

# Quining Naturalism

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## I Pale metaphysics

Scientific naturalism is a metaphysical doctrine, a view about what there is, or what we ought to believe that there is. It maintains that natural science should be our guide in matters metaphysical: the ontology we should accept is the ontology that turns out to be required by science. Quine is often regarded as the doyen of scientific naturalists, though the supporting cast includes such giants as David Lewis and J. J. C. Smart.

An alternative view offers a causal criterion for ontological commitment: we should be realists about whatever manifests itself in virtue of having effects. In particular, perhaps, we should believe in the existence of whatever figures in good causal explanations of observed phenomena, and of our experiences and beliefs in general. Thus electrons play a role in good causal explanations of our beliefs ‘about electrons’, presumably, and so we should be realists about electrons; but values don’t seem to figure in causal explanations of our evaluative beliefs, so we should not be realists about values.

These two criteria for realism are not the same, of course. The first is often thought to provide a reason for doubting that the second is a necessary condition, on the grounds that entities that are not causally efficacious—numbers, perhaps, or possible worlds—may be indispensable to science. There is much agreement, however. Much of what figures in explanations of our beliefs also figures in natural science. All of it does so, as long as explanations of our beliefs are *ipso facto* scientific explanations. In that case, proponents of second criterion are entitled to regard themselves as strictly more stringent naturalists than their permissive Quinean cousins.

David Armstrong calls the causal criterion the Eleatic Principle,<sup>1</sup> and takes it, *contra* Lewis, to favour fictionalism about possible worlds. Other notable advocates of the Eleatic criterion include Hartry Field, who takes it to provide support for fictionalism about mathematics; and Simon Blackburn, who suggests that it marks the line at which realism should give way to quasi-realism.<sup>2</sup>

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<sup>1</sup>*A World of States of Affairs*, Cambridge: Cambridge University Press, 1997, p. 41.

<sup>2</sup>See Hartry Field, *Science Without Numbers: A Defence of Nominalism*, Princeton, NJ: Princeton University

In this paper, I want to criticise both criteria for realism, and both resulting forms of naturalism—‘Quinean naturalism’ and ‘Eleatic naturalism’, as I’ll call them. Neither criterion provides a crucial test for ontological commitment, in my view, and domains which fail both tests may be on a par with domains which pass both. Thus my project is to make a case for the removal, or at least for a radical relocation, of the boundary that both forms of naturalism draw between real and unreal, respectable and unrespectable, in the ontological realm. And I want to make the case, by and large, from Quinean materials.

Think of the distinction between realism and irrealism as like that between illumination and shadow, in a black and white image. The Quinean and Eleatic versions of naturalism offer us with pictures in which the light falls bright on the entities required by natural science, or by causal explanations, but all else lies in shadow. I want to defend an alternative image, in which neither region is highlighted in this distinctive way.

In principle, there are three ways to adjust the naturalists’ image, to produce such a result. We might increase the brightness overall, revealing structure in parts of the image previously dark. We might reduce the brightness overall, losing the structure in regions previously light. Or we might simply reduce the contrast overall, producing a paler and more nuanced image, in shades of grey. The last manipulation is the one I favour.<sup>3</sup>

The metaphor is self-consciously Quinean, of course. Recall Quine’s famous trope for the rejection of a distinction between factual and conventional truths:

The lore of our fathers is . . . a pale gray lore, black with fact and white with convention. But I have found no substantial reasons for concluding that there are any quite black threads in it, or any white ones.<sup>4</sup>

I’ve borrowed Quine’s metaphor because I, too, want to call into question a well-entrenched distinction—and to do it, by and large, by Quinean methods. My target is the high-contrast metaphysical picture offered to us by naturalism. In other words, in the sense of Dennett’s *The Philosophical Lexicon*, and hence of his ‘Quining Qualia’,<sup>5</sup> I want to ‘quine’ the distinction that naturalists draw between light and dark, real and non-real, in the ontological realm. But my target is Quine’s own scientific naturalism, as well as its Eleatic cousin. So there’s irony, as well as homage, in my metaphorical mimicry.

My view differs from these two versions of naturalism in two ways: first, in ‘reducing the contrast’, in deflating the conception of what’s at stake in these metaphysical matters; and second, in maintaining that in so far as there is any distinction worth making, it doesn’t fall where (either version of) naturalism takes it to fall. In the first matter, I am

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Press, 1980; Simon Blackburn, ‘Truth, Realism, and the Regulation of Theory’, in *Essays in Quasi-Realism*, New York: Oxford University Press, 1993, 15–34.

<sup>3</sup>Or strictly, it is the first of two manipulations I want to recommend. The second adds some new hues, while keeping the contrast low.

<sup>4</sup>W. V. Quine, ‘Carnap and Logical Truth’, in *Ways of Paradox and Other Essays*, 2nd ed., Cambridge, MA: Harvard University Press, 1956, 107–132, at p. 132.

<sup>5</sup>In A. Marcel and E. Bisiach, eds, *Consciousness in Modern Science*, Oxford University Press, 1988.

going to argue that I am entitled to treat Quine as an ally. One of my main tasks will be to distinguish two conceptions of Quine's prescription for metaphysics and ontology, which seem to me to have been systematically confused. Only the weaker conception is really defensible by Quinean lights, I shall argue, and this amounts to the deflationary view.

In the second matter, Quine is not officially an ally, but ought to be, in my view. Even if the stronger conception of what is at stake were sustainable—if ontology were a matter of black and white, so to speak—there would be little in Quine to support the naturalists' account of where the line should be drawn.

My view is close to that of Carnap's 'Empiricism, Semantics and Ontology'.<sup>6</sup> Carnap defends both a pale, deflationary conception of ontology, in my sense, and also a kind of pluralism that challenges the naturalist's privileged conception of the place of science. In my terms, in other words, he is a champion of pale but multi-coloured metaphysics. It may seem foolhardy to pit such a champion against Quinean naturalism, of all targets. Didn't Quine himself demolish Carnap's view—using, what's more, the very weapon whose metaphors I've mimicked, viz., the rejection of a distinction between matters of fact and matters of linguistic convention? However, like the widespread belief that Quine made the world safe for less pale forms of metaphysics, this assessment of what he achieved against Carnap is mistaken, in my view.

As I said, I want to argue that Quine's own position on ontological commitment, and the relation of philosophy to science, in fact provides little support for 'Quinean' naturalism. On the contrary, it favours, or at least leaves open, a view much closer to that of Carnap. I'll explain why this view is untouched by Quine's criticisms of Carnap, and argue that the most significant disagreement between Quine and Carnap concerns the plurality of the functions of language, and hence of ontological commitment. Carnap is at least implicitly committed to pluralism, and Quine opposed to it. When the issues in question are properly understood, however, Quine's objections to Carnap on this matter turn out to miss the target that matters. Quine's monism then seems not only unsupported, but in tension, at least *prima facie*, with his naturalistic conception of the project of philosophy.

