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REAL METAPHYSICS AND THE DESCRIPTIVE/REVISIONARY DISTINCTION

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In two of her early papers, "Descriptive and Revisionary Metaphysics" (1979.a1) and "Some Preliminaries to Ontology" (1976.a6), Susan Haack raises a number of questions about the nature and subject matter of metaphysics, specifically about ontology. Her questions go right to the heart of what metaphysics is and why it has been held in such contempt from the eighteenth century onwards in Western philosophy. Haack does more in these papers than simply to raise fundamental questions about metaphysics. She also sketches ways in which one might go about attempting to answer them.

I think that the questions Haack raises are crucial to understanding the nature of metaphysical inquiry, and that satisfactory answers must be forthcoming if metaphysics is to be free of the contempt from which it has, in my opinion, wrongly suffered. Further, I think that her suggestions about how one might begin to provide such answers are exactly right. My aim in this essay is to develop a more complete answer to at least some of these questions based on her suggestions. I begin, in section 1 below, by outlining briefly her argumentative strategy in the two papers that are of interest here. In section 2, I focus on some of the questions whose answers Haack claims are crucial to metaphysical inquiry and on her suggestions for ways to approach them. In section 3, I develop these suggestions by providing an account of what, for want of a better word, I consider 'real' metaphysics to be. I conclude with some suggestive remarks about Haack's view of concepts as dynamic.

SECTION 1

In "Some Preliminaries to Ontology," Haack examines Carnap's (1950) distinction between 'internal' and 'external' questions. Carnap's purpose is to distinguish between ontological questions that make sense and are capable of being answered relatively unproblematically and ontological questions that make no literal sense at all and so deserve the name 'pseudoquestions.'

'Internal' questions are ones that can only be asked sensibly after the adoption of a particular linguistic framework (i.e., interpreted language fragment), and are about the domain associated with that framework. Examples are particular questions about an entity of some kind, such as "Is five a prime number?" as well as general, category questions about the existence of items of a given kind, such as "Do numbers really exist?" According to Carnap, questions of the latter sort, while being very general, can be answered unproblematically 'within,' or after the adoption of, a given conceptual or linguistic framework. So, for example, if you were to ask me whether there really are numbers, I, who have adopted the linguistic framework of numbers, could meaningfully reply, "yes, there are numbers, since five is a number." Haack takes the form of an internal question to be "Are there so-and-so's according to L?," where L is a linguistic framework/interpreted language fragment.

'External' questions, on the other hand, are questions that arise prior to the adoption of a given linguistic framework, about the 'reality' of the framework itself. Haack takes them to have the form "Are there so-and so's (period)?" These are inherently general and fall into two sorts. First, there are questions of a practical kind that we can ask about a given linguistic framework, say, the framework of numbers. We can ask whether it is useful or expedient in some way to use number-talk, or to use number-concepts.[1] Carnap considers this type of external question to be harmless because, in his view, it is not one whose answer commits any speaker or thinker using the framework to the existence of items corresponding to the terms or concepts in the framework.

However, Carnap maintains that there is a second type of external question, which does not make any sense at all, and to which we cannot give an intelligible answer. This is a 'framework' question understood, not as a pragmatic question, but as a *theoretical* one about the 'reality' of the entities in the domain associated with the framework. Thus interpreted, it is a question about the truth or falsity of the framework itself.

Haack argues that Carnap's attempt to show that external theoretical questions are pseudoquestions does not succeed. She discerns two main arguments in Carnap's work (principally, in 1950 and 1973). The first has two threads, one focusing on the sense of 'real,' and the other focusing on the sense of 'so-and-so's' in "So-and-so's are real." Haack disentangles these two threads, and argues that neither establishes that external theoretical questions make no sense.

One thread of argument in Carnap is that only after the adoption of a conceptual/linguistic framework can it make sense to ask what is real and what is not. Haack disagrees. She argues that there is always the possibility of constructing a metalanguage in which such questions can meaningfully be formulated.[2]

A second thread of argument in Carnap is that prior to the adoption of a linguistic framework, 'so-and-sos' has no established sense. Only a linguistic framework can give it a sense. Here Haack agrees, but wonders how this shows that external theoretical questions are pseudoquestions. Certainly no question about the reality of so-and-so's will be meaningful if 'so-and-so's' has no meaning. But, Haack asks, how are we to assess the claim that only a linguistic framework can

supply such a meaning? If we think of natural languages, which are not consciously adopted, we can agree that 'so-and-so' must have a use before it can have a meaning. But then in this very weak sense every question about the reality of so-and-so's, if 'so-and-so' has meaning, will be relative to a linguistic framework, and no existence question will be meaningless. If on the other hand we restrict ourselves to formal languages, then there will be some external existence questions, and the distinction between internal and external theoretical questions will be saved. But saving it requires that we commit ourselves to the highly implausible view that only expressions in formal languages have meaning.

