pick out just one thing in a world where they pick out anything at all. Alternatively, one might say that a world, an arrangement of qualities, brings with it a universe of “possibilities” which are like worlds, but include properties of the sort $[\alpha, k]$ as fundamental elements. In either case, it is likely that $[\alpha, k]$ includes some “non-qualitative” component (imagine w_1 and w_2 are worlds of two-way eternal recurrence). But see Jubien (1993, 42-45); and notice that a categorical “constraint on quality arrangement” might involve particular places, times, or quality instances, and so include “non-qualitative” elements. Decisions on these matters shouldn’t affect the general discussion above.

³³Insofar as reference typically spreads back to a fixed point but forward indefinitely, there is room for explanation of modal emphasis on features of origin.

³⁴Related principles are suggested by Kripke (1980, 111-115), and developed by others; see esp. Sidelle (1989). Roy (1995, 225-233) develops the suggestion that such principles enable an account of modal claims about things that could, but do not, exist.

³⁵In effect, ‘ $[\alpha, k]$ ’ is like ‘ $[\lambda y SKy\alpha]$ ’, and this is like an instance of λ -abstraction according to which $\Box \forall x ([\lambda y SKy\alpha]x \equiv SKx\alpha)$.

³⁶It is natural for a modified essentialist to say a thing’s *modified essences* are those essence-candidates which are, in fact, grounded in the way the thing actually is. Also, (3) - (5) impose a certain “form” on worlds. But it is one thing to say that Abraham’s first wife was the mother of Isaac, and another to say that she was the mother of Ishmael. If the Genesis record is correct, the first is possible and the second is not. Thus worlds with the same “form” may have different “particular contents”—where possibility depends on actuality and the particular contents involved. Presumably, we *stipulate* which contents are under consideration in a given context.

³⁷Impressed by reasoning as above, one might object that no ‘ α ’ is directly referential in this sense. However, it’s important that ordinary reference is associated with essence-candidates just when modal notions apply (and this is what the arguments are supposed to show). So, e.g., in the case of the thing that is this stuff, i.e. the thing that is this lump, i.e. the thing that is this statue, we seem to have identified an object but without any corresponding essence-candidate. Also, talk

about things that “correspond” to thing-candidates is intended to get things but without essence-candidates.

³⁸A three-dimensionalist might respond similarly to puzzles about, e.g., Tibbles the cat: In the past, something was the same cat as this and had a tail. But, in the past, nothing which was the same puss (that part of a cat which does not include its tail) as this had a tail. Also, insofar as “*l* could have been as flat as a pancake” and “*s* could have been as flat as a pancake” attribute *different* properties to the one thing—in the one case [λx possibly something is the same lump as *x* and is as flat as a pancake], and in the other [λx possibly something is the same statue as *x* and is as flat as a pancake]—one might think of this as a (fleshed-out) version of the “predicate switching” strategy suggested in Noonan (1985, 202-206). For a related approach, see Lewis (1971).

