Two Notions of Being: Entity and Essence

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As the title of my paper suggests, in what follows I want to talk both about *beings*—entities that do or could exist—and about *being*, in the sense of *essence*: what Locke talks about when he says that 'essence', in the 'proper original signification' of the word, denotes 'the very being of any thing, whereby it is, what it is'.[1] The latter notion is, of course, one that he gets straight out of Aristotle.[2] One of my key claims will be that although all entities *have* essences, essences themselves should never be thought of as *further entities*, somehow specially related to the entities whose essences they are. In my view, confusion over this point has caused much mischief in the history of metaphysics and continues to do so in contemporary debates about essentialism, metaphysical necessity, and modal epistemology.

Before I get to my main theme, however, I want to draw attention to two prior questions which have led me towards the position concerning essence that I now seek to defend. First, what is metaphysics *about*—does it have a distinctive *subject matter*? And second, is there anything distinctive about its *methods of inquiry*? These are two of the most important *meta*-metaphysical questions that can be raised, along with the famous Kantian question: how is metaphysics *possible*? Elsewhere, I have defended the view that the central task of metaphysics is to chart the possibilities of existence by identifying the categories of being and the relations of ontological dependency in which beings of different categories stand to one another.[3] This task, I claim, is an *a priori* one which, as rational beings, we are committed to undertaking whether we like it or not, with the implication that metaphysics is not only possible but *necessary* for beings like us—necessary, that is, inasmuch as it provides the ultimate underpinnings for all rational knowledge. But *how* is the task to be conducted? By what means can we and do we acquire modal knowledge—knowledge

[1] See John Locke, *An Essay Concerning Human Understanding*, ed. P. H. Nidditch (Oxford: Clarendon Press, 1975), III, III, 15.

[2] See, for example, Aristotle, *Metaphysics*, Z, 4–5.

[3] See my *The Possibility of Metaphysics: Substance, Identity, and Time* (Oxford: Clarendon Press, 1998), ch. 1.

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of what is *necessary* or of what is *possible*? In the first part of this paper, I shall examine and criticize some recent approaches to this question and in the second I shall develop my own answer, which appeals to a version of essentialism that I call *serious* essentialism, to distinguish it from various surrogates that are commonly paraded under the banner of 'essentialism'.

I: The Problem of Modal Knowledge

To repeat my last question: How can we have knowledge of what is *necessary*, or of what is *merely possible*—as opposed to knowledge of what is *actual*? Before I examine some putative answers to this question, we should notice that there seems to be a presumption in it that knowledge of what is actual is somehow *less problematic* than knowledge of what is necessary or of what is merely possible—that is, that *non-modal* knowledge is somehow less problematic than *modal* knowledge. Certainly, such a presumption is widely held. But it is one that I want to challenge forcefully in the course of this paper. The presumption seems to be that *experience* can, at least sometimes, provide us—directly and unaided—with knowledge of what is actual, but cannot provide us with modal knowledge (not directly and unaided, at any rate): and it is the first part of this presumption that I want to challenge. Here, however, I should emphasize that I am solely concerned with 'real' or *metaphysical* modality—assuming there to be such a thing—not with mere *logical* necessity or possibility, narrowly conceived. I take the latter kind of necessity to be that which attaches to a proposition simply in virtue of its being a logical law, or a logical consequence of such laws, such as the law of non-contradiction.[4] To anticipate later developments, I want to say that *metaphysical* necessity is, by contrast, *grounded in the essences or natures of things*—but more of this in Part II of the paper.

Until recently—more or less, until the seminal work of Saul Kripke made its impact—the foregoing presumption was bound up with the doctrine that modal knowledge can only be *a priori*, whereas *a posteriori* knowledge can only be knowledge of what is actual and contingent. Now, Kripke famously challenged that doctrine, by arguing that there may be necessary *a posteriori* truths and also contingent

[4] For more on the distinction between real or metaphysical possibility and 'mere' logical possibility, see again my *The Possibility of Metaphysics*, ch. 1.

a priori truths.[5] His account of metaphysically necessary *identities* provides the paradigm for this conception of modal knowledge, according to which what may typically be known *a priori*—by deductive proof from logically true premises—is a *conditional* truth, whose consequent expresses a necessary truth and whose antecedent is knowable *a posteriori*, such as 'If Hesperus is (identical with) Phosphorus, then *necessarily* Hesperus is Phosphorus'. However, the archetypal proof in question—the Barcan-Kripke proof of the necessity of identity[6]—seems to presuppose that the singular terms involved (thus, in the example just cited, the terms 'Hesperus' and 'Phosphorus') are so-called *rigid designators*, for without this assumption the proof falls foul of obvious counterexamples involving definite descriptions. And then the proof really seems superfluous, because it is surely just trivially the case that '$a = b$' is, if true, then necessarily true, *given* that 'a' and 'b' are rigid designators—given, that is, that they denote the same object(s) in any possible world in which they denote anything at all. All of this suggests that so-called *a posteriori* necessary truths—truths such as 'Hesperus is Phosphorus' and 'Water is H_2O'—are mere trivialities, even though they are not *formal logical* trivialities, of the type '$a = a$'. And yet, paradoxically, truths such as 'Water is H_2O' are also often claimed to be paradigm examples of *essential* truths and thus of metaphysically substantive and interesting truths. But how can that be? How can the semantics of proper names and natural kind terms deliver, in conjunction with mere empirical observation or experimental evidence, truths concerning the *essences* of mind-independent things?

The answer, it seems to me, is that they *can't*.[7] Knowledge of essence cannot be obtained from a combination of purely non-modal empirical knowledge—observational or experimental knowledge—and *a priori* logical or conceptual-cum-semantic knowledge. Whence, then, derives the illusion that it can? The illusion, it seems to me, rests

[5] See Saul A. Kripke, *Naming and Necessity* (Oxford: Blackwell, 1980).

[6] See Saul A. Kripke, 'Identity and Necessity', in M. K. Munitz (ed.), *Identity and Individuation* (New York: New York University Press, 1971), pp. 135–64. I set aside, for present purposes, the serious doubts that may be raised concerning the cogency of this supposed proof, for which see further my 'On the Alleged Necessity of True Identity Statements', *Mind* 91 (1982), pp. 579–84 and my 'Identity, Vagueness, and Modality', in J. L. Bermúdez (ed.), *Thought, Reference, and Experience: Themes from the Philosophy of Gareth Evans* (Oxford: Clarendon Press, 2005), pp. 290–310.

[7] For similar doubts, whose cogency seem to have been forgotten by many, see Nathan U. Salmon, *Reference and Essence* (Oxford: Blackwell, 1982).

upon the very presupposition mentioned earlier: that knowledge of what is actual can be delivered by unaided experience—unaided, that is, by properly modal knowledge (unaided, as I would put it, by knowledge of essences). *It cannot*. For empirical evidence can only be evidence for what is (genuinely) *possible* and so cannot reveal something to be *actual* save on condition that it *is* possible.[8] This consideration affects the Kripkean paradigm of *a posteriori* modal knowledge as follows. How, we should ask, is the *antecedent* of the relevant conditional to be established *purely empirically* in any given case? How, for instance, is it to be established that Hesperus *is* Phosphorus, or that water *is* H_2O? Not *purely* by observation or experiment, I claim. Observation can reveal that Hesperus coincides in its orbit with Phosphorus, but the conclusion that Hesperus *is* (identical with) Phosphorus requires the further assumption that these are material objects and that any such object necessarily excludes another—or, at least, another of the same kind—from the same place at the same time. But how is *that* known? Not by empirical means. Likewise with water and H_2O, as I shall explain more fully a little later.