The second main argument is that we cannot make sense of external theoretical questions by means of the internal sense of 'so-and-so's' in "There are so-and-so's according to L" and the question whether the sentences of L are true. According to Carnap, the acceptance of a linguistic framework is a pragmatic rather than a theoretical matter, and so carries with it no ontological commitment. If he is right, then we cannot make sense of external questions in the way just suggested, since accepting L would not be a matter of accepting the sentences of L as true. But Haack points out that in order for Carnap's response to work, one would need to construe him as an 'epistemological pessimist'—one who holds that we cannot know or discover whether theories are true, but only which ones are compatible with the data, and of these, which are preferable on grounds such as simplicity and/or other pragmatic criteria. The problem with this is that Carnap was not in general an epistemological pessimist. She concludes that

> . . . Carnap's distinction between internal and external questions could be seen as an unsuccessful, but not altogether abortive, attempt to explain how persistence with the question, whether there really *are* so-and-so's, may be a symptom of controversy about whether they are, really, *what* they are ordinarily taken to be. (1976.a6, 472)

In "Descriptive and Revisionary Metaphysics," Haack revisits the issue of the nature and function of metaphysical enquiry. Here she is concerned, not specifically with the question of how we are to understand ontological questions, but more generally with the question of how we are to understand the nature of metaphysical claims. Her subject matter is the distinction between descriptive and revisionary metaphysics as drawn by Peter Strawson in *Individuals* (1959) and embodied in his work and in Whitehead's *Concept of Nature* (1930).

Haack's discussion falls into two parts. In the first, she compares and contrasts Strawson's 'descriptive' metaphysics with Whitehead's 'revisionary' metaphysics. In the second, she raises some difficult and important questions about the distinction between these two types of metaphysics and assumptions underlying it.

According to Strawson, descriptive metaphysics aims to describe the actual structure of our conceptual framework, the scheme by which we think about the world. It differs from conceptual analysis only in its generality. Whereas, on one traditional view, the latter is concerned to make explicit the necessary and sufficient conditions for any concept to be the concept it is, descriptive metaphysics is con-

cerned to uncover the fundamental concepts required for human thought about the world to be possible. It aims to,

> lay bare the most general features of our conceptual structure . . . a massive central core of human thinking which has no history . . . the commonplaces of the least refined thinking . . . the indispensable core of the conceptual equipment of the most sophisticated human beings. (Strawson 1959. 10)

This conceptual scheme has a core that has remained constant throughout history and is invariant between languages. It is this central core that descriptive metaphysics attempts to uncover.

Note, however, that uncovering it is not simply a matter of taking our talk and thought at face value. As Strawson recognizes:

> The structure [which the metaphysician] seeks does not readily display itself on the surface of language, but lies submerged. He must abandon his only sure guide when the guide cannot take him as far as he wishes to go. (Strawson 1959, 10)

The results of doing descriptive metaphysics can surprise us, and can be counterintuitive to unreflective common sense. The contrast Strawson seems to be interested in here is that between a description of how we appear to think (i.e., what conceptual structure unreflective commonsense takes us to work with), on the one hand, and how we really think (i.e., what conceptual structure we really work with, as discerned by reflective common sense), on the other. Strawson cites as descriptive metaphysicians Aristotle and Kant.

Revisionary metaphysics, in contrast, aims to change or alter our actual conceptual scheme by recommending another, on the grounds that it is more adequate for some purpose other than that which serves ordinary thought and talk about the world, such as the purposes of science. Strawson describes its relation to descriptive metaphysics thus:

> The productions of revisionary metaphysics remain permanently interesting, and not only as key episodes in the history of thought. Because of their articulation, and the intensity of their partial vision, the best of them are both intrinsically admirable and of enduring philosophical utility. But this last merit can be ascribed to them only because there is another kind of metaphysics, which needs no justification at all beyond that of inquiry in general. Revisionary metaphysics is at the service of descriptive metaphysics. (Strawson 1959, 9)

This passage suggests that Strawson views revisionary metaphysics as viable, but only alongside and against the background of descriptive metaphysics. However, Haack questions whether this is Strawson's considered view.