³⁹For some, a model may help to illustrate this and surrounding paragraphs. Consider a first-order language with designated predicates ‘E’ for existence and ‘=’ for equality, two-place “cross-world” predicates ‘SK’, ‘SJ’ ..., *rigid* individual constants ‘ α ’, ‘ β ’ ..., and for any rigid constant ‘ α ’ and cross-world predicate ‘SK’, *nonrigid* individual constants, ‘ $a_{[\alpha,k]}$ ’, ‘ $b_{[\alpha,k]}$ ’ ...; for simplicity, require that nonrigid constants don’t appear in the second place of cross-world predicates. Say $M = \langle W, W_0, D, D_0, I \rangle$ where: W is a set of worlds and $W_0 \in W$; D_0 is a set of objects and D a 1:1 function from W onto a partition of D_0 ; and I is an interpretation function such that: (a) for any n -place predicate \mathcal{A} and $w \in W$, $I(\mathcal{A}, w) \subseteq (D_0)^n$; (b) $I(E, w) = D(w)$; (c) $I(=, w) = \{\langle x, x \rangle \mid x \in D(w)\}$; (d) for any $u \in D_0$ and $w \in W$, there is at most one v such that $\langle v, u \rangle \in I(SK, w)$; if $\langle v, u \rangle \in I(SK, w)$ then $v \in D(w)$; and if $u \in D(w)$ and for some w' and v , $\langle v, u \rangle \in I(SK, w')$, then $\langle u, u \rangle \in I(SK, w)$; (e) for any rigid constant ‘ α ’ and $w, w' \in W$, $I(\alpha, w) \in D_0$ and $I(\alpha, w') = I(\alpha, w)$; (f) for any non-rigid constant ‘ $a_{[\alpha,k]}$ ’ and w , if $I(\alpha, w) = u$ and $\langle v, u \rangle \in I(SK, w)$, then $I(a_{[\alpha,k]}, w) = v$, and otherwise $I(a_{[\alpha,k]}, w)$ is some object, maybe D_0 itself, not in D_0 . Let s assign a member of D_0 to each individual variable, and s_w be like s for variables, and like $I(t, w)$ for individual constants. Now, adopt a *presupposition* function P such that for any s , w and cross-world ‘SK’, $P(SKt_1t_2)$ is *met* on s at w iff t_1 is nonrigid or $s_w(t_1) \in D(w)$; and otherwise, for any s and w , $P(\mathcal{A}t_1 \dots t_n)$ is *met* on s at w iff for $1 \leq i \leq n$, t_i is nonrigid or $s_w(t_i) \in D(w)$. Now say expressions *hold* or *fail* according to the “strong” Kleene truth tables: (a) an atomic $\mathcal{A}t_1 \dots t_n$ *holds* on s at w iff $P(\mathcal{A}t_1 \dots t_n)$ is *met* on s at w and $\langle s_w(t_1), \dots, s_w(t_n) \rangle \in I(\mathcal{A}, w)$; $\mathcal{A}t_1 \dots t_n$ *fails* on s at w iff $P(\mathcal{A}t_1 \dots t_n)$ is *met* on s at w and $\langle s_w(t_1), \dots, s_w(t_n) \rangle \notin I(\mathcal{A}, w)$; (b) $\sim \mathcal{A}$ *holds* on s at w iff \mathcal{A} *fails* on s at w ; $\sim \mathcal{A}$ *fails* on s at w iff \mathcal{A} *holds* on s at w ; (c) $\mathcal{A} \supset \mathcal{B}$ *holds* on s at w iff \mathcal{A} *fails* on s at w or \mathcal{B} *holds* on s at w ; $\mathcal{A} \supset \mathcal{B}$ *fails* on s at w iff \mathcal{A} *holds* on s at w and \mathcal{B} *fails* on s at w ; (d) $\forall x \mathcal{A}$ *holds* on s at w iff for each $u \in D(w)$, \mathcal{A} *holds* on $s[u/x]$ at w ; $\forall x \mathcal{A}$ *fails* on s at w iff for some $u \in D(w)$, \mathcal{A} *fails* on $s[u/x]$ at w ; (e) $\Box \mathcal{A}$ *holds* on s at w iff \mathcal{A} *holds* on s at each $w \in W$; $\Box \mathcal{A}$ *fails* on s at w iff \mathcal{A} *fails* on s at some $w \in W$; if a substitutional quantifier is desired, (f) $\Pi x \mathcal{A}$ *holds* on s at w iff for each non-rigid ‘ $a_{[\alpha,k]}$ ’ such that ‘ $Ea_{[\alpha,k]}$ ’ *holds* on s at w , $\mathcal{A}[a_{[\alpha,k]}/x]$ *holds* on s at w ; $\Pi x \mathcal{A}$ *fails* on s at w iff for some ‘ $a_{[\alpha,k]}$ ’ such that ‘ $Ea_{[\alpha,k]}$ ’ *holds* on s at w , $\mathcal{A}[a_{[\alpha,k]}/x]$ *fails* on s at w . \mathcal{A} is *true* on I iff it holds for every s at W_0 , \mathcal{A} is *false* on I iff it fails for every s at W_0 . Various modifications are possible, and no one formal development is part of the metaphysical view developed above. This particular picture builds in a response to “variable domains” which makes ‘ $\Box \forall x(SKx\alpha \supset Px)$ ’ equivalent, not to ‘ $\Box Pa_{[\alpha,k]}$ ’ as above, but to ‘ $\Box(Ea_{[\alpha,k]} \supset Pa_{[\alpha,k]})$ ’; atomics ‘ $Pa_{[\alpha,k]}$ ’ convert to ‘ $\exists x(SKx\alpha \ \& \ Px)$ ’. ‘ $\Box P\alpha$ ’ and ‘ $\Box(E\alpha \supset P\alpha)$ ’ neither hold nor fail when there is more than one world. The idea isn’t that things exist in just one world, but rather that it’s just a thing’s existence in one world on which we depend. If we are restricted to expressions (without equality) whose only individual constants are non-rigid and only quantifiers are substitutional, there are natural truth-preserving translations between models of this sort, and models with objects that trace across worlds and a different object corresponding to each non-rigid constant.

⁴⁰These conventions would operate at the level of reference, not things. So a convention of this sort is distinct from any convention associated with moderate pseudo-essentialism. To see this, notice that a convention at the level of reference might exist together with, e.g., Jubien’s convention on things—with the reference convention governing sentences that have alternative analyses.

⁴¹If one or both of the lecterns does not exist, then there is no $\langle \alpha, k \rangle$ with the lectern as a member; and one might argue that, correspondingly, there is no $\langle \text{being that lectern} \rangle^c$. Even so, nothing prevents talking about what the property would be like if it did exist. See note 34.