Here it may be asked: why isn't it sufficient, in order to know that Hesperus and Phosphorus are identical on the grounds that they exist in the same place at the same time, merely to know that they are material objects of the same kind and that such objects *do not*—rather than *cannot*—exist in the same place at the same time, this being a non-modal fact that is knowable purely empirically?[9] I answer that the fact that material objects of the same kind *do not* exist in the same place at the same time is *not* knowable purely empirically, but only by inference from the *modal* truth that such objects *cannot* exist in the same place at the same time. For it is not as though one could tell, simply by observing very carefully, that *only one* material object of a given kind occupies a certain place and then infer inductively, from many such observations, that this is quite generally the case. After all, if—*per impossibile*, as I maintain—two such objects did occupy exactly the same place, why should we suppose that they would *look* or *feel* or in any other way observably *appear* any different from just one such object?[10] But if they wouldn't,

[8] For further discussion of this general point, see my *The Possibility of Metaphysics*, ch. 1.

[9] I am grateful to Paul Noordhof and Timothy Williamson for pressing me on this point in discussion.

[10] It might perhaps be supposed that they would *feel twice as heavy* as one such object normally would. But how could any purely empirical consideration entitle one to suppose this? And even if they *would* feel twice

then no amount of careful observation could assure us—without benefit of the modal knowledge that such a situation is *impossible*—that, indeed, *only one* material object of the kind in question exists in any given place. Nor, it should be emphasized, can one intelligibly suppose that it is a merely *contingent* fact that no two such objects ever coincide, for this fact would then amount to a quite inexplicable accident of cosmic proportions. It might be suggested, I suppose, that its explanation would lie in the purely contingent fact that matter is *impenetrable*, in the sense that it resists the intrusion of other matter into the place that it occupies. But even if we were to accept this claim concerning the nature of matter—a claim which, in any case, has every appearance of being an *essentialist* one—it would *not* by itself explain why two different material objects of the same kind never coincide, because that conclusion requires the further assumption that two such objects *never share the same matter*. And this is not explicable by appeal to anything analogous to forces of resistence nor, indeed, by appeal to any other conceivable consideration of a wholly contingent and purely empirical character.

The more general point to be insisted upon here is that ordinary judgements of identity, such as 'Hesperus is (identical with) Phosphorus', cannot warrantably be made without at least implicit appeal to or reliance upon *criteria* of identity, which often differ for things of different kinds, are not discoverable purely empirically, and carry specific modal implications (because they are determinative of the sorts of changes that things of given kinds can and cannot survive, or through which they can or cannot persist).[11] Thus, for example, if ancient astronomers had believed that Hesperus and Phosphorus were *not* material objects of any kind but, instead, *holes in the firmament* through which the cosmic light shines, then they would have had no reason at all to *identify* Hesperus and

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as heavy as one such object normally would, how could mere observation enable us to distinguish this hypothetical situation from one in which a *single* object of the kind in question had twice the weight of a normal object of that kind? I should stress that in raising queries of this type, I have not the slightest intention to give succour to *scepticism* regarding our perceptual capacities, but only to bring to our attention the ways in which our use of those capacities to acquire empirical knowledge relies upon our grasp of certain *a priori* modal truths, in confirmation of my general thesis that knowledge of what is actual cannot be delivered by unaided experience—unaided, that is, by properly *modal* knowledge.

[11] See further my *Kinds of Being: A Study of Individuation, Identity and the Logic of Sortal Terms* (Oxford: Blackwell, 1989), ch. 2.

Phosphorus even if they had been able to predict that, at a certain time, Hesperus and Phosphorus would exactly coincide. For holes are things of such a kind that they *can* coincide without being identical—as are, for example, shadows and spots of light. We can readily make sense of the thought that two holes in a surface should approach one another, merge for a while, and then carry on travelling their separate ways, just as we can make sense of the thought of two shadows or spots of light merging and then separating again. Not so with two material objects of the same kind, it seems clear—and, certainly, it is this assumption that is presupposed by the judgement that Hesperus and Phosphorus, being such objects, are identical because they coincide in their orbits.[12]

So how, then, *do* we know that two material objects of the same kind—unlike two shadows or two spots of light—necessarily exclude one another from the same place at the same time, given that mere empirical observation cannot inform us of this fact? A popular answer would be: *by reflection on concepts*—which might be taken to include engagement with 'thought-experiments', designed to reveal 'what we would say' in various imaginary scenarios. But the implication of this sort of answer seems to be that such knowledge is still not *substantive*, because it deals in mere analytic trivialities, on a par with 'Bachelors are unmarried', even if the analytic character of the statements in question may be less immediately obvious. In any case, I shall shortly challenge answers of this sort—and in Part II of the paper I shall develop an alternative approach to such questions that is very different in character.

But let us return for a moment to Kripke's other surprising category of knowable truths—the contingent *a priori*, his famous example being that the standard metre bar is one metre in length. Here, it may be urged, is another example: 'Water is the watery stuff (around here)'—where 'watery stuff' is shorthand for some

[12] Of course, there may be—indeed, *are*—metaphysians who, for their own reasons, *dispute* the truth of the proposition that two different material objects of the same kind cannot coincide: but since their reasoning, for what it is worth, is itself based at least in part on modal considerations, they pose no threat to the more general claim that I am defending, namely, that all empirical judgements rest on modal presuppositions. They pose only a threat to the suggestion that, in the case of Hesperus and Phosphorus, the modal presupposition that I have cited is a *correct* one. But I should emphasize that I myself think that the presupposition in question *is* a metaphysically sound one, agreeing in this respect with David S. Oderberg: see his 'Coincidence Under a Sortal', *The Philosophical Review* 105 (1996), pp. 145–71.

such descriptive phrase as 'colourless and transparent liquid which quenches thirst, falls from the sky in rain and fills the oceans and rivers'.[13] The case for citing this as an example of the contingent *a priori* is founded on the following thought. Minimal linguistic competence with the expressions 'water' and 'the watery stuff' surely suffices to guarantee that a speaker equipped with it thereby knows that this sentence is *true*, without requiring any resort to empirical evidence (and, moreover, without presuming on his or her part the knowledge that water is, in fact, H_2O). Plausibly, anyone who insisted on more *empirical* information before being ready to assent to this statement would thereby simply reveal his or her inadequate grasp of the linguistic meanings of the expressions involved (taking 'linguistic meaning' here to encompass the rules or conventions governing the proper use of expressions). In short: anyone comprehending the linguistic meaning of 'Water is the watery stuff (around here)' should know that it expresses a *true* proposition, even if he or she need not know precisely *which* proposition it expresses (because he or she need not know *which* stuff water is—H_2O or, say, XYZ).