She argues that there is a deep ambiguity in Strawson's work concerning the relation of revisionary to descriptive metaphysics. Although Strawson's 'official' view about the possibility and value of revisionary metaphysics vis-à-vis descriptive meta-

physics is modest and conciliatory, there is a persistent strand of thinking in *Individuals* that challenges its credentials to contribute anything of value to metaphysics. This emerges in his discussions of 'our' conceptual scheme, and, within that scheme, of the priority of material bodies and persons over other categories of particular.

Strawson's claims that "descriptive metaphysics needs no justification at all" (Strawson 1959, 9), and that "there are categories and concepts which . . . change not at all" (Strawson 1959, 10) suggest that revisionary metaphysics is not just an alternative to descriptive metaphysics, but one which could never seriously compete with it. His claim that "persons and material bodies are what primarily exist" (Strawson 1959, 247) suggests that he thinks not only that the concepts, *person*, and *material body*, are fundamental to our thought about the world, but that persons and material bodies themselves are ontologically basic. His claim that the concept of a person is primitive confuses concept with object:

> the meaning of saying that this concept is primitive is that it is not to be analysed in a certain way or ways. We are not, for example, to think of it as a secondary kind of entity in relation to two primary kinds, viz. a particular consciousness and a particular human body. (Strawson 1959, 104f)

The first occurrence of 'it' in the above quotation refers to the concept, *person*, but the second occurrence plainly refers to persons themselves.

It is hard to see how purely descriptive claims about our conceptual scheme could directly support claims about what kinds of things exist in the world beyond our concepts. But Strawson plainly thinks that they do. This makes better sense if he is understood, not as making ontologically conservative claims on behalf of descriptive metaphysics, but rather, as making quite radical ones. Understood conservatively, he is claiming that, for those of us humans who happen to be working with this particular conceptual scheme, the world itself could not but be constituted by particulars, and of those, persons and material bodies. This leaves it an open possibility that there might be humans who experience and think the world differently, which undermines the move from claims about our conceptual scheme to claims about what kinds of things exist (period). However, understood radically, Strawson is claiming, not just that certain concepts are indispensable to our conceptual scheme, but also that 'we' includes all possible human beings. His claims that 'our' conceptual scheme is without a history and is "the indispensable core of the conceptual equipment of the most sophisticated human beings" (Strawson 1959, 10) suggest this more radical view that there simply could not be human beings who experienced and thought about the world in a fundamentally different way. And that suggests that ours is not just one conceptual scheme amongst many other possible ones (for human beings), but is the only possible one. If so, then the qualification 'for those of us' is otiose, and the move from claims about fundamental concepts to claims about ontologically basic kinds is natural, if contentious. It is contentious because, even if ours is the only possible conceptual framework, it does not follow that nonconceptual 'reality' answers to it.

Haack argues that there is real rivalry between descriptive and revisionary metaphysics if Strawson is construed in the radical way, since thus understood, it is impossible to do revisionary metaphysics. But she wonders whether, on this understanding of 'descriptive' metaphysics, the distinction between it and revisionary metaphysics can ultimately be made out. This is where the difficult questions arise.

SECTION 2

Haack ends both of her discussions by posing some questions and suggesting directions in which answers might be found, which are promising and important. First, she suggests that although Carnap's attempt to distinguish internal and external theoretical questions fails, there is something of value to be salvaged from it. What remains is a distinction between "straightforward" ontological questions and "hard" ones. It is possible, Haack suggests, that the hard questions are hard, not because they are about *whether* items of a kind really exist, but because they are about *what it is* to be an item of that kind. Of course, sometimes a question of the form "Are there really so-and-so's" is intended to challenge the assumption that so-and-so's exist at all. But more often than not, it is intended to challenge the assumption that so-and-so's are things of the kind that we thought they were. As she puts it,