Exploring these issues will lead us to the suggestion that the Eleatic criterion might provide a way of keeping pluralism under control—of distinguishing a privileged domain of ontological commitment, which alone deserves our full allegiance. I'll conclude by arguing that this suggestion, too, turns out to be untenable, by the lights of the broadly Quinean considerations I'll be invoking against Quinean naturalism itself. Thus the problems of the Quinean criterion for naturalism are not an argument in favour of the stricter Eleatic criterion. On the contrary, they are an argument in favour of Carnapian tolerance.

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<sup>6</sup>In L. Linsky (ed.), *Semantics and the Philosophy of Language*, Urbana: University of Illinois Press: 208–228. (Originally published in *Revue Internationale de Philosophie* 4 (1950): 20–40.)

## 2 A wider shade of pale?

Carnap thought that much of traditional metaphysics and ontology rests on a mistake. In explaining why, he relies on the notion of a linguistic framework. Roughly, a linguistic framework is the set of rules (supposedly) governing the use of a group of terms and predicates—say, the terms we use in talking about medium sized objects, or in talking about numbers. Carnap thought that adopting such a framework, or way of talking, typically brings with it ontological methods and questions. These are ‘internal’ questions, questions that arise within the framework, and their nature depends on the framework in question. They may be empirical, as in science, or logical, as in mathematics.

However, Carnap continues, these internal questions do not include the metaphysical questions typically asked by philosophers: ‘Are there material objects?’, for example, or ‘Are there numbers?’ Carnap says that in this form these ‘external’ questions are simply mistakes: ‘They cannot be asked because they are framed in the wrong way.’ The only legitimate external questions are pragmatic in nature: Should we adopt this framework? Would it be useful?<sup>7</sup>

Carnap thus becomes a pluralist about ontological commitment—explicitly so, in the sense that he associates distinct ontological commitment with distinct linguistic frameworks, and at least implicitly so in a deeper ‘functional’ or pragmatic sense. After all, the key to Carnap’s accommodation of abstract entities is the idea that the framework that introduces talk of such entities may serve different pragmatic purposes from the framework that introduces talk of physical objects—and this could only be so if there is some sense in which the two frameworks ‘do different jobs’. A corollary of this functional pluralism is that it may turn out that neither natural science nor the project of causal explanation provide the only frameworks in which we have a pragmatic need for ontological claims. In principle, then, Carnap provides grounds for rejecting both forms of naturalism.

However, Carnap’s view is not simply a recipe for more inclusive realism—a way of turning up the brightness overall, as I put it earlier. For if what is meant by realism is a metaphysical view, in the old sense, then Carnap’s position amounts to a *rejection* of all such views. By that realist’s lights, then, Carnap’s view is a form of global irrealism. Yet his view is not simply a recipe for turning down the brightness overall, either. It is a third position, which rejects the high-contrast terms in which the image is typically presented. Here’s Carnap’s own negotiation of this critical point, from ‘Empiricism, Semantics and Ontology’:

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<sup>7</sup>A useful way to put Carnap’s point is to appeal to the use–mention distinction. Legitimate *uses* of the terms ‘number’ and ‘material object’ are necessarily internal, for it is conformity (more-or-less) to the rules of the framework in question that constitutes use. But as internal questions, as Carnap notes, these questions could not have the significance that traditional metaphysics takes them to have. Metaphysics tries to locate them somewhere else, but thereby commits a use–mention fallacy. The only legitimate external questions simply *mention* the terms in question.

The non-cognitive character of the questions which we have called here external questions was recognized and emphasized already by the Vienna Circle under the leadership of Moritz Schlick, the group from which the movement of logical empiricism originated. Influenced by ideas of Ludwig Wittgenstein, the Circle rejected both the thesis of the reality of the external world and the thesis of its irreality as pseudo-statements; the same was the case for both the thesis of the reality of universals (abstract entities, in our present terminology) and the nominalistic thesis that they are not real and that their alleged names are not names of anything but merely *flatus vocis*. (It is obvious that the apparent negation of a pseudo-statement must also be a pseudo-statement.) It is therefore not correct to classify the members of the Vienna Circle as nominalists, as is sometimes done. However, if we look at the basic anti-metaphysical and pro-scientific attitude of most nominalists (and the same holds for many materialists and realists in the modern sense), disregarding their occasional pseudo-theoretical formulations, then it is, of course, true to say that the Vienna Circle was much closer to those philosophers than to their opponents.<sup>8</sup>

Thus Carnap is not only an ontological pluralist, but also a champion of pale metaphysics, in my sense.

But an unsuccessful champion, in many eyes. According to a popular version of the history of twentieth-century philosophy, Quine was the saviour of a more robust metaphysics, slayer of positivist demons hell-bent on exsanguinating the entire subject. With one hand (the story goes), Quine wrote ‘On What There Is’, and thus gave Ontology a life-saving transfusion; with the other, he drove a stake through the heart of ‘Empiricism, Semantics and Ontology’, and dispatched the last incarnation of the Viennese menace.

I’m exaggerating, of course, but not much—here’s Hilary Putnam’s description of the first of these achievements:

“How come,” the reader may wonder, “it is precisely in *analytic* philosophy—a kind of philosophy that, for many years, was *hostile* to the very word ‘ontology’—that Ontology flourishes?”

If we ask *when* Ontology became a respectable subject for an analytic philosopher to pursue, the mystery disappears. It became respectable in 1948, when Quine published a famous paper titled “On What There Is.” It was Quine who single handedly made Ontology a respectable subject.<sup>9</sup>

I want to argue that this orthodox philosophical history is mistaken in two ways:

1. The metaphysics that Quine revived is itself a pale zombie, not the sanguine, beefy creature that positivists since Hume had been trying to put down.<sup>10</sup>

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<sup>8</sup>Carnap is here endorsing the views he ascribes to the Vienna Circle, of course.

<sup>9</sup>Hilary Putnam, *Ethics Without Ontology*, Cambridge, MA: Harvard University Press, 2004, pp. 78–79.

<sup>10</sup>This needs qualification. In one sense, Quine actually revived the more beefy kind of metaphysics. Certainly it has been behaving as if it were very much alive. But I would prefer to say that it is actually as dead as Carnap left it, but that many of its practitioners—encouraged in part by the misinterpretation of Quine I am about to describe—simply haven’t noticed.

2. Quine's stake missed the heart of Carnap's metaphysics-destroying doctrine completely, merely lopping off some inessential appendages, and leaving the creature, if anything, stronger than before. The twin-chambered heart of Carnap's view comprises, first, a deflationary view of metaphysics, with which Quine concurs; and second, a pluralism about the functions of existentially-quantified discourse, with which Quine does not concur, but against which he offers no significant argument.