This line of thought, however, provides a possible basis for a challenge to the claim that I made earlier, regarding the metaphysical presuppositions of our empirical discovery that water is H_2O, as follows. First, it may be said—as has just been pointed out—'Water is the watery stuff (around here)' is contingent but knowable *a priori*. Second, we can—it may be urged—discover *purely empirically* that H_2O is the watery stuff (around here). Hence, finally, we can deduce that water is H_2O—a metaphysically necessary truth. What further *modal* knowledge is required here—it may be asked—analogous to the modal knowledge that is apparently required in the case of Hesperus and Phosphorus? The inference in question *seems* to be from modally innocent premises—'Water is the watery stuff (around here)' and 'The watery stuff (around here) is H_2O'—to a modally significant, because necessarily true, conclusion, 'Water is H_2O'. But that in itself should raise our suspicions that the appearance of modal innocence here is deceptive.[14] And,

[13] Frank Jackson, for instance, urges precisely this in his recent book, *From Metaphysics to Ethics: A Defence of Conceptual Analysis* (Oxford: Clarendon Press, 1998): see p. 52. The expression 'watery stuff', thus understood, is borrowed from David J. Chalmers, *The Conscious Mind* (Oxford: Oxford University Press, 1996), p. 57.

[14] In fact, 'Water is the watery stuff (around here)' and 'The watery stuff (around here) is H_2O' are both supposed to be *contingent* truths (the first *a priori* and the second *a posteriori*), in which case we really do have

indeed, on closer inspection we see that the 'empirical discovery' that the watery stuff (around here) is H_2O is *not* free of modal presuppositions. How, after all, are scientists supposed to make this discovery, if not by identifying individual *samples* of the watery stuff (around here) with individual quantities of H_2O? But identifying two such quantities of material stuff is exactly analogous to identifying Hesperus with Phosphorus and relies on the same modal presupposition, namely, that distinct material bodies of the same kind—in this case, distinct bodies of liquid—cannot exist in the same place at the same time. (There are, besides, other difficulties attached to standard accounts of the modal and epistemic status of identity claims involving natural kind terms, such as 'Water is H_2O', which I have glossed over so far and will discuss in Part II of the paper.)

It may be supposed, however, that light can be thrown on the foregoing issue by appeal to the framework of so-called *two-dimensional modal semantics*—so let us now look briefly at that.[15] A key thought motivating this approach to modal questions is that there is a perfectly good sense in which we don't know *which* possible world is the *actual* world—although, of course, in another perfectly good sense we *do*, for we know that it is *this* world. For example, scientists tell us that water is H_2O—and, if they are right, then the actual world is one in which H_2O is the watery stuff (around here). But what if they're *wrong*, as they surely might be, at least in one sense of 'might'—an *epistemic* sense? Perhaps, after all, XYZ is the watery stuff (around here). Surveying all the possible worlds—all the 'maximal' ways that things could be—we may think of them in either of two different capacities: either as *counterfactual* worlds (that is, as ways the actual world *is not* but *could have been*), or else as worlds that are *rival candidates for actuality* (that is, as different ways the actual world might in fact turn out to be). 'Water is the watery stuff (around here)' is then true—in the sense that it expresses a true proposition—in every possible world *considered as actual*, whereas 'Water is H_2O' is true in every

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a problem on our hands, because a necessary truth—which is what 'Water is H_2O' is supposed to be—cannot be deduced from purely contingent premises. If we take the definite description 'the watery stuff (around here)' in the *second* premise to be an implicitly *rigidified* one, that problem goes away but is replaced by another: for this description in the *first* premise must *not* be taken to be an implicitly rigidified one if the first premise is to be interpreted as an example of the contingent *a priori*.

[15] See further Jackson, *From Metaphysics to Ethics*, ch. 2 and ch. 3, where the history of this approach is documented and the approach itself is endorsed.

possible world *considered as counterfactual* (for the proposition that it expresses is true in every world, *given* that it is true in the actual world—on the assumption, that is, that our scientists are not mistaken about the chemical composition of water). Thus we seem to have *two* kinds of 'necessary truth'—one knowable purely *a priori* and the other knowable only *a posteriori*. But neither kind of knowledge, it is assumed, requires anything more than *either* a grasp of concepts or meanings (including the meanings of logical expressions) *or*—in the case of the *a posteriori* truths—purely empirical evidence. In sum, modal knowledge is always *factorizable* into at most two independent components, one broadly conceptual or semantic in character and the other purely empirical in character. The two-dimensional framework, although it complicates matters somewhat, does not affect that basic assumption. And it is that assumption that I want to call into question.

The inadequacy of the two-dimensional framework for the purposes of modal metaphysics can be illustrated in the following way. Note, first, that if 'water' is taken to be a rigid designator (a term which designates the same thing in every possible world in which that thing exists), then 'Water is the watery stuff (around here)' is not true in all possible worlds *considered as counterfactual*—because, presumably, H_2O *isn't* watery stuff in some possible worlds (although this claim rests upon the perhaps debatable assumption that the natural laws governing the appearance and behaviour of a chemical substance like H_2O are not themselves metaphysically necessary).[16] By contrast, however, 'Water is *actually* the watery stuff (around here)' comes out as true in all possible worlds *both* considered as counterfactual *and* considered as actual and so is a 'necessary' truth in both of the senses canvassed earlier. It comes out as true in all possible worlds *considered as actual* for the same reason that 'Water is the watery stuff (around here)' does. And it comes out as true in all possible worlds *considered as counterfactual* because in every such world it is true solely in virtue of how water is *in the actual world*—and in the actual world water *is* the watery stuff (around here). In this respect—that is, in respect of its being a 'necessary' truth in both of the canvassed senses—'Water is actually

[16] The view that *all* laws of nature are in fact metaphysically necessary has been advanced by some philosophers recently: see, for example, Brian Ellis, *Scientific Essentialism* (Cambridge: Cambridge University Press, 2001). However, this is still very much a minority view and it is one that I myself challenge elsewhere: see my *The Four-Category Ontology: A Metaphysical Foundation for Natural Science* (Oxford: Clarendon Press, 2006), ch. 9 and ch. 10.

the watery stuff (around here)' is just like '2 + 2 = 4'. And yet, of course, 'Water is actually the watery stuff (around here)' is plainly *trivial*, in a way that '2 + 2 = 4' is not: the former, unlike the latter, does not express a metaphysically substantive necessity. Because the framework of two-dimensional modal semantics classifies these two statements in the same way, however, that framework must be judged inadequate for a comprehensive account of the metaphysics of modality—reinforcing the doubts on this score that I have already expressed. That framework, it seems clear, cannot adequately distinguish between *real* metaphysical necessity, grounded in the natures of things—in the natures, for instance, of the natural numbers 2 and 4—and *superficial* metaphysical necessity, of the sort exhibited by 'Water is actually the watery stuff (around here)'.

Recall again the thought that there is a perfectly good sense in which we don't know *which* world is the actual world. That is right, because empirical evidence is always defeasible and is always far from being comprehensive. But we shouldn't lose sight here of a more fundamental point: that empirical evidence can at best only help us to *select* a world—or a class of worlds—as a likely candidate for being (or including) the actual world. It cannot tell us what the worlds *are*—what the range of possibilities is from which the selection is to be made. Ultimately that can only be determined, if at all, by *a priori* considerations. So how *is* it to be determined? Purely by appeal to logical and conceptual-cum-semantic considerations? But how could *that* claim be upheld, without condemning us to some fairly extreme form of conceptualist anti-realism? Yet such considerations are all that seem to be available, according to prevailing orthodoxy in analytic philosophy.