> But isn't it, one might ask, simply perverse, not to say downright inconsistent, to admit that two is a number, but to deny that there are numbers? . . . the point is that there remains room for dispute about what, exactly, numbers are. And those who hold the apparently perverse position of admitting that x is a ϕ but denying that there are really any ϕs often turn out to do so because they hold an unusual view about what ϕs really are; they think that numbers are really logical constructions out of propositional functions, for instance, or that physical objects are logical constructions out of sense-data. (1976.a6, 471)[3]

Haack's attitude toward the internal/external question distinction is echoed in her discussion of the distinction between descriptive and revisionary metaphysics. Having identified the source of Strawson's radical view about the nature of descriptive metaphysics as a commitment to some kind of 'conceptual invariance' thesis with regard to all languages, she points out that whether such a thesis is true is not an easy matter to determine, since it raises many difficult questions that need answering. Here are only a few of them:

> What is a concept? How are concepts individuated? What is a conceptual scheme? How are conceptual schemes individuated? What is the relation between a language and a conceptual scheme? How are languages individuated? Who are the 'we' of 'our conceptual scheme'? Is descriptive metaphysics possible? Is revisionary metaphysics possible? What could it mean to say that one conceptual scheme is 'better' than another? (1979.a1, 27)

Haack ends by suggesting how one might begin to answer at least some of these questions. First, she claims that Strawson's commitment is probably to a 'global conceptual invariance' thesis, and that he takes the connection between a conceptual scheme and language to be strong rather than weak: if a language has certain features, then speakers of it must employ a certain conceptual scheme.[4] She argues that there is some reason to think that this connection is weaker than Strawson envisages. Second, she points out that a global conceptual invariance thesis makes it impossible to do revisionary metaphysics since, if there is no alternative to 'our' conceptual scheme, it is not possible to produce a more adequate one, whatever the purposes for which it may be required. Third, she points out that the individuation of conceptual schemes will require some criterion for the individuation of concepts, since we will need to know when it is right to say that a concept has changed, and when it is right to say that it has been replaced by a new one. She favors a view about concepts which treats them as dynamic, rather than static. The dynamic view can be reconciled with Strawson's 'revisionary' metaphysics, construed in the modest way as offering something viable that can be of use to descriptive metaphysics. The static view, however, encourages the dismissal of revisionary metaphysics as suffering from conceptual confusion. She ends with a quotation of Geach's as paradigmatic of the static view:

> 'at the same time' belongs not to a special science but to logic. Our practical grasp of this logic is not to be called into question on account of recondite physics. . . . A physicist who casts doubt upon it is sawing off the branch he sits upon. (Geach, 1965, 304)

To this she offers the following response:

> I will reveal my sympathies by urging that we are not on a branch, as in Geach's metaphor, rather, on a raft, as in Neurath's. And if you object that this means we are all at sea, I reply that this is no worse, at any rate, than being up in the air. (1979.a1, 30)

I think that Haacks remarks not only suggest a certain view about the nature and function of metaphysics, but contain the foundations of a solid, positive account. According to it, there are genuine, 'real' metaphysical questions, the so-called 'hard' ones, even if there is no useful internal/external question distinction. Some general, category questions about ontology make sense, as do their answers. These questions are best seen as arising 'within' a linguistic framework. They make sense because, although they arise after the adoption of a linguistic framework, they question whether ***what*** in the world answers to at least some of the category concepts embedded in it is what we thought answered to them. These are not just questions about what concepts and conceptual structures are embedded in the linguistic framework adopted. They are questions about what the world is like, given those concepts. Of course, raising such questions will require using these concepts. But the questions that are raised are not naturally viewed as 'about' those concepts. Nor, principally, are they best viewed as questions about whether anything at all answers to

those concepts (although some part of metaphysical thinking will involve questions like these, for certain falsehoods in the framework). They concern the natures of things of certain kinds. According to this view, then, metaphysics is not fundamentally about *whether* items of this or that kind exist; it is about what it is for items of this or that kind to have a nature, and what that nature might be.