### 3 How beefy is Quine's recipe for ontology?

To begin the case for the first proposition, let's ask what sort of a subject it is, this 'Ontology' that Quine is supposed to have made respectable. Here's a recent three-line summary by Stephen Yablo:

Quine . . . takes existence questions dead seriously. He even outlines a program for their resolution: Look for the best overall theory—best by ordinary scientific standards or principled extensions thereof—and then consider what has to exist for the theory to be true.<sup>11</sup>

Yablo can afford to be succinct. Quine's program for ontology is as familiar as almost anything in contemporary analytic philosophy, and Yablo is entitled to assume that his readers know what he means.

Yet the familiarity of Quine's program conceals a trap, in my view. In reality, there are two very different ways to construe the program, that need to be distinguished a lot more carefully than has usually been the case. (And Quine himself is one of those at fault, I think.) Roughly, there's a 'thin', or modest, reading of the program and a 'thick', or ambitious reading. I want to distinguish the two, and to argue that only the former really stands up as an adequate interpretation of Quine—though many people are committed, at least implicitly, to the stronger reading.

To forestall a possible objection, I want to emphasise that in one sense, the distinction between these two readings makes little difference to the conclusion for which I'm aiming. My targets are the criteria that Quinean and Eleatic naturalists offer for ontological commitment, and under both readings of his program, in my view, Quine fails to offers any good argument for thinking that the boundary between light and dark should be drawn where these naturalists want it drawn. (More on this later.)

Under the thin reading, however, it is also doubtful whether the boundary between light and dark could possibly have the significance that naturalists take it to have. Under the thin reading, Quinean ontological commitment is already pale grey commitment—metaphysics has already lost its regions of black and white. On the thin reading, in other

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<sup>11</sup>'Does ontology rest on a mistake?', *Proceedings of the Aristotelian Society*, supp. vol. LXXII (1998), 229–261, at p. 230.

words, Quine's brand of ontological commitment differs little in tone from Carnap's—while if it differs in application, in being restricted to the commitments needed in science, it thus rests on foundations that seem hard to defend, in the modest as well as in the ambitious version of the program.

The distinction between thin and thick readings is important in another way, too. It seems to me that many who appeal to Quine in support of their metaphysical investigations rely on the thick, ambitious reading, while at the same time displaying a kind of false modesty—helping themselves to a cloak of plain-speaking ontological frugality that belongs to the thin reading. Metaphysics thus gets away with working both sides of the street, because the two readings are not properly distinguished. It is therefore worth taking the trouble to draw the distinction, and to show that only the thin reading can really be regarded as legitimate, by Quine's own lights.

I'm going to proceed by offering extreme versions of the thin and thick readings, in order to highlight two kinds of constraint on an adequate interpretation of Quine's program for ontology. My intention is that as we chart an acceptable course between these extremes—an under-nourished Scylla and a beefy Charybdis, as it were—we'll find that the resulting view is clearly modest rather than ambitious, in the relevant respects. In other words, I'll begin by drawing the distinction between modest and ambitious readings in a caricatured form, and establish that in this form, only the modest reading is acceptably Quinean. In this form, however, the modest reading is unacceptably trivial. There are ways of making it less trivial, but so long as we keep our eyes on the dangers of Charybdis—on what it is that made our initial thick reading unacceptably ambitious—it will be clear, I'll argue, that permissible enhancements of the trivial reading remain modest in the relevant respects. Quine's program cannot be a recipe for thick or ambitious metaphysics.

In order to highlight the threat posed by the thin interpretation to the view that Quine saves ontology as a substantial discipline, let's begin by reformulating Yablo's summary of Quine's program, so that it becomes a program for resolving factual matters in general, rather than specifically matters of ontology:

Quine ... takes [factual] questions dead seriously. He even outlines a program for their resolution: Look for the best overall theory—best by ordinary scientific standards or principled extensions thereof—and then consider [how the facts have to be] for the theory to be true.

Now the initial challenge. Hasn't the program become trivial? If the best overall theory says that P, then this is how the facts have to be for the theory to be true: It has to be a fact that P. So here's what the program seems to amount to: *Look at what the scientific experts say, and take the facts to be what they say that they are.* Some program!

In its extreme version, then, the modest reading amounts to the view that the investigation of reality is nothing more or less than what the lead players do on the scientific stage. If philosophers want to do ontology first-hand, they should become scientific experts—do

what scientists do, and do it well. Otherwise, the only way to do it is second-hand, as spectators, by watching those who do it first-hand—by basing one's views on the views of the scientific experts. (Those who can, do science. Those who can't, read *Science*.)

Nobody will deny that this program ('Look at what the scientific experts say, and take the facts to be what they say that they are') is a modest program for metaphysics—self-effacing to the point of extinction, as an intellectual pursuit in its own right. However, everybody will deny, quite rightly, that it is all that Quine offers to metaphysics. There are at least three ways in which it may be held to be a non-trivial matter how the world has to be, for the scientist's claim that P be true.

First, some philosophers will say that there is often, perhaps always, a non-trivial issue about what *makes* such a claim true (if it is true). The task of philosophy, then, is the search for *truthmakers* for the best overall theories given to us by science. Second, even philosophers wary of the notion of truthmakers and truth-making may allow that there is often a non-trivial issue about the *interpretation* of scientific theories accepted as true. Granted that quantum mechanics is true, for example, what is it actually telling us about reality? Third, and even more importantly, once we revive the specifically ontological perspective, then there's the issue famously made vivid by Quine himself. Given that we are to accept a given scientific theory as true, how are we to construe its quantificational structure? Over what entities should our quantifiers range, in the best formulation of the theory in question? So long as any of these three suggestions proves acceptable—provides a non-trivial way to take the question as to how the world has to be, for the scientist's claim that P to be true—then the threat of triviality will have been met.

Thus we have several strategies for beefing-up the excessively modest reading of Quine's program into something more substantial—something with a more active role for philosophy. But too much beef would be a bad thing, as we can see by considering a view at the other extreme. According to this extreme version of the ambitious reading, the path to metaphysics begins with *Science* and *Nature*—with the journals, and other data of a similar kind, not with the world. For on this view metaphysics relies on a distinctive mode of inference, an inference that takes as input what the scientific experts *say*, and delivers as output conclusions about the nature of reality. The behaviour of scientists thus becomes *evidence* for a distinctive mode of investigation—the quest for the truthmakers, the interpretations, the preferred logical representations, of the claims of science.

According to the modest view, then, scientists play all the significant roles in the game of metaphysics. Unless philosophers are prepared to become scientists themselves, their role can only be to stand outside—observing the action, perhaps describing it in new and useful terms, but not making the running. According to the ambitious view, however, philosophers are investigators in their own right, standing outside the scientific arena, making judgements about reality on the basis of the behaviour of the performers within the arena.

As I said, this is a caricature. What's helpful about it is that it highlights a tension also present in some would-be more accurate readings of Quine's program. For imagine the perspective of a scientific expert, seriously concerned to find out how things are. According to this caricatured version of the beefy view, her investigation of nature is inevitably a two-stage process. First, she needs to develop the best scientific theories about the matter. Then she needs to conduct another investigation altogether. She needs to step outside the scientific arena—off the scientific stage, onto the philosophical stage—to ask what makes those theories true, how they should be interpreted, what their best logical representation is, or whatever. Only from the latter stage can she say, 'Ah, so this is how things really are!'