It is at this point that *conceivability* is apt to be appealed to as a putative guide to possibility—as it were, as a surrogate for the perceptual *experience* that can, supposedly, reveal the contents of the *actual* world to us, but cannot reveal to us what is merely possible.[17] But this suggestion is really of no use whatever, on the usual understandings of what conceivability involves. For, on these understandings, either we are to construe 'conceiving' as an exercise of our competence with logic and concepts, or else we are to construe it on a quasi-perceptual or imaginative model. The first approach gets us no further forward with the problem that has been posed—that is, with the question of how we can get beyond a mere knowledge of *our concepts* to knowledge

[17] For extensive recent discussion of the relationship between conceivability and possibility, see T. S. Gendler and J. Hawthorne (eds), *Conceivability and Possibility* (Oxford: Clarendon Press, 2002).

of what is objectively *possible* independently of us. The second falls foul of the fact that, as mentioned earlier, even perceptual experience is no guide to reality save when its deliverances are constrained within the bounds what is *genuinely possible*, which such experience cannot itself determine unaided. Imagination is no better, and in fact considerably worse, in this regard.

The lesson of all this, I believe, is that metaphysical knowledge—modal knowledge of mind-independent reality—must, if it exists at all, have another basis altogether, being grounded *neither* in experience *nor* in logic and concepts. Let us return to a putative example of such knowledge—knowledge that no two material bodies (of the same kind) can occupy the same place at the same time. Is this really just like knowing that no bachelor can be married? By no means. For the former requires a grasp of, or rational insight into, certain necessary relationships between the identities of bodies, places and times—and thus, as I would put it, insight into their *natures* or *essences*. The central task of philosophy, in my view, is the cultivation of such insight—*not* the 'analysis of concepts', with which it is apt to be confused. Knowing the nature or essence of a (possible) kind of being or entity cannot be reduced to knowing the meanings of words or understanding concepts and knowing logical relations between them—on the model of knowing, for example, that the word 'bachelor' cannot properly be applied to married men, or that concept *bachelor* is such that married men do not fall under it. Moreover, there *must* be knowledge of essences if there is to be any kind of knowledge *at all*, including empirical and conceptual knowledge. For example, conceptual knowledge that bachelors are not married depends on knowledge of the essences of *concepts*, since it requires one to grasp the concept of a *bachelor*—and thereby to know, at least implicitly, *which* concept this is. All of this I shall explain more fully in Part II below. But concepts are just one kind of entities amongst many and if we can grasp *their* essences—as we must, I believe, in order to possess conceptual knowledge—then why should we not equally be able to grasp the essences of other actual and possible kinds of entities, such as material bodies, times and places? Such a grasp is necessarily antecedent to any well-grounded empirical knowledge of which possible entities the actual world does in fact contain. Knowledge of essence is certainly not a *substitute* for such empirical knowledge, but it *is* a prerequisite of it. It is acquired, in my view, by rational reflection on being and its modes, that is, by *metaphysical thought and reasoning*.

To grasp fully what such thought and reasoning are and how they differ from other exercises of the intellect, one has to engage in them

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oneself—typically, after having been introduced to them by another practitioner of the subject. That, at least in part, should be the aim of a philosophical education. Metaphysical thought and reasoning, I consider, are *sui generis* and irreducible. In this respect, I think, they are like both mathematical and moral reasoning. To sum all of this up, we might say that metaphysics as an intellectual discipline is perhaps most perspicuously characterized as *the science of essence*. In the second part of this paper, I shall try to sketch in more detail what this characterization of metaphysics involves, by formulating and defending more fully the view of essence to which it is committed.

II: Serious Essentialism

It is vital for my purposes in the remainder of this paper that the doctrine of *essentialism* be suitably understood. I say this because many contemporary *possible-worlds theorists* readily describe themselves as essentialists and propose and defend what *they* call essentialist claims, formulated in terms of the language of possible worlds. They will say, for instance, that an essential property of an object is one that the object possesses in every possible world in which it exists. And they will typically claim that some, but not all, of an object's actual properties are essential to it in this sense. But a doctrine of this sort is not serious essentialism in my sense, because it attempts to characterize essence in terms of antecedently assumed notions of possibility and necessity and thus—in my view—puts the cart before the horse. It is at best *ersatz* essentialism. So what is *serious* essentialism? To pursue this query, one might seek to ask *what essences are*. However, this question is already potentially misleading, for it invites the reply that essences are *entities* of some special sort. And, as I have already remarked, I want to deny that essences are entities. According to serious essentialism, as I understand it, all entities *have* essences, but their essences are certainly not further entities related to them in some special way.

So, what do we or, rather, what *should* we mean by the 'essence' of a thing—where by 'thing', in this context, I just mean any sort of entity whatever? We can, I suggest, do no better than to recall John Locke's perceptive words on the subject, which go right to its heart. Essence, Locke said, in the 'proper original signification' of the word, is 'the very being of any thing, whereby it is, what it is'.[18] In short, the

[18] See again Locke, *An Essay Concerning Human Understanding*, III, III, 15.

essence of something, *X*, is *what X is*, or *what it is to be X*.[19] In another locution, *X*'s essence is the very *identity* of *X*—a locution that I am happy to adopt, provided that it is clearly understood that to speak of something's 'identity' in this sense is quite different from speaking of the identity *relation* in which it necessarily stands to itself and to no other thing. However, in order to avoid potential confusion about the meaning of locutions such as these, I think that it is important to draw, from the very start, a distinction between *general* and *individual* essence.[20] The key point to be emphasized in this connection is that any individual thing, *X*, must be a thing *of some general kind*—because, at the very least, it must belong to some *ontological category*. Remember that by 'thing' here I just mean 'entity'. So, for example, *X* might be a *material object*, or a *person*, or a *property*, or a *set*, or a *number*, or a *proposition*, or whatnot—the list goes on, in a manner that depends on what one takes to be a full enumeration of the ontological categories to be included in it.[21] This point being accepted, if *X* is something of kind *K*, then we may say that *X*'s *general* essence is *what it is to be a K*, while *X*'s *individual* essence is *what it is to be the individual of kind K that X is*, as opposed to any other individual of that kind.

But why suppose that things must *have* 'essences' in this sense and that we can, at least in some cases, know those essences? First of all, because otherwise it makes no sense—or so I believe—to say that we can talk or think comprehendingly about things at all. For if we do not at least know *what a thing is*, how can we talk or think comprehendingly about it?[22] How, for instance, can I talk or think

[19] The historical source of this view lies, of course, with Aristotle, whose phrase το τι ην ειναι is standardly translated as 'essence': see Aristotle, *Metaphysics* Z, 4. Its more literal meaning is 'the what it is to be' or 'the what it would be to be'.

[20] I do not attempt to offer here a *semantic analysis* of expressions such as 'what *X* is', 'what it is to be *X*' or 'the identity of *X*', although that is no doubt an exercise that should be undertaken at some stage in a full account of what I am calling *serious essentialism*. I assume that our practical grasp of the meaning of such expressions is adequate for a preliminary presentation of the approach of the sort that I am now engaged in.

[21] For my own account of what ontological categories we should recognize and which we should regard as fundamental, see my *The Four-Category Ontology*, especially Part I.