Because this is what 'real' metaphysics is concerned with, it cannot be merely descriptive. For it is concerned not only with *whether* sentences in a linguistic framework are true, but with what in the world makes them true when they are. Because its aim is to arrive at our best theory of the world, it will inevitably involve conceptual change. As Haack puts it,

> The [view], with which I sympathize, sees our concepts as the result of a long and continuing evolution, and as containing residues of earlier scientific and metaphysical theories. (1979.a1, 30)

Does this mean that descriptive metaphysics is fine as far as it goes, but revisionary metaphysics is also viable and important? Or does it mean that there really is no distinction between descriptive and revisionary metaphysics, since nothing that we would wish to call 'real metaphysics'—the kind of metaphysics that deals with the 'hard' questions—answers to 'descriptive metaphysics'? My guess is that Haack would say the latter. This is not just because she views concepts as dynamic, whereas Strawson's descriptive metaphysics treats them as static. It is also because, at any stage in the evolution of 'our' concepts, the 'hard' questions will need to *both* mention *and* use these concepts in asking what in the world answers to them. We shall need to both mention and use the concept *number*, such as it is, in order to raise and answer the question 'Are there really numbers?' because doing metaphysics partly involves doing semantics. Properly understood, revisionary metaphysics actually incorporates a 'descriptive' element. But, in attempting to arrive at a 'best' theory of the world, it will be concerned to refine and shape these concepts so as to better express that theory. Evolution of concepts in metaphysics is motivated by the need to find better concepts to better express our best theory of the world. So a good revisionary metaphysics is also a good descriptive one. And there are constraints on what counts as a good revisionary metaphysics.

SECTION 3

These remarks express a fairly determinate view of what the nature and function of metaphysics is, which I take to be by and large Haack's. Let me develop it further. As I see it, 'real' metaphysics aims to arrive at our best theory of the world—of the fundamental kinds that there are, and what their fundamental natures are. This being so, it is bound to be revisionary in at least two ways. First, in attempting to arrive at this theory, metaphysicians will inevitably 'attempt to produce a better structure' than that

contained in our actual thought about the world. This is because the aim in producing our best theory of the world is first and foremost to produce a—or the—*true* theory. Strawson cites Descartes, Leibniz, and Berkeley, as revisionary metaphysicians. To the extent that they were, their aim in producing a better structure was to produce a better theory of the world, of what kinds of things there are and what their natures are. They thought their theories were better because they better describe the world as it really is.

Since all knowledge is shaped or informed by the human conceptual apparatus, metaphysical knowledge is too. This means that metaphysics is, in a sense, relative: it is the study of what there is, where this is shaped and informed by the human conceptual apparatus. Metaphysical knowledge, like all knowledge, is constrained by conditions, some of which concern the psychology of the knower. This does not mean that metaphysical truths do not describe facts in the nonmental world, any more than the truths of science do not. Whether knowledge of facts in the nonmental world is possible depends partly on whether human beings have concepts of the appropriate kinds, and partly on what, if anything, in this world answers to those concepts.

So 'real' metaphysics is revisionary in at least this way. But it is revisionary in another way as well. It does not purport to study what there is according to the conceptual framework or frameworks by which we think about the world. It purports to study what, fundamentally, there *really is*. It is true that, in order to do so, it must make use of the basic concepts or categories by which we think about the world. But what is relativistic is *not* the question of what, fundamentally, there really is. It is, rather, the question of how metaphysical *questions* are to be raised and answered.

Given this conception of real metaphysics, one begins doing metaphysics by identifying conceptual frameworks, since identifying these is the starting point of metaphysical theorizing. And theories, whatever else they may be, are typically expressed by sets of sentences and are commonly individuated, or distinguished from one another, in this way.[5] We speakers of English often use sentences of English to refer to objects or other things or phenomena in the world and say things about them. However, any language that expresses a theory will make use of terms to which no particular ontological significance is attached. So not all words or expressions are taken to refer, or do refer.

Matters are more complicated still, since there are expressions in English that have the grammatical, but not the semantic form of a referring expression or singular term, since they do not function to refer to or pick out a single object. Think, for example of the expression 'the sake' in 'She did it for the sake of her country.'[6] The form of this expression is grammatically that of a singular term. But no one seriously thinks that the expression 'the sake' refers to an individual thing, a sake. The general point, I take it, is what Strawson intends when he says that the structure of our conceptual framework "does not readily display itself on the surface of language, but lies submerged" (Strawson 1959, 9). How, then, can we work out what the ontological commitments of a theory actually are?