However, this is both absurd, and clearly in conflict with Quine's intentions. It is in conflict with Quine because he insists that there is no 'outside'—philosophy and science share the same raft, the same stage. And it is absurd because if our scientist thinks that she's engaged in the same project within the scientific arena as without, she can't think *both* that the theories she settles on within the arena are the best that science can do, *and* that there are further questions that can be settled outside (for anything that can be done outside can also be done inside)—while if she thinks she's engaged on different projects, then what reason could she have for thinking that the best theories *inside* are the appropriate input to the investigation *outside*?

To avoid both the absurdity and the conflict with Quine's manifest intentions, then, we need to ensure that in any less caricatured presentation of Quine's program for ontology, ontology is not something that scientists themselves couldn't regard as continuous with their own investigations. It can be something that, in practice, doesn't *interest* most working scientists—something that pushes questions they recognise as legitimate further than they themselves feel the need to go. But it can't be a second-order reflection on the results of their investigations.

With this in mind, let's look again at Yablo's gloss on Quine's program. Under one (perhaps slightly uncharitable) reading, it provides an illustration of the danger that concerns us here—the overly-beefy Charybdis, from which any acceptable interpretation of Quine's ontological program needs to distance itself:

Look for the best overall theory—best by ordinary scientific standards *or principled extensions thereof*—and then consider what has to exist for the theory to be true.  
[Emphasis added]

We've seen that without absurdity, and without obvious conflict with Quine's insistence that there is no second-order standpoint for ontology, we can indeed make sense of the program thus described, *as it would be without the italicised phrase*. The crucial point is that being the best by ordinary scientific standards is compatible with being less than the best by the more refined standards of Quinean ontologists—who, *though scientists at heart themselves*, simply *care more* about truthmakers, interpretation, and proper logical form. In other words, so long as 'best by ordinary scientific standards' is still sub-optimal, there's a

niche for Quinean ontologists, on the scientific stage. But if the investigations conducted by these ontologists are really not different in kind from those of ordinary scientists, they must surely count as principled extensions of ordinary scientific practice. To think that there is anything left to do after finding the best overall theory *by those extended standards*, is to lead us back to the trap we've just escaped. With the italicised phrase, then, Yablo's gloss on Quine's program suggests the overly-ambitious version.

Summing up, we've seen that we can make sense of the idea that there is real work for philosophers within the scientific arena, tackling tasks that tax the skills and stamina of scientists themselves. In this respect, our caricatured version of the modest reading of Quine's program of ontology is not the only alternative. But the new version is nevertheless modest, compared to our caricatured version of the ambitious reading. And we need to be on our guard against sliding back in that direction—against glossing the Quinean program in ways which do make ontology second-order, an activity which takes place after and outside science.

It seems to me that this overly-ambitious reading of Quine's program is actually common in contemporary philosophy. As evidence for this claim, I want to call attention to an ambiguity in presentations of an argument standardly attributed to Quine, the so-called 'indispensability argument' for the existence of abstract objects. I want to show that this argument has two interpretations, paralleling the modest and ambitious readings of the Quinean program for ontology. The stronger interpretation makes the same sorts of mistakes as the version of the ambitious reading described above. And yet, as we'll see, it is alive and well in the literature.

#### 4 Is there an argument from indispensability?

Realists in the philosophy of mathematics frequently appeal to, and irrealists in the same field frequently seek to evade, what both sides refer to as the Quine-Putnam argument from indispensability. What is this argument? Here's a characterisation by Hartry Field, perhaps the leading contemporary writer on the irrealist side of these debates:

Putnam 1971<sup>12</sup> is the *locus classicus* for the view that we need to regard mathematics as true because only by doing so can we explain the utility of mathematics in other areas: for instance, its utility in science ... and in metalogic .... The general form of this Putnamian argument is as follows:

- (i) We need to speak in terms of mathematical entities in doing science, metalogic, etc.;

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<sup>12</sup>'Philosophy of Logic', in his *Mathematics, Matter and Method: Philosophical Papers Volume 1*, 2nd. edn., Cambridge: Cambridge University Press, 1979, 323–357. (Originally published as *Philosophy of Logic*, New York: Harper Torchbooks, 1971.)

- (ii) If we need to speak in terms of a kind of entity for such important purposes, we have excellent reason for supposing that that kind of entity exists (or at least, that claims that on their face state the existence of such entities are true).<sup>13</sup>

Here's another formulation of the argument, from Mark Colyvan's entry on 'Indispensability arguments in the philosophy of mathematics' in *The Stanford Encyclopedia of Philosophy*:

For future reference I'll state the Quine-Putnam indispensability argument in the following explicit form:

- (P1) We ought to have ontological commitment to all and only the entities that are indispensable to our best scientific theories.  
(P2) Mathematical entities are indispensable to our best scientific theories.  
(C) We ought to have ontological commitment to mathematical entities.<sup>14</sup>

In my view, however, the forms of the indispensability argument offered here by Field and Colyvan involve a subtle misinterpretation of Quine and perhaps of Putnam—though admittedly a misinterpretation that neither Quine nor Putnam seems to have done much to discourage. Here is Putnam's own version, from the source cited by Field.

So far I have been developing an argument for realism along roughly the following lines: quantification over mathematical entities is indispensable for science, both formal and physical; therefore we should accept such quantification; but this commits us to accepting the existence of the mathematical entities in question. This type of argument stems, of course, from Quine, who has for years stressed both the indispensability of quantification over mathematical entities and the intellectual dishonesty of denying the existence of what one daily presupposes.<sup>15</sup>

I want to call particular attention to Putnam's final remark here (his gloss of Quine). If quantification over mathematical entities is indispensable, it is 'intellectually dishonest' to deny the existence of such entities. The crucial point—a point missed by Putnam himself here, so far as I can see—is that a principled exclusion of arguments *against* the existence of entities of a certain kind does not in itself comprise an argument *for* the existence of such entities, of the kind supposedly captured by the above formulations.

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<sup>13</sup>Hartry Field, 'Mathematical objectivity and mathematical objects', in his *Truth and the Absence of Fact*, Clarendon Press: Oxford, 2001, 315–331, at pp. 328–329.

<sup>14</sup>'Indispensability arguments in the philosophy of mathematics', in Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Fall 2003.

<sup>15</sup>'Philosophy of Logic', in his *Mathematics, Matter and Method: Philosophical Papers Volume 1*, 2nd. edn., Cambridge: Cambridge University Press, 1979, 323–357, at p. 347. (Originally published as *Philosophy of Logic*, New York: Harper Torchbooks, 1971.)