[22] Note that I ask only how we can *talk* or *think* comprehendingly about a thing if we do not know what it is—not how we can *perceive* a thing if we do not know what it is. I am happy to allow that a subject *S* may, for example, *see* an object *O* even though *S* does not know what *O* is. Seeing, however,

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comprehendingly about *Tom*, a particular cat, if I simply don't know what cats are and which cat, in particular, Tom is? Of course, I'm not saying that I must know *everything* about cats or about Tom in order to be able to talk or think comprehendingly about that particular animal.[23] But I must surely know enough to distinguish the kind of thing that Tom is from other kinds of thing, and enough to distinguish Tom in particular from other individual things of Tom's kind. Otherwise, it seems that my talk and thought cannot really fasten upon *Tom*, as opposed to something else.[24]

However, denying the reality of essences doesn't only create an epistemological problem: it also creates an ontological problem. Unless Tom has an 'identity'—whether or not anyone is acquainted

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is not a purely intellective act. Indeed, of course, even lower animals that cannot at all plausibly be said to understand *what* objects exist in their environment, may nonetheless be said to *see* or *feel* or *smell* some of those objects.

[23] Perhaps, indeed, all I need to know about cats is that they are *animals* or *living organisms* and perhaps, likewise, all I need to know about Tom is which animal or living organism he is.

[24] Of course, it is fashionable at present to suppose that our talk and thought have, in general, their *referents* in the 'external' world secured through the existence of appropriate *causal* links between certain constituents of our talk and thought—certain of our linguistic and mental 'representations'—and various extra-linguistic and extra-mental entities belonging to that world: links that can, and mostly do, obtain without our needing to have any knowledge of them. On this sort of view, it may be supposed, my talk and thought can fasten upon Tom because there is an appropriate causal link between the name 'Tom', as I have learnt to use it, and *Tom*—and an analogous causal link between a certain 'mental representation' of mine (perhaps a certain 'symbol' in the putative 'language of thought' supposedly utilized by my brain) and *Tom*. I will only say here that I cannot begin to understand how it might seriously be supposed that a linkage of this sort could genuinely suffice to enable me to *talk and think comprehendingly about Tom*, even if it is conceded that there is a (relatively anodyne) notion of 'reference' that could perhaps be satisfactorily accounted for by a causal theory of the foregoing sort. I should emphasize, then, that I am not presently concerned to challenge the so-called causal theory of reference, much less to defend in opposition to it some sort of neo-Fregean theory of reference as being mediated by 'sense'. Rather, I am simply not interested, at present, in semantic questions or rival semantic theories, but rather in the purely metaphysical question of *how it is possible to be acquainted with an object of thought*: my answer being that it is so through, and only through, a grasp of that object's *essence*—that is, through knowing *what it is*.

with it—there is nothing to make Tom the particular thing that he is, as opposed to any other thing. Anti-essentialism commits us to anti-realism—and indeed to an anti-realism so global that it is surely incoherent. It will not do, for instance, to try to restrict one's anti-essentialism to 'the external world', somehow privileging us and our language and thought. For how could it be that there is a fact of the matter as to *our* identities, and the identities of *our words and thoughts*, but not as to the identities of the mind-independent entities that we try to capture in language and thought? On the other hand, how could there *not* be any fact of the matter as to our identities and the identities of our words and thoughts? Everything is, in Joseph Butler's memorable phrase, *what it is and not another thing*. That has sounded to many philosophers like a mere truism without significant content, as though it were just an affirmation of the reflexivity of the identity relation. But, in fact, Butler's dictum does not merely concern the identity relation but also identity in the sense of *essence*. It implies that there is a fact of the matter as to what any particular thing is—that is, as to its 'very being', in Locke's phrase. Its very being—its identity—is what makes it the thing that it is and thereby distinct from any other thing.

Essences are apt to seem very elusive and mysterious, especially if talked about in a highly generalized fashion, as I have been doing so far. Really, I suggest, they are quite familiar to us. Above all, we need to appreciate that in very many cases a thing's essence involves *other things*, to which it stands in relations of *essential dependence*. Consider the following thing, for instance: the set of planets whose orbits lie within that of Jupiter. What kind of thing is that? Well, of course, it is a *set*, and as such an abstract entity that depends essentially for its existence and identity on the things that are its members—namely, Mercury, Venus, Earth, and Mars. Part of *what it is to be a set* is to be something that depends in these ways upon certain other things—the things that are its members. Someone who did not grasp that fact would not understand *what a set is*. Furthermore, someone who did not know *which things* are this set's members, or at least what determined which things are its members, would not know *which particular set* this set is. So, someone who knew that its members are the planets just mentioned would know which set it is, as would someone who knew what it is to be a planet whose orbit lies within that of Jupiter.[25] This is a simple example, but

[25] There are, broadly speaking, two different views of what a set is: one which takes a set simply to be the result of—as David Lewis puts it—'collecting many into one', and another which takes a set to be the extension

it serves to illustrate a general point. In many cases, we know what a thing is—both what kind of thing it is and which particular thing of that kind it is—only by knowing that it is related in certain ways to other things. In such cases, the thing in question depends essentially on these other things for its existence or its identity. To say that X depends essentially on Y for its existence and identity is just to say that it is *part of the essence* of X that X exists only if Y exists and *part of the essence* of X that X stands in some unique relation to Y.[26] Knowing a thing's essence, in many cases, is accordingly very largely a matter of understanding the relations of essential dependence in which it stands to other things whose essences we in turn know.

I said earlier that it is wrong to think of essences as themselves being *entities* of any kind to which the things having them stand in some special kind of relation. Locke himself unfortunately made this mistake, holding as he did that the 'real essence' of a material substance just *is* its 'particular internal constitution'—or, as we would now describe it, its atomic or molecular structure.[27] This is a mistake that has been perpetuated in the modern doctrine, made popular by the work of Saul Kripke and Hilary Putnam, that the essence of water *consists* in its molecular make-up, H_2O, and that the essence of a living organism *consists* in its DNA—the suggestion being that we *discover* these 'essences' simply by careful scientific investigation of the things in question.[28] Now, as we saw earlier,

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of a property or of a concept. For Lewis's remark, see his *Parts of Classes* (Oxford: Blackwell, 1991), p. vii. I see no compelling reason why, in principle, our ontology should not accommodate sets in *both* of these understandings of what they are. But since I am using the example of sets only for illustrative purposes, this is a matter on which I can afford to remain agnostic here.

[26] See further my *The Possibility of Metaphysics*, ch. 6, or alternatively my 'Ontological Dependence', *The Stanford Encyclopedia of Philosophy* (2005), ed. E. N. Zalta, http://plato.stanford.edu.

[27] Thus, at one point Locke remarks: '[W]e come to have the *Ideas of particular sorts of Substances*, by collecting such Combinations of simple *Ideas*, as are by Experience ... taken notice of to exist together, and are therefore supposed to flow from the particular internal Constitution, or unknown Essence of that Substance' (*Essay*, II, XXIII, 3).

[28] See, especially, Kripke, *Naming and Necessity* and Hilary Putnam, 'The Meaning of "Meaning"', in his *Mind, Language and Reality: Philosophical Papers Volume 2* (Cambridge: Cambridge University Press, 1975).

it may well be part of the essence of a thing *that it stands in a certain relation to some other thing*, or kind of things. But *the essence itself*—the very being of a thing, whereby it is, what it is—is not and could not be some further entity. So, for instance, it *might* perhaps be acceptable to say that it is part of the essence of water *that it is composed of H_2O molecules*. This is an issue that I shall return to later. But the essence of water could not simply *be* H_2O—*molecules* of that very kind—nor yet the *property* of being composed of H_2O molecules.[29] For one thing, if the essence of an entity *were* just some further entity, then *it in turn* would have to have an essence of its own and we would be faced with an infinite regress that, at worst, would be vicious and, at best, would appear to make all knowledge of essence impossible for finite minds like ours. To know something's essence is not to be acquainted with some *further thing* of a special kind, but simply to understand *what exactly that thing is*. This, indeed, is why knowledge of essence is possible, for it is a product simply of *understanding*—not of empirical observation, much less of some mysterious kind of quasi-perceptual acquaintance with esoteric entities of any sort. And, on pain of incoherence, we cannot deny that we understand what at least some things are, and thereby know their essences.