In order to determine the ontological commitments of a theory, one needs a criterion of ontological commitment (Quine 1961, 1969). This is a statement of the neces-

sary and sufficient conditions for an object or entity to be reckoned as among the items in a theory's ontology. It tells us what features a theory must have in order to be committed to the existence of items of any sort, and it also tells us that the presence of these features is enough, or sufficient, for such commitment. Suppose, for example, that the rather crude picture of reference hinted at above, that all singular terms refer, were one that was presumed by the linguistic framework of English. Then a criterion of ontological commitment, in attempting to make explicit the ontological commitments of that framework, would need to be sensitive to that presumption. Clearly the theory of reference presumed here is too crude to be plausible, but for present purposes that is not what matters. What matters is that a criterion of ontological commitment be capable of expressing the ontological commitments embodied in English: it must make explicit what may be only implicit background assumptions of that linguistic framework. And commitment is both different from, and prior to, the issue of truth. One cannot adjudicate between theories with respect to their truth if one cannot even tell what their commitments are, and so what they take to be true.

To see this is to see that a criterion of ontological commitment is a *metatheoretical principle*; one that can be employed by metaphysicians when attempting to determine what there really is by attempting to specify the (or a) best theory of what there is. The starting point for metaphysics is our conceptual system in natural language and thought. Applying a criterion of ontological commitment to it, we can see what prima facie ontological commitments are implicit in this system. Since, however, these are only prima facie commitments, we can exercise a certain amount of freedom in attempting to specify what the real ontological commitments of that system are. Suppose again that the conceptual system embodied in English were to presume the crude theory of reference suggested above. Then a criterion of ontological commitment based on such a theory would assign ontological status to expressions such as 'the sake' and 'Pegasus.' One way of avoiding this unwanted consequence would be to distinguish real from merely apparent singular terms (that is, terms that function grammatically, but not semantically, like singular terms), thus refining the crude theory of reference, and then to reapply our criterion of ontological commitment to the real singular terms. Tampering with the conceptual system in natural language and thought is guided throughout by the same criterion of ontological commitment (we have not here rejected the original, reference-based criterion in favor of another), and at each stage we can evaluate the implicit commitments of the theory we have. The goal of tampering with the original theory is to arrive at a theory of the world which we can take to be a canonical statement, an ontologically perspicuous statement of the theory. Then, when we apply our criterion, what we get are our serious ontological commitments: what we think really exists.

If there is only one theory to serve as the object of our metaphysical reasonings, then this process of moving from one description to another, canonical one will yield our best theory of what we *think* really exists. But if there is more than one such theory, then even after this process is complete, it may not be that only one theory will emerge as 'the best' theory of the world. At this stage, metaphysics may be inca-

pable of fixing on a unique theory of what there really is. Further, it is possible for different people to arrive at very different final theories *via* the process. Consider, for example, the different ways that Meinong (1904) and Russell (1905) deal with singular terms which apparently lack reference: whereas Russell attempts to show that they are not really singular terms at all, Meinong takes them to be genuinely referential, and expands his ontology accordingly. Both, however, use a reference-based criterion of ontological commitment, which places the weight of ontological commitment on the singular terms, specifically, the names, in sentences of the language fragment. As this example indicates, the nature of the tampering is important, so there should be some constraints on what counts as acceptable, even if this issue is poorly understood and little discussed.

One such constraint is commonsense. Metaphysical thinking, being metatheoretical, takes place against the background of ongoing theoretical practices, such as science. Just as those practices must be reconciled with our commonsensical beliefs about the world, so too must metaphysics. When we theorize about the nature of reality, we do so against the background of beliefs such as the belief that there is a mind-independent reality, a world with various kinds of objects and phenomena in it, such as trees, persons, lions, and earthquakes, which relate to one another causally and in other ways. One way of constraining the process by which a metaphysical theory is arrived at is to test it against the dictates of common sense. Commonsensical beliefs are the springboard of much of our theorizing; they are what motivate it, and they are, in the end, what such theorizing attempts to explain. But they aren't sacrosanct: like most other beliefs, they may be false. The dictates of common sense may also be defeasible, or capable of being overridden, for other reasons. One is that it might not be possible to vindicate all of our commonsensical beliefs, since there may be inconsistencies between them.

Common sense provides one, albeit defeasible, constraint on the kind and extent of tampering that is acceptable. Another emerges from doing ontology itself. Suppose that we have before us two possible paraphrases of the English sentence, "Julia was born at midnight." One takes the object that the sentence is about to be Julia, and construes the sentence as attributing to her the property of being born at midnight. The other takes the object to be an event, a birth, which is a birth of Julia at midnight. Which of these paraphrases is correct? They cannot both be, if substances are not events.