One way to see this is to note that if there were an argument usable by philosophy here, then by Quine's lights it would also be an argument usable by scientists and mathematicians themselves. After all, as I've stressed above, Quine insists that philosophy is not separate from science—we're all adrift in the same boat. But think about the (supposed) argument as used by scientists themselves. To secure premise (P<sub>2</sub>) (in the notation used by Colyvan above), they must come to accept that quantification over mathematical entities is indispensable—not merely something that they do do, as scientists, but something that survives under reflection—something they think that they don't have a choice about, if they are to continue to do science at all.

But for Quine, of course, there is no space between ontological commitment—belief that there are mathematical entities—and acceptance of quantification over mathematical entities. So, by Quine's lights, to be in a position to accept (P<sub>2</sub>) is to accept not only that one believes that there are mathematical entities, but that one is justified in doing so, by the lights of best (philosophically informed) scientific practice. It is to believe not only that there are mathematical entities, but that one ought to believe that there are (by the standards of scientific practice), having properly considered the alternatives.

Imagine our scientists, thus equipped with premise (P<sub>2</sub>). If they accept premise (P<sub>1</sub>), they are thus led to the conclusion, (C), that they ought to believe that there are mathematical entities. But they believed that already, by assumption, if 'ought' means something like 'by the internal standards of science'. So the argument could only take them somewhere new if there were some other standards—some other standpoint, from which to assess the question as to whether there are mathematical entities.

As before, there are two problems with this last idea (i.e., that there is some other standpoint from which to assess the question). One is that it flatly contradicts Quine, who insists that there is no separate standpoint for ontology, outside that of science. The other is that by introducing two standards for ontological commitment—the second-rate 'as-if' kind of commitment at the first stage, as compared to the first-rate, meaty kind of commitment at the second—it pulls the rug from beneath the entire argument. If there is a second-rate kind of ontological commitment, why should *that* kind of commitment be a guide to what there is? On the contrary, presumably, what makes it second-rate is that it isn't a (first-rate) guide to what there is.

Thus the argument from indispensability seems to embody the beefy vices of our excessively ambitious interpretation of Quinean ontology. If so, then our Charybdis wasn't a caricature, after all; except in flaunting what proponents of the argument from indispensability have disguised, the fact that there can only be such an argument if the standpoint of ontology is not merely that of science.

In defence of the argument from indispensability, it might be said that Quine insists that if science reaches that stage of accepting (P<sub>2</sub>), then there is no philosophical standpoint from which it makes sense to doubt that there are mathematical entities—to ask 'But are there REALLY mathematical entities?' Doesn't this imply that if science reaches the stage of

accepting (P2), then we are justified in affirming that there are mathematical entities—after all, aren't we justified in affirming what it makes no sense to doubt?

Well, it depends. Perhaps we are justified in repeating what science says (though the issue of the source of the normative force of 'justified' here is a nice one—more on this below). But even if so, this involves no inference from the fact that science says it: no argument, simply concurrence. The Quinean doctrine that if science reaches that stage of accepting (P2), then there is no philosophical standpoint from which it makes sense to doubt that there are mathematical entities—to ask 'But are there REALLY mathematical entities?'—does put paid to a certain sort of ontological scepticism, or anti-realism. But it doesn't imply that there is an argument *from* the needs of science *to* ontological conclusions—*for* realism. On the contrary, it deflates or disallows a certain sort of ontological debate: a debate taking place outside science, about whether there are things of the kind science quantifies over. After all, think of 'REALLY' as a metaphysician's term of art. The argument that it makes no sense to ask 'But are there REALLY mathematical entities?' does not imply that we should say 'There REALLY are mathematical entities.' Perhaps we should simply forget about 'REALLY'.

The difficulty with the argument just given is that our realist opponents will deny that they ever meant anything special (viz., 'REALLY') by 'really'. A familiar dispute then ensues about whose position is the more modest—about who holds the metaphysical low ground, so to speak. From the deflationist's point of view, the right strategy is to present one's opponent with issues on which she must take a stand, one way or the other. The aim is to show that if she agrees, she is being more deflationist than she wants to be; while if she disagrees, she holds commitments sufficiently inflated to be targets. The claimed argument from indispensability provides one such choice point, in my view. However, if someone insists that she meant the argument only in the modest, anti-realist dismissing sense, then we deflationists have no reason to argue with her any further. On the contrary, we should welcome her to the anti-metaphysical club—to that enlightened circle who agree with Carnap, in rejecting 'both the thesis of the reality of the external world and the thesis of its irreality'.

Summing up, we've seen that the only acceptable Quinean ontology is a very modest variety. It need not be as modest as a mere chorus line to science. There seems to be more dignified employment for philosophy, dealing with issues that, although continuous with science, suit the skills and temperament of philosophers better than those of working scientists themselves. But it is not an activity 'after' science, in a logical sense. In particular, it does not rely on inferences from what best current science says about reality. On the contrary, it is itself a kind of formal finishing school for scientific theory. Its own products *are* best current science.

This conception of the role of philosophical ontology is certainly modest, compared to some alternatives. However, I think it is worth noting in passing that it may still seem somewhat self-important, compared to views genuinely deferential to science. After all

(it might be objected), how could there really be space for such a pursuit? If scientists themselves get by without doing it, it cannot really be indispensable to science—in which case, what rationale can it have, for theorists whose role is as aides to science, if anything? Quinean ontology walks a rather fine line here, I think.

However, my present interest isn't how much role there really is for ontology *within* science. It is the question as to what basis, if any, there can be for a distinction relevant to ontology *between* science and other areas of discourse. Let's return to that issue, in the light of the conclusion that Quinean ontology is necessarily a very modest, deflationary kind of ontology.

## 5 Naturalism thick and thin

In its ambitious form, the argument from indispensability exemplifies a proposal for doing metaphysics from outside science—a proposal that metaphysics should appeal to the practices of science as *evidence*<sup>16</sup> for its own, separate, investigation. Note the special role accorded to *science*, of all possible intellectual pursuits. The strong form of the indispensability argument does not accord any weight to the ontological commitments of moralists or musicians, say, or marketeers, or even mathematicians themselves, except in so far as those commitments meet the needs of scientists.

If this preference for science could be justified—without begging the question, of course—then it would give us a basis for scientific naturalism, within the confines of this ambitious, non-Quinean metaphysical program. Ambitious ontology would have turned out to be a discipline which, in virtue of special place of the needs of science in its evidential base, does yield the conclusion that what exists is what (mature) science reveals. But the prospects for such a justification are surely slim. The evidential principle simply assumes naturalism. So long as naturalism is in doubt, so to will be the proper evidential base for this kind of ontology by inference from best first-order practice.

However, even this slim prospect disappears when we move to the modest program. In this context, the relevance of argument that you can't do science without committing yourself to numbers is much like that of the argument that you can't make an omelette without breaking eggs. It leaves you with a choice: commit to numbers or don't do science; break eggs or don't make omelettes.