Here it may be objected that it is inconsistent of me to deny that essences are entities and yet go on, as I apparently do, to *refer to* and even *quantify over* essences. Someone who voices this objection probably has in mind W. V. Quine's notorious *criterion of ontological commitment*, encapsulated in his slogan 'to be is to be the value of a variable'.[30] I reply, in the first place, that I could probably say all that I want to about my version of essentialism while avoiding all locutions involving the appearance of reference to and quantification over essences, by paraphrasing them in terms of locutions involving only sentential operators of the form 'it is part of the essence of X that'—where 'the essence of X' is not taken to make an independent

[29] Note here that it is vital not to confuse the following two forms of assertion: 'It is part of the essence of X that X has property P' and 'Property P is part of the essence of X'. Far from it being the case that these two forms of assertion are equivalent, only the first of them is acceptable according to my conception of essence. For, on the assumption that a property, P, is an *entity*, the second implies that the essence of X has an entity *as a part*, and consequently that the essence of X is itself an entity, contrary to my principle that *essences are not entities*. By contrast, the first form of assertion has no such unwanted implication.

[30] See, for example, W. V. Quine, 'Existence and Quantification', in his *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969).

contribution to the meaning of the operator, which might be represented symbolically by, say, 'E_X' in a sentential formula of the form '$E_X(p)$'. The latter is a kind of locution that I certainly do want to use and find very useful. However, I think that effort spent on working out such paraphrases in all cases would be effort wasted. If a paraphrase *means the same* as what it is supposed to paraphrase—as it had better do, if it is to be any good—then it carries the same 'ontological commitments' as whatever it is supposed to paraphrase, so that constructing paraphrases cannot be a way of relieving ourselves of ontological commitments. We cannot discover those commitments simply by examining the syntax and semantics of our language, for syntax and semantics are very uncertain guides to ontology. In short, I see no reason to place any confidence in Quine's famous criterion.

Another crucial point about essence is this: in general, *essence precedes existence*.[31] And by this I mean that the former precedes the latter both *ontologically* and *epistemically*. That is to say, on the one hand, I mean that it is a precondition of something's existing that its essence—along with the essences of other existing things—does not preclude its existence. And, on the other hand—and this is what I want to concentrate on now—I mean that we can in general *know* the essence of something X antecedently to knowing whether or not X exists. Otherwise, it seems to me, we could never find out *that* something exists. For how could we find out *that* something, X, exists before knowing *what* X *is*—before knowing, that is, *what it is* whose existence we have supposedly discovered?[32]

[31] I am reassured by finding an independent expression of support for this view in the Introduction to Kit Fine's recent book, *Modality and Tense* (Oxford: Clarendon Press, 2005): see p. 11.

[32] Notoriously, Descartes is supposed to have claimed, in the *Second Meditation*, to know *that* he existed before he knew *what* he was—that is, before he grasped his own essence. But it seems to me that any such claim must be construed as being either disingenuous or else intended non-literally, if it is not to be dismissed as being simply incomprehensible. It might, for instance, be taken to imply merely that Descartes was certain that the word 'I' *had a reference*, before knowing what that reference was. To be accurate, though, what Descartes actually says is 'But I do not yet have a sufficient understanding of what this "I" is, that now necessarily exists': see René Descartes, *Meditations on First Philosophy*, trans. J. Cottingham (Cambridge: Cambridge University Press, 1986), p. 17. That is consistent with saying that Descartes *does* already grasp his own essence, but needs to clear his mind of confused thoughts concerning it. Query: might we not come to know what X is *neither before nor after*

Consequently, we know the essences of many things which, as it turns out, *do not* exist. For we know what these things *would be*, if they existed, and we retain this knowledge when we discover that, in fact, they do not exist. Conceivably, there are exceptions. Perhaps it really is true in the case of God, for instance, that essence does not precede existence. But this could not quite generally be the case. However, saying this is perfectly consistent with acknowledging that, sometimes, we may only come to know the essence of something after we have discovered the existence of certain *other* kinds of things. This is what goes on in many fields of theoretical science. Scientists trying to discover the transuranic elements knew before they found them *what it was* that they were trying to find, but only because they knew that what they were trying to find were elements whose atomic nuclei were composed of protons and neutrons in certain hitherto undiscovered combinations. They could hardly have known what they were trying to find, however, prior to the discovery of the existence of protons and neutrons—for only after these sub-atomic particles were discovered and investigated did the structure of atomic nuclei become sufficiently well-understood for scientists to be able to anticipate which combinations of nucleons would give rise to reasonably stable nuclei.

Here it may be countered that Kripke and Putnam have taught us that the essences of many familiar natural kinds—such as the kind *cat* and the kind *water*—have been revealed to us only *a posteriori* and consequently that in cases such as these, at least, it cannot be true to say that 'essence precedes existence', whatever may be said in the case of the transuranic elements.[33] The presupposition here,

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discovering that X exists, but *simultaneously* with that discovery? Well, I see no reason to deny this possibility in some cases. But that concession need not be taken to undermine the claim that, in general, we *can* know the essence of something X before knowing whether or not X exists.

[33] The extent to which the Kripke–Putnam doctrine has become a commonplace of contemporary analytic philosophy is illustrated by the following remark of Frank Jackson's, which he makes simply in passing and without acknowledging any need to justify it: '[W]e rarely know the essence of the things our words denote (indeed, if Kripke is right about the necessity of origin, we do not know our own essences)': see his *From Metaphysics to Ethics*, p. 50. Yet, I would urge, it should strike one as being odd to the point of paradoxicality to maintain that we can talk or think comprehendingly about things without knowing *what it is* that we are talking or thinking about—that is, without grasping their essences. The charitable conclusion to draw would be that philosophers like

of course, is that Kripke and Putnam are *correct* in identifying the essence of water, for example, with its molecular make-up, H_2O. Now, I have already explained why I think that such identifications are mistaken, to the extent that they can be supposed to involve the illicit *reification* of essences. But it may still be urged against me that even if, more cautiously, we say only that it is part of the essence of water *that it is composed of H_2O molecules*, it still follows that the essence of water has only been revealed to us—or, at least, has only been *fully* revealed to us—*a posteriori*.