Doing semantics will not by itself yield an answer to this question. Nor will appealing to common sense. We know that some of our talk is talk of events: we speak of earthquakes and avalanches, and we even use singular terms that apparently refer to events (e.g., 'The Big Bang'). We also know that much of our talk is talk of substances, typically effected by means of singular terms. We could generate an argument from semantic considerations to favor one over the other of these paraphrases, the event-positing one, but this alone would not be decisive in favor of that paraphrase. Why? Because one wants to know whether, in *addition* to things which undergo change, such as substances, there really are *changes*. In order to know that, we really need to know what kinds of things events might be; what they are like, and how they might relate to such items as substances: in what ways they might be like, and in what crucial respects

different. We need, in other words, a metaphysical *theory* of events. And although the paraphrase requires supposing that there are such things, it cannot by itself ensure that there are such things. If there are, then the paraphrase is correct. If not, then although it may be well motivated semantically, the semantics is wrong.

So when we engage in metaphysical thinking, we do not just do semantics for sentences of natural language, for two reasons. The first is that, in arriving at a best theory of the world, we may need to tamper with those natural language sentences. In particular, we may take theories as they are naturally expressed and paraphrase away certain prima facie commitments. As I said earlier, this introduces a serious degree of freedom between determining the apparent ontological commitments in natural language (where every sentence's semantic properties must be accounted for) and the final account which we take to be ontologically committing (where only some of these sentences will be of interest). The freedom extends beyond choosing one over another paraphrase of a natural language sentence such as 'Julia was born at midnight,' where the question of what the real semantic structure of such a sentence is (one which speaks only of substances and properties of them, or one which speaks of events and properties of them) arises. This might require doing more than semantics, but here we are still attempting to account for the real semantic structure of such a sentence. The freedom involved in doing metaphysics extends further because paraphrase is not limited to giving the real semantic structure of natural language sentences (which may not be apparent on the surface). One might paraphrase in such away that *no* essential appeal to certain entities implicitly appealed to in the natural language 'correlate' is made, and this marks a real departure from semantics for natural language.[7]

This first reason leads directly to the second, which is that doing ontology is largely independent of doing semantics, even once we have applied a criterion of ontological commitment and have a canonical statement of the theory expressed by a given language. The criterion can discern what semantic values are the real ontological commitments of the criterion (say, the semantic values of names, viz. their referents), but not what their natures are, nor how they are related to one another. For example, the criterion can perhaps tell us whether a best theory of the world will contain reference to numbers and reference to sets; but it cannot tell us whether numbers are sets, and so it cannot tell us whether this best theory is ontologically committed to both numbers and sets or whether it is only committed to sets. This second point in particular brings out clearly that coming by an adequate criterion of ontological commitment is only part of what is involved in doing metaphysics. The rest—which is what doing 'real' metaphysics involves—is trying to come by our best theory of what kinds of things there are, and what are their natures. And by 'best' is meant 'true.'

CONCLUSION

I have attempted to develop an account of the nature and function of metaphysics that is both consistent with, and builds upon, foundations suggested by Susan Haack

in her work. There is much that remains to be said, but I shall confine myself here to a final—suggestive—remark. Haack favors a dynamic view of concepts, according to which they evolve over time and contain remnants of earlier metaphysical and scientific theories. Her purpose in doing this, apparently, is to undermine the distinction between descriptive and revisionary metaphysics. However, I doubt that the distinction between a static and a dynamic view of concepts alone can do this. The reason is that it seems to be orthogonal to the distinction between descriptive and revisionary metaphysics. Strawson's distinction between how unreflective common sense takes us to think and how reflective common sense reveals we really think is compatible with a view of concepts according to which they are dynamic rather than static. On this view, descriptive metaphysics describes the actual concepts we employ to think about the world. That such concepts contain remainders of past theories (even restricting these to commonsense ones, as Strawson does) doesn't threaten the enterprise.