So far as I can see, it doesn't supply any normative pressure to choose the former option. Someone already committed to science has no choice, of course—it is from that internal, already-committed perspective that the argument has some normative force. But modest ontology can exert no force on mere browsers—intellectual window-shoppers, simply interested in what the package entails, what the recipe requires. Even more importantly, for present purposes, there's no sense in which choice *privileges* science. On the contrary,

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<sup>16</sup>Where 'evidence' means more than testimony, of course—that way modesty lies.

it is clearly possible that there will turn out to be other activities such that you can't do X without postulating Y. What isn't admissible, it seems, is that there could be a perspective from which this possibility could be ruled out. If so, then there can be no a priori argument for naturalism. We are naturalists, de facto, if it turns out that all we are committed to is what is required by science. But even if that's so, it isn't a position we reach by argument.

The crucial point is that the restriction of ontology to first-order ontology—the rejection, with Quine, of any higher standpoint for philosophy—doesn't necessarily amount to a restriction of ontology to first-order *scientific* ontology. It all depends on whether science is the only existentially-quantifying game in town, at first-order level. As I have already noted, Carnap takes the negative side on this issue in 'Empiricism, Semantics and Ontology', defending a pluralist conception of the role of existential quantification in language.

However, one component of Quine's famous criticism of Carnap focusses precisely on this issue, and Quine is also known as a critic of other manifestations of pluralism about existence and existential quantification, notably that of Ryle. I want to show that these Quinean arguments contain little to trouble Carnap's combination of deflationism about metaphysics and pluralism about the functions of linguistic categories. As a result, they provide no serious obstacle to the suggestion that in virtue of such pluralism, not all first-order ontological commitment need be scientific ontological commitment.

Quine's objections to Carnap on this matter also offer an apparent defence of metaphysics against Carnap's criticisms—a defence in tension, it may seem, with my suggestion that Quine, too, is a deflationist about ontological issues. Before turning to the issue of pluralism, I want to show that in fact there is no tension here. For all practical purposes, Quine does agree with Carnap about the status of metaphysical issues. If anything, he is more of a pragmatist than Carnap, arguing that Carnap is mistaken in assigning a more robust status to scientific matters.

## 6 Quine's defence of metaphysics—the bad news

Much of Quine's attack on Carnap turns on the objection that Carnap's notion of a linguistic framework presupposes the analytic–synthetic distinction. Quine argues that in virtue of the failure of the analytic–synthetic distinction, even internal questions are ultimately pragmatic. Referring to Carnap's view that, as Quine puts it, 'philosophical questions are only apparently about sorts of objects, and are really pragmatic questions of language policy', Quine asks: 'But why should this be true of the philosophical questions and not of theoretical questions generally? Such a distinction of status is of a piece with the notion of analyticity, and as little to be trusted.'<sup>17</sup> In other words, Quine's claim is that there are no purely internal issues, in Carnap's sense. No issue is ever entirely insulated from pragmatic concerns about the possible effects of revisions of the framework itself. Pragmatic issues of

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<sup>17</sup> *Word and Object*, Cambridge, MA: MIT Press, 1960, p. 271.

this kind are always on the agenda, at least implicitly. In the last analysis, all judgements are pragmatic in nature.

Grant that this is true. What effect does it have on Carnap's anti-metaphysical conclusions? Carnap's internal issues were of no use to traditional metaphysics, and metaphysics does not lose if they are disallowed. But does it gain? Science and mathematics certainly lose, in the sense that they become less pure, more pragmatic, but this is not a gain for metaphysics. And Quine's move certainly does not restore the non-pragmatic external perspective required by metaphysics. In effect, the traditional metaphysician wants to be able to say, 'I agree it is useful to say this, but is it true?' Carnap rules out this question, and Quine does not rule it back in.<sup>18</sup>

Quine sometimes invites confusion on this point. He says that

if there is no proper distinction between analytic and synthetic, then no basis at all remains for the contrast which Carnap urges between ontological statements [i.e., the metaphysical statements that Carnap wants to disallow] and empirical statements of existence. Ontological questions then end up on a par with the questions of natural science.<sup>19</sup>

This sounds like good news for ontology, but actually it isn't. Quine's criticism of Carnap cannot provide vindication of traditional metaphysics, for if all issues are ultimately pragmatic, there can't be the more-than-pragmatic issue of the kind the metaphysician requires. The main effect of abandoning the analytic–synthetic distinction is that Carnap's distinctions are no longer sharp—there are no purely internal (non-pragmatic) issues, because linguistic rules are never absolute, and pragmatic restructuring is never entirely off the agenda. But a metaphysician who takes this as a vindication of his position—who announces triumphantly that Quine has shown us that metaphysics is in the same boat as natural science, that 'ontological questions [are] on a par with the questions of natural science'—is someone who has not been told the terrible news. Quine himself has sunk the metaphysicians' traditional boat, and left all of us, scientists and ontologists, clinging to Neurath's Raft.<sup>20</sup>

As Quine himself puts it in the same piece:

Carnap maintains that ontological questions . . . are questions not of fact but of choosing a convenient scheme or framework for science; and with this I agree only if the same be conceded for every scientific hypothesis.<sup>21</sup>

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<sup>18</sup>Roughly, Carnap allows us to ask about truth only for internal questions. Quine agrees, but says that there are no such questions, in the last analysis, because there are no firm linguistic rules.

<sup>19</sup>'On Carnap's Views on Ontology', in *The Ways of Paradox and Other Essays*, New York: Random House, 1966 (originally published in *Philosophical Studies* 2, 1951), at p. 134.

<sup>20</sup>The immodest interpretation noted above would have us do ontology by studying the behaviour of the creatures on the raft from the outside, as it were; but that interpretation is absurd.

<sup>21</sup>'On Carnap's Views on Ontology', p. 134. Note Quine's revealing use of the phrase 'for science'. It is

Thus Quine is not returning to the kind of metaphysics rejected by the logical empiricists. On the contrary, he is moving forwards, embracing a more thoroughgoing post-positivist pragmatism. In this respect, far from blocking Carnap's drive towards a more pragmatic, less metaphysical destination, Quine simply overtakes him, and pushes further in the same direction.

It might be objected that news still looks much better for metaphysics than Carnap would have had us believe. Granted, there is no longer any pure, non-pragmatic science to be had, and no non-pragmatic metaphysics, either. But if metaphysics nevertheless ends up 'on a par' with the kinds of questions investigated at CERN and Bell Labs, isn't that a kind of respectability worth having?

However, this objection trades on an excessively optimistic reading of the phrase 'on a par'. Like the rejection of the analytic-synthetic distinction on which it depends, the effect of Quine's challenge is simply to soften the distinction that Carnap wants to draw between ontological issues that are settled 'by convention', when we adopt a framework, and ontological issues that are serious matters for investigation, within a framework. In effect, Quine turns a dichotomy into a gradation, and lops off the pure cases, at either end. At one end, as I've noted, this makes science a little more pragmatic. At the other end, it makes the issue as to whether there are numbers, or physical objects, just a tiny bit less trivial—remember, no 'quite black threads . . . [nor] any white ones'. Patently, however, this change in logical status isn't enough to support a serious metaphysical investigation into the status of numbers, or physical objects—no more than the same news supports a serious sociological investigation into the gender and marital status of bachelors! To all intents and purposes, then, Quine has to agree with Carnap that useful employment for metaphysicians is not to be found here, among the most nearly conventional of what Carnap calls the internal questions.