⁴²Versions of this paper were presented to philosophy departments at Simon Fraser University and California State University, San Bernardino. I thank participants in those discussions, along with Michael Jubien, Jeff King, Richard Jensen, Felipe Leon, Rose Roy, and especially some anonymous readers for many helpful comments.

References

- Adams, Robert. (1981) "Actualism and Thisness," *Synthese* 49: 3-41.
- Almog, Joseph. (1996) "The What and the How II: Reals and Might," *Noûs* 30: 413-433.
- Burke, Michael. (1992) "Copper Statues and Pieces of Copper: A Challenge to the Standard Account," *Analysis* 52: 12-17.
- Burke, Michael. (1994) "Preserving the Principle of One Object to a Place: A Novel Account of the Relations Among Objects, Sorts, Sortals, and Persistence Conditions," *Philosophy and Phenomenological Research* 54: 591-624.
- Chisholm, Roderick. (1967) "Identity Through Possible Worlds: Some Questions," *Noûs* 1: 1-8. Reprint in *The Possible and the Actual*, ed. Loux, Ithaca: Cornell University Press, 1979, 80-87.
- Della Rocca, Michael. (1996) "Essentialists and Essentialism," *Journal of Philosophy* 93: 186-202.
- Fine, Kit. (1994) "Essence and Modality," *Philosophical Perspectives* 8: 1-16.
- Geach, Peter. (1980) *Reference and Generality*, Ithaca: Cornell University Press.
- Gibbard, Allan. (1975) "Contingent Identity," *Journal of Philosophical Logic* 4: 187-221.
- Heller, Mark. (1990) *The Ontology of Physical Objects: Four-Dimensional Hunks of Matter*, Cambridge: Cambridge University Press.
- Horgan, Terence. (1993) "From Supervenience to Superdupervenience: Meeting the Demands of a Material World," *Mind* 102: 555-586.
- Jubien, Michael. (1993) *Ontology, Modality, and the Fallacy of Reference*, Cambridge: Cambridge University Press.
- Kim, Jaegwon. (1990) "Supervenience as a Philosophical Concept," *Metaphilosophy* 21: 1-27.
- Kripke, Saul. (1977) "Identity and Necessity," *Naming, Necessity, and Natural Kinds*, ed. S. Schwartz, Ithaca: Cornell University Press, 66-101.
- Kripke, Saul. (1980) *Naming and Necessity*, Cambridge: Harvard University Press.
- Lewis, David. (1971) "Counterparts of Persons and Their Bodies," *Journal of Philosophy* 68: 203-211. Reprint in Lewis, *Philosophical Papers, vol. I*, New York: Oxford University Press, 1983: 47-54.
- Lewis, David. (1986a) *On the Plurality of Worlds*, New York: Basil Blackwell.
- Lewis, David. (1986b) "Introduction," *Philosophical Papers, vol. II*, New York: Oxford University Press, ix-xvii.
- Lewis, David. (1994) "Humean Supervenience Debugged," *Mind* 103: 473-490.
- McGinn, Colin. (1981) "Modal Reality," *Reduction, Time and Reality*, ed. Healey, Cambridge: Cambridge University Press, 143-187.
- Noonan, Harold. (1985) "The Closest Continuer Theory of Identity," *Inquiry* 28: 195-229.
- Quine, Willard. (1953) "Three Grades of Modal Involvement," *Proceedings of the XIth International Congress of Philosophy* 14. Reprint in Quine, *The Ways of Paradox*, Cambridge: Harvard University Press, 1976: 158-176.
- Quine, Willard. (1980) "Reference and Modality," *From a Logical Point of View*, Cambridge: Harvard University Press, 139-159.
- Roy, Tony. (1993) "Worlds and Modality," *Philosophical Review* 102: 335-361.
- Roy, Tony. (1995) "In Defense of Linguistic Ersatzism," *Philosophical Studies* 80: 217-242.
- Shalkowski, Scott. (1994) "The Ontological Ground of the Alethic Modality," *Philosophical Review* 103: 669-688.
- Sidelle, Alan. (1989) *Necessity, Essence, and Individuation: A Defense of Conventionalism*, Ithaca: Cornell University Press.

- Van Inwagen, Peter. (1990) *Material Beings*, Ithaca: Cornell University Press.
- Wiggins, David. (1968) "On Being in the Same Place at the Same Time," *Philosophical Review* 77: 90-95.
- Wiggins, David. (1980) *Sameness and Substance*, Cambridge: Harvard University Press.
- Yablo, Stephen. (1987) "Identity, Essence, and Indiscernibility," *The Journal of Philosophy* 84: 293-314.
- Zimmerman, Dean. (1995) "Theories of Masses and Problems of Constitution," *Philosophical Review* 104: 53-110.