What threatens it is the thought that describing how we really think, and (perhaps) what the history of the concepts we now use is, is not what 'real' metaphysics claims to be doing. What is missing in descriptive metaphysics, even if it describes our concepts as they evolve, is an account of *why* they evolve. In the case of certain, fundamental concepts, such evolution is motivated by the aim to come by our best—true—theory of the world. Finding better concepts—or concepts which better 'fit' the world as it is—is part of that aim. Revisionary metaphysics—recommending conceptual change—is necessarily part of 'real' metaphysics.

Let me illustrate this point with a couple of examples. The ancient Greeks, and Aristotle in particular, worked with a certain conception of infinity or the infinite (*apeiron*). According to this, the infinite is the unlimited, or that which cannot be traversed.[8] At any point in the process of coming to be traversed, there is still more to traverse. This conception of infinity treats it as merely potential, and not actual.[9] Kant also worked with a conception of infinity as not actual.[10] However, Cantor found a way of talking about infinity in terms of sets of numbers, which replaced talk of infinity in Aristotelian and Kantian terms.[11] Beginning with the set of natural numbers, which has no greatest (or last) one, he was able to determine that there are greater infinities, such as the set of real numbers, by determining whether their members could be put into one to one correspondence with the natural numbers. Cantor was able to define an infinite hierarchy of sets, each of which has a cardinality higher than the set below it. In his system infinity is not potential, but actual.

The work to which Cantor put the concept of infinity was revisionary. But it led to real discoveries and developments in mathematics. Replacing talk of infinity with talk about sets of numbers led to the growth of mathematical knowledge.

This is one example where the evolution of a concept has been motivated by revisionary concerns. Another example concerns the concept of species. Aristotle conceived of the species as fixed.[12] For him, species are constituted by primary substances, which in turn are constituted by matter and form. Form in his system is what endows primary substances with the features required for membership in a species

(or makes them 'this *suches*'), and it plays an important role in determining their final causes.

However, developments in evolutionary biology as a result of Darwin's (1859) work have led to the conception of species, not as fixed, but as evolved. This was undoubtedly a revisionary move on Darwin's part. But it has proved to be enormously fruitful in the development of biological knowledge.

Both of these cases are examples where the evolution of concepts was motivated by revisionary considerations. And both are cases where the shaping of concepts was motivated by a need to better 'shape' them to reality. Finally, both are cases of concepts that have been considered by many—notably by Aristotle—to be fundamental to our conceptual scheme. This is what I want to say real metaphysics involves.[13]

NOTES

1. So the question 'Are there really numbers?' actually has two 'senses,' an internal one and an external one, both of which are meaningful.

2. Although Carnap's response to this would probably be that such a metalanguage could only be constructed after the adoption of a given object language.

3. Carnap might respond here that his view is not that we can admit that two is a number but deny that there are numbers. Rather, it is that we can admit that two is a number while remaining agnostic about whether there are numbers, since the latter is a framework question.

4. The Global thesis is that the same conceptual scheme is associated with all languages.

5. Note that this is not to say that the identity conditions of theories can be given in this way: the same theory can be expressed by different sets of sentences.

6. This example is derived from Quine (1960).

7. Consider, for example, Hartry Field (1980). In 'reinterpreting' physics so that it makes no essential appeal to mathematical entities, he probably doesn't see himself as doing the semantics of the statements of physical theory.

8. Aristotle, *Physics*, Book III, 6 (206a9–206b35).

9. See his *Physics*, Book III, 4–8 (202a30–208a26).

10. See *Critique of Pure Reason* (1996), First Antinomy A426/B454–A434/B462. Arguably, the citation needs to be to the whole of Chapter II ("The Antinomy of Pure Reason") of Book II ("On the Dialectical Inferences of Pure Reason") of Division II ("Transcendental Dialectic") of Kant's *Critique of Pure Reason*. At B84 Kant implies that the principle of noncontradiction is a merely negative condition on all truth. This looks ahead to the antinomies. I am grateful to Philip Catton for this point.

11. See Cantor (1915). Thanks to Paul Studtmann for this example.

12. See Aristotle: *De generatione animalium* 731b31–732a1, 760a35–b1; *De generatione et Corruptione* 338b11–19; and *De anima* 415a25–b7. Terence Irwin (1990) notes that in the latter two works, Aristotle stops short of asserting the fixity of the species. See also Aristotle's claim about the ungenerability of form in *Metaphysics*, Book VII, 8, 1033b5.

13. I wish to thank Philip Catton, Graham Macdonald, and Paul Studtmann for very helpful comments and advice.

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