## 7 Quine's objections to pluralism

As I have stressed, however, there is also a respect in which Quine does not move in the same direction as Carnap. Think of Carnap's move as a vector sum of two components, the first a push towards a deflationary and pragmatic conception of ontological issues, the second a push towards pluralism. Quine goes further than Carnap on the first axis, but resists all movement on the second. What, then, are Quine's objections to Carnap's pluralism?

I have already noted that Carnap's pluralism operates at two levels. On the surface, most explicitly, it is a doctrine expressed in terms of the logical syntax of language—the view that language may be significantly factored into distinct linguistic frameworks, each

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far from clear that for Carnap, the convenience of adopting a linguistic framework is always convenience *for science*.

associated with ‘a particular style of bound variables’, as Quine puts it.<sup>22</sup> Underlying this logico-syntactical pluralism, however, is the pragmatic or functional pluralism which provides its motivation. Carnap holds that there is some sort of category mistake involved in assimilating issues of the existence of classes, say, and the existence of physical objects. His model for the construction of linguistic frameworks reflects this assumption, requiring that we mark the category boundaries in our choice of syntax—a different quantifier for each category, for example. But the distinctions in question are not grounded at the syntactical level.

This is important, because Quine’s challenge to Carnap’s pluralism rests on a challenge to its logico-syntactical manifestation. Quine argues that it cannot be more than ‘a rather trivial consideration’ whether we use different quantifiers for numbers, classes and physical objects, for example, or use a single existential quantifier ranging over entities of any of these kinds. But it seems to me that we can allow that Quine is right about this, while insisting that it makes no difference at all to the issue that really matters: viz., whether Carnap is right about the underlying functional distinctions, and right about category mistakes.

The notion of a category mistake was familiar to the logical positivists of the 1920s and 1930s. In the *Aufbau* of 1928, Carnap himself uses the term ‘mixing of spheres’ (*Sphärenvermengung*) for, as he puts it later, ‘the neglect of distinctions in the logical types of various kinds of concepts’.<sup>23</sup> But for contemporary audiences the notion is particularly associated with Ryle. Ryle is quite clear that it has implications for ontological issues, and in a famous passage in *The Concept of Mind*, touches on the question as to whether existence is a univocal notion:

It is perfectly proper to say, in one logical tone of voice, that there exist minds, and to say, in another logical tone of voice, that there exist bodies. But these expressions do not indicate two different species of existence, for “existence” is not a generic word like “coloured” or “sexed”. They indicate two different senses of “exist”, somewhat as “rising” has different senses in “the tide is rising”, “hopes are rising” and “the average age of death is rising”. A man would be thought to be making a poor joke who said that three things are now rising, namely the tide, hopes and the average age of death. It would be just as good or bad a joke to say that there exist prime numbers and Wednesdays and public opinions and navies; or that there exist both minds and bodies.<sup>24</sup>

Given Quine’s response to Carnap, it isn’t surprising that he has little sympathy for Ryle’s apparent ontological pluralism. In a section of *Word and Object* devoted to ambiguity, Quine takes the opportunity to put on record his objection to Ryle’s view:

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<sup>22</sup>‘On Carnap’s Views on Ontology’, p. 130.

<sup>23</sup>Schilpp, P., ed., *The Philosophy of Rudolf Carnap*. *Library of Living Philosophers*, Vol. XI. La Salle, IL: Open Court, 1963, p. 45.

<sup>24</sup>*The Concept of Mind*, London: Hutchinson, 1949, at p. 23.

There are philosophers who stoutly maintain that “true” said of logical or mathematical laws and “true” said of weather predictions or suspects’ confessions are two uses of an ambiguous term “true”. There are philosophers who stoutly maintain that “exists” said of numbers, classes and the like and “exists” said of material objects are two uses of an ambiguous term “exists”. What mainly baffles me is the stoutness of their maintenance. What can they possibly count as evidence? Why not view “true” as unambiguous but very general, and recognize the difference between true logical laws and true confessions as a difference merely between logical laws and confessions? And correspondingly for existence?<sup>25</sup>

But what is the disagreement between Quine and Ryle? For Quine, matters of ontology reduce to matters of quantification, and presumably Ryle would not deny that we should quantify over prime numbers, days of the week and dispositions. Indeed, Ryle might reinforce his own denial that there are ‘two species of existence’ by agreeing with Quine that what is essential to the single species of existence is its link with quantification. Ryle simply needs to say that what we are doing in saying that beliefs exist is not what we are doing in saying that tables exist—but that this difference rests on a difference in talk about tables and talk about beliefs, rather than on any difference in the notions of existence involved. So far this is exactly what Quine would have us say. The difference is that whereas Quine’s formulation might lead us to focus on the issue of the difference between tables and beliefs *per se*, Ryle’s functional orientation—his attention to the question as to what a linguistic category *does*—will instead lead us to focus on the difference between the *functions* of talk of beliefs and talk of tables.

Moreover, it is open to Ryle (and again, entirely in keeping with his use of the analogy with ‘rising’) to say that in one important sense, it is *exactly the same* existential quantifier we use in these different cases. It is the same logical device, but employed in the service of different functional, pragmatic or linguistic ends. This move is important because it goes a long way to defusing Quine’s objection to Carnap.

By way of comparison, consider the familiar view that the truth predicate is a grammatical device to meet certain logical and pragmatic needs: a device for disquotational or prosentential purposes, say. As a number of writers have noted,<sup>26</sup> this account is compatible with the view that declarative sentences can perform radically different functions, in a way which isn’t captured merely by noting differences in content. Consider projectivism about moral or causal claims, for example. A deflationist may say that although it is the same deflated notion of truth we use when we say there are moral truths, or that there are causal truths, moral and causal claims have quite different functions (both with respect to each other, and with respect to other kinds of declarative claims).

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<sup>25</sup>*Word and Object*, p. 131. The above passage from *The Concept of Mind* is one of two places to which Quine refers readers for ‘examples of what I am protesting.’

<sup>26</sup>See, e.g., Paul Horwich, *Truth*, Oxford: Basil Blackwell, 1990, at pp. 87–8; Simon Blackburn, *Spreading the Word*, Oxford: Oxford University Press, 1984.

An analogous move seems to provide the best way to preserve the pluralist insights of Carnap and Ryle in the face of Quine's objections. We should concede to Quine that there is a single device of existential quantification, just as there is a single device of disquotational truth—if Carnap was really committed to the view that there are different existential quantifiers, one for each framework, then he was wrong about that.<sup>27</sup> But we should insist that this device has application in a range of cases, whose functional origins are sufficiently distinct that naturalism is guilty of a serious error, in attempting to treat them as all on a par. (Compare: There is just one device of enumeration by units, but it gives rise to incommensurable notions of 'rising', when the units in question belong to different scales, serving different purposes.)