In point of fact, however, the Kripke–Putnam doctrine is even more obscure and questionable than I have so far represented it as being. Very often, it is characterized in terms of the supposed modal and epistemic status of identity statements involving natural kind terms, such as 'Water is H_2O', which—for reasons discussed in Part I of this paper—are said to express truths that are at once necessary and *a posteriori*. In such a statement, however, the term 'H_2O' is not functioning in exactly the same way as it does in the expression 'H_2O molecule'. The latter expression, it seems clear, means something like 'molecule composed of two hydrogen ions and one oxygen ion'. But in 'Water is H_2O', understood as an identity statement concerning kinds, we must either take 'H_2O' to be elliptical for the *definite description* 'the stuff composed of H_2O molecules' or else simply as being a *proper name*, in which case we cannot read

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Jackson do not use the term 'essence' in what Locke called its 'proper original signification'. Now, of course, Locke himself says that the 'real' essences of material substances are *unknown* to us—and the Kripke–Putnam doctrine is recognizably a descendent of Locke's view, to the extent that it identifies the 'real essences' of material substances with their 'internal constitutions', many of which are certainly still unknown to us and may forever continue to be so. But Locke, at least, concluded—unlike modern adherents of the Kripke–Putnam doctrine—that 'the *supposition of Essences, that cannot be known*; and the making them nevertheless to be that, which distinguishes the Species of Things, *is so wholly useless* ... [as] to make us lay it by' (*Essay*, III, III, 17) and he accordingly appeals instead to what he calls *nominal* essences. The correct position, I suggest, is neither Locke's nor that of the Kripke–Putnam doctrine, but rather (what I take to be) Aristotle's: that the real essences of material substances *are* known to those who talk or think comprehendingly about such substances—and consequently that such essences are not to be identified with anything that is *not* generally known to such speakers and thinkers, such as the 'particular internal constitution' of a material substance, or a human being's (or other living creature's) 'origin' in the Kripkean sense.

into it any significant semantic structure. On the latter interpretation, 'Water is H_2O' is exactly analogous to 'Hesperus is Phosphorus' and its necessary truth reveals nothing of substance to us concerning the composition of water. If we are inclined to think otherwise, this is because we slide illicitly from construing 'H_2O' as a proper name to construing it as elliptical for the definite description 'the stuff composed of H_2O molecules'. Now, when 'Water is H_2O' is understood on the model of 'Hesperus is Phosphorus', its necessary *a posteriori* truth may in principle be established in a like manner—namely, by appeal to the familiar logical proof of the necessity of identity, together with the *a posteriori* discovery of the co-reference of the proper names involved—but not so when it is construed as meaning 'Water is the stuff composed of H_2O molecules', for the latter involves a definite description. Thus far, then, we have been given no reason to suppose that 'Water is H_2O' expresses an *a posteriori* necessary truth that reveals to us something concerning the essence of water. The appearance that we have been given such a reason is the result of mere sleight of hand. It might be thought that 'Water is the stuff composed of H_2O molecules' follows unproblematically from the supposed empirical truth 'Water is H_2O' (construed as an identity statement involving two proper names) and the seemingly trivial, because analytic, truth 'H_2O is the stuff composed of H_2O molecules'. But the latter, when the first occurrence of 'H_2O' in it is interpreted as a proper name, is no more trivial than '*Water* is the stuff composed of H_2O molecules'—and this is how it must be interpreted for the inference to go through.

There is another important consideration that we should bear in mind when reflecting on the frequently-invoked analogy between 'Water is H_2O' and 'Hesperus is Phosphorus'—a consideration that I invoked in Part I of this paper, but which merits further elaboration and emphasis here. It is all very well to point out that the discovery that Hesperus is Phosphorus was an empirical one. But it was not *purely* empirical, for the following reason. The identity was established because astronomers discovered that Hesperus and Phosphorus *coincide in their orbits*: wherever Hesperus is located at any given time, there too is Phosphorus located. However, as I remarked in Part I, spatiotemporal coincidence can only be taken to imply identity *for things of appropriate kinds*. It is only because Hesperus and Phosphorus are taken to be *planets* and thereby *material objects of the same kind* that their spatiotemporal coincidence can be taken to imply their identity. But, as I also remarked in Part I, the principle that distinct material objects of the same kind cannot coincide spatiotemporally is not an empirical one: it is an *a priori*

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principle implied by *what it is* to be a material object of any kind—in other words, it is a truth grounded in *essence*. It is only because we know that it is *part of the essence* of a planet not to coincide spatiotemporally with another planet, that we can infer the identity of Hesperus with Phosphorus from the fact that they coincide in their orbits. Thus, one must already know *what a planet is*—know its essence—in order to be able to establish by *a posteriori* means that one planet is identical with another. By the same token, then, one must already know *what a kind of stuff is*—know its essence—in order to be able to establish by *a posteriori* means that one kind of stuff is identical with another. It can hardly be the case, then, that we can *discover* the essence of a kind of stuff simply by establishing *a posteriori* the truth of an identity statement concerning kinds of stuff—any more than we can be supposed to have discovered the essence of a particular planet by establishing *a posteriori* the truth of an identity statement concerning that planet. So, even granting that 'Water is H_2O' is a true identity statement that is both necessarily true and known *a posteriori*, it does not at all follow that it can be taken to reveal to us the essence of the kind of stuff that we call 'water'.

Be all this as it may, however, we still have to address the question of whether, in fact, we ought to say that it is part of the essence of water that it is composed of H_2O molecules. So far, we have seen only that the Kripke–Putnam semantics for natural kind terms have given us no reason to suppose that we ought to. I am inclined to answer as follows. If we are using the term 'water' to talk about a certain *chemical compound* whose nature is understood by theoretical chemists, then indeed we should say that it is part of the essence of this compound that it consists of H_2O molecules. But, at the same time, it should be acknowledged that the existence of this compound is a relatively recent discovery, which could not have been made before the nature of hydrogen and oxygen atoms and their ability to form molecules were understood. Consequently, when we use the term 'water' in everyday conversation and when our forebears used it before the advent of modern chemistry, we are and they were *not* using it to talk about a chemical compound whose nature is now understood by theoretical chemists. We are and they were using it to talk about a certain *kind of liquid*, distinguishable from other kinds of liquid by certain *macroscopically* detectable features, such as its transparency, colourlessness, and tastelessness. We are right, I assume, in thinking that a liquid of this kind actually exists, but *not* that it is part of its essence that it is composed of H_2O molecules. At the same time, however, we should certainly acknowledge that empirical scientific inquiry reveals that, indeed, the chemical

compound H_2O is very largely what bodies of this liquid are made up of. In fact, the natural laws governing this and other chemical compounds make it overwhelmingly unlikely that this kind of liquid could have a different chemical composition in different parts of our universe. But the 'could' here is expressive of mere physical or natural possibility, not *metaphysical* possibility.[34] Only an illicit conflation of these two species of possibility could reinstate the claim that water is *essentially* composed of H_2O molecules.

But, it may be asked, what about our alleged 'intuitions' in so-called 'Twin-Earth' cases[35]—for example, the intuition that if, on a distant planet, a watery stuff was discovered that was not composed of H_2O molecules, then it would not be *water*? In reply, I would remark only that any metaphysical significance that these alleged intuitions might be supposed to have is dissipated by the fact, just mentioned, that the natural laws governing chemical compounds in our universe almost certainly render such scenarios physically impossible. The supposedly 'watery' stuff on Twin Earth would be like *fool's gold*: it would at best be *casually* mistakable for water and *that* is why it would not be water. The *chemical* explanation for this would be that fool's water, as we could justly call it, is not composed of H_2O molecules. But we cannot turn this perfectly legitimate chemical explanation into a logico-metaphysical argument that genuine water is of *metaphysical* necessity composed of H_2O molecules—unless, once again, we conflate physical with metaphysical necessity.

So far, I have urged that the following two principles must be endorsed by the serious essentialist: that *essences are not entities* and that, in general, *essence precedes existence*. But by far the most important principle to recognize concerning essences, for the purposes of the present paper, is that *essences are the ground of all metaphysical necessity and possibility*.[36] One reason, thus, why it can be the case that X is *necessarily* F is that it is part of the essence of X that X is F. For example, any material object is necessarily spatially extended because it is part of the essence of a material object that it is spatially

[34] For extended discussion of the need to distinguish between these two species of possibility, see my *The Four-Category Ontology*, ch. 9 and ch. 10.

[35] I say 'alleged' intuitions because I suspect that many who *say* they have them do so only because it has become part of current philosophical orthodoxy to assume that 'we' do.

[36] Compare Kit Fine, 'Essence and Modality', in James E. Tomberlin (ed.), *Philosophical Perspectives, 8: Logic and Language* (Atascadero, CA: Ridgeview, 1994).

extended—in other words, part of *what it is to be a material object* is to be something that is spatially extended. But this is not the only possible reason why something may be necessarily *F*. *X* may be necessarily *F* on account of the essence of *something else* to which *X* is suitably related. For example, Socrates is necessarily the subject of the following event—*the death of Socrates*—because it is part of the essence of that event that Socrates is its subject, even though it is not part of Socrates's essence that he is the subject of that event. It is not on account of *what Socrates is* that he is necessarily the subject of that event but, rather, on account of *what that event is*.[37] This is not to say that Socrates could not have died a different death, only that no one but Socrates could have died the death that he in fact died. And what goes for necessity goes likewise, *mutatis mutandis*, for possibility. I venture to affirm that all facts about what is necessary or possible, in the metaphysical sense, are grounded in facts concerning the essences of things—not only of existing things, but also of non-existing things. But, I repeat, facts concerning the essences of things are not facts concerning *entities* of a special kind, they are just facts concerning *what things are*—their very beings or identities. And these are facts that we can therefore grasp simply in virtue of *understanding* what things are, which we must in at least some cases be able to do, on pain of being incapable of thought altogether. Consequently, all knowledge of metaphysical necessity and possibility is ultimately a product of the understanding, not of any sort of quasi-perceptual acquaintance, much less of ordinary empirical observation.

How, for example, do we know that two distinct things of suitably *different* kinds, such as a bronze statue and the lump of bronze composing it at any given time, can—unlike two planets—exist in the same place at the same time? Certainly not by *looking very hard* at what there is in that place at that time. Just by looking, we shall not see that two distinct things occupy that place. We know this, rather, because we know *what a bronze statue is* and *what a lump of bronze is*. We thereby know that these are *different* things and that a thing of the first sort must, at any given time, be composed by a thing of the second sort, since it is part of the essence of a bronze statue to be composed of bronze. We know that they are different things because, in knowing what they are, we know their *identity*

[37] Note that analogously, then, it could be conceded that H_2O molecules necessarily compose water without it being conceded that it is part of the essence of *water* to be composed of H_2O molecules—for the necessity could be explained instead as arising from the essence of H_2O molecules.

conditions, and thereby know that one of them can persist through changes through which the other cannot persist—that, for instance, a lump of bronze can persist through a radical change in its shape whereas a bronze statue cannot. These facts about their identity conditions are not matters that we can discover purely empirically, by examining bronze statues and lumps of bronze very closely, as we might in order to discover whether, say, they conduct electricity or dissolve in sulphuric acid.[38] Rather, they are facts about them that we must grasp *antecedently* to being able to embark upon any such empirical inquiry concerning them, for we can only inquire empirically into something's properties if we already know *what it is* that we are examining.

At this point, I anticipate the objection that what I have been calling facts about essences are really, in the end, just facts about certain of *our concepts*—for example, *our concept* of a bronze statue and *our concept* of a lump of bronze. This would reduce all modal truths to conceptual truths or, if the term is preferred, *analytic* truths. Now, I have no objection to the notion of conceptual truth as such. Perhaps, as is often alleged, 'Bachelors are unmarried' indeed expresses such a truth. Let us concede that it is true in virtue of our concept of a bachelor, or in virtue of what we take the word 'bachelor' to mean. But notice that 'Bachelors are unmarried' has a quite different modal status from an *essential* truth such as 'Animals are material beings'. In calling the former a 'necessary' truth, we cannot mean to imply that bachelors *cannot marry*, only that they cannot marry *and go on rightly being called 'bachelors'*. The impossibility in question is only one concerning the proper application of a word. But in calling 'Animals are material beings' a necessary truth, we certainly can't be taken to mean merely that animals cannot cease to be composed of matter *and go on rightly being called 'animals'*—as though *the very same thing* that, when composed of matter, was properly called an 'animal' might exist as something immaterial. No, we must be taken to mean that animals cannot fail to be composed of matter *period*. Animals are things such that, *if they exist at all*, they must be composed of matter. That is because it is part of the essence of an animal to be so composed. In contrast,

[38] See further my 'Substantial Change and Spatiotemporal Coincidence', *Ratio* 16 (2003), pp. 140–60, and my 'Material Coincidence and the Cinematographic Fallacy: A Response to Olson', *The Philosophical Quarterly* 52 (2002), pp. 369–72, the latter being a reply to Eric T. Olson, 'Material Coincidence and the Indiscernibility Problem', *The Philosophical Quarterly* 51 (2001), pp. 337–55.

it is not part of the essence of any bachelor to be unmarried, for a bachelor is just an adult male human being who happens to be unmarried—and any such human being undoubtedly *can* marry. So, 'Animals are material beings' is certainly not a mere conceptual truth and the same goes for other truths that are genuinely essential truths—truths concerning the essences of things. They have, in general, nothing to do with our concepts or our words, but with the natures of the things in question. Of course, since concepts and words are themselves things of certain sorts, there can be truths concerning *their* essences. Indeed, what we could say about 'Bachelors are unmarried' is that it is, or is grounded in, a truth concerning the essence of the concept bachelor, or of the word 'bachelor'. We could say, thus, that it is part of the essence of the concept *bachelor* that only unmarried males fall under it, and part of the essence of the word 'bachelor' that it applies only to unmarried males.

I consider that *conceptualism*—if we may so call the view motivating the objection that has just been examined—is fundamentally incoherent. For one thing, as we have just seen, the proper thing to say about 'conceptual' truths is, very plausibly, that *they are grounded in the essences of concepts*. That being so, the conceptualist cannot maintain, as he does, that *all* putative facts about essence are really just facts concerning concepts. For this is to imply that putative facts about *the essences of concepts* are really just facts concerning *concepts of concepts*—and we have set out on a vicious infinite regress. But the conceptualist will object, no doubt, that this complaint is question-begging. However, even setting that complaint aside, we can see that conceptualism is untenable. For the conceptualist is at least committed to affirming that *concepts*—or, in another version, *words*—exist and indeed that concept-users do, to wit, *ourselves*. *These*, at least, are things that the conceptualist must acknowledge to have *identities*, independently of how we conceive of them, on pain of incoherence in his position. The conceptualist must at least purport to understand *what a concept or a word is*, and indeed *what he or she is*, and thus grasp the essences of at least some things. And if of *these* things, why not of *other* kinds of things? Once knowledge of essences is conceded, the game is up for the conceptualist. And it must be conceded, even by the conceptualist, on pain of denying that he or she knows what *anything* is, including the very concepts that lie at the heart of his account. For recall, all that I mean by the essence of something is *what it is*.