A good way to put this might be to say that the subject–predicate form, and indeed the notion of an object itself, have this one–many functional character. In one sense, it is the same tool or set of tools we employ wherever we speak of objects, or whenever we use the subject–predicate form, or—what seems part of the same package—whenever we use the existential quantifier. However, there's no further unitary notion of *object*, or *substance*, or metaphysical bearer of properties, but 'only a subject position in an infinite web of discourses'.<sup>28</sup> Similarly, it is the same tool or set of tools we whenever we speak of truth, whenever we make a judgement or an assertion. But in each case, the relevant tool or set of tools may have incommensurable uses, if there are important senses in which the bits of language they facilitate have different functions (in a way which doesn't simply collapse into differences in the objects *talked about*).

This line of thought leads to an explanatory issue: to what do we need to appeal, in explaining the difference between talk of chairs and talk of beliefs? If it is simply difference between chairs and beliefs, pluralism has made no headway. An interesting pluralism stems from reversing the order of explanation: explaining differences between our talk of different kinds of objects in terms of differences in the function of the talk, not differences in the objects. Thus a projectivist about values and causes explains the

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<sup>27</sup>Though it is hard to see that there could really be a substantial difference of opinion here. We could index our disquotational truth predicates in a way which distinguished the predicate we apply to moral claims from the predicate we apply to causal claims, but this trivial syntactical exercise wouldn't prevent it from being the case that the resulting predicates both serve the same disquotational function. It is surely uncharitable to Carnap to suggest that he was confused about the analogous point, in the case of the existential quantifier. A champion of less deflationary metaphysics might think that there were significant distinctions for such syntactical conventions to mark, but why should Carnap think so?

<sup>28</sup>To reverse the sense of a remark by one of David Lodge's characters, who is characterising the view that there is no such thing as the Self. In this context, I note that Hilary Putnam does want to distinguish between 'speaking of objects' and 'using the existential quantifier', and wants to use the term object in a more restricted sense. (See his *Ethics Without Ontology*, op. cit., pp. 52ff, and 'Was Wittgenstein Really an Anti-Realist about Mathematics?', in *Wittgenstein in America*, eds. Timothy McCarthy and Sean C. Stidd, Oxford: Oxford University Press, 2001, pp. 140–194.) However, there doesn't seem to be much at issue here. Certainly, the Carnapian view I am recommending seems close to Putnam's 'pragmatic pluralism' (see *Ethics Without Ontology*, pp. 21–22.)

differences between evaluative and causal judgements in terms, ultimately, of functional differences between the kinds of psychological states projected in the two cases: desires, perhaps, in the case of evaluative judgements, and Humean habits of expectation, in the case of causal judgements.

This explanatory program leads us in turn in the direction of Eleatic naturalism. In one common version, the Eleatic criterion for realism is that the entities in question figure in causal explanations of our beliefs and talk (apparently) about those entities. To finish, I want to turn briefly to the question whether the Eleatic form of naturalism can hold the line, where Quinean naturalism could not, against Carnap's pale but permissive pluralism. First, however, let me summarize the case against Quinean naturalism.

I have argued that Quine's appeal to the virtues of a single existential quantifier does not undermine Carnap's functional pluralism. Given a sufficiently deflated view of ontology, functional pluralism does not depend on *syntactical* pluralism about existential quantification. Hence it remains open to a Carnapian to dispute the claim that all ontological commitment is scientific in nature—to defend the view that ontologically committed language may do other jobs. Naturalism thus remains vulnerable to the Carnapian challenge.

But suppose Quine had won this dispute. Suppose that he had established that in some substantial sense, existential quantification is a more monochrome matter than Carnap takes it to be. Would this have been a victory for naturalism? Not at all, it seems to me. It is one thing to establish that all ontological issues are the same kind of issue, quite another to establish that they are all *scientific* issues. So victory on this point wouldn't have vindicated Quinean naturalism. It would simply have blocked what is otherwise a powerful objection to Quinean naturalism, viz., the thesis that the relevant parts of language are functionally pluralistic, so that naturalism is guilty of a category mistake.<sup>29</sup> But although functional pluralism defeats naturalism, functional monism does not imply naturalism.

## 8 Eleatic naturalism to the rescue?

Now, finally, to Eleatic naturalism. As we noted earlier, one appealing version of the Eleatic criterion holds that we should be realists about a class of entities—about *Xs*, let's say—when *Xs* figure in causal explanations of our talk and beliefs 'about' *Xs* (i.e., of talk which has the superficial form of talk about *Xs*). Simon Blackburn canvasses such a criterion as the basis of a distinction between quasi-realism and genuine realism, for example:

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<sup>29</sup>Note that this objection derives its power, in large measure, from the fact that it comes from within science—from a scientific reflection on what we humans do with our language. Hence it points to a tension between two strands in Quine's naturalism. His own insistence that human thought and talk be addressed from a scientific perspective threatens to undermine his assumption that all serious ontological commitment is in the service of science itself. All it takes, in effect, is for science of linguistic behaviour to reveal that we humans do other things with existential quantifiers, besides scientific theorising.

A quasi-realist [e.g., about value] can mimic our formal practice with the concept of truth or fact. But surely he cannot give the facts any role in explaining our practice. To do so is to embrace their real distinct existence, or so it might seem.<sup>30</sup>

Can such a principle hold the line, where Quinean naturalism could not, against Carnap's pale but permissive pluralism (or indeed against Quine's own metaphysical deflationism)?

The basic difficulty with this suggestion is that by the deflationist's lights, the Eleatic view simply has an overly-inflated conception of what is at issue. After all, suppose it turns out that we find a pragmatic need for existential quantification in cases which don't pass the Eleatic test. To regard the Eleatic principle as an *ontological* criterion is to introduce a distinction between 'weak' ontological commitment, for which existential quantification alone is sufficient, and 'strong' or 'genuine' commitment, for which the Eleatic criterion is the benchmark. But such a distinction simply flies in the face of deflationism. Whence, and what, this stronger notion of ontological commitment, for which causation is supposed to be the *sine qua non*?

This point may have been obscured by the fact that in one sense, Quine himself attempts to draw such a distinction, favouring the ontological commitments required by science over what he treats as second-rate commitments. Quine's proposal challenges the Eleatic criterion, of course, as we noted at the beginning, and this challenge may have obscured the more basic point: if we take Quine's deflationism seriously, the serious challenger to Eleatic naturalism is not Quinean naturalism—another high-contrast view, but adjusted to accommodate numbers, abstract objects, and the like—but a paler and much more inclusive deflationary metaphysics. In other words, the more serious challenge stems from the fact that Quine's own account of what is at stake in ontological matters leaves no apparent space for a distinction between first-rate, 'genuine', ontological commitment, and lesser varieties of existential quantification.<sup>31</sup>

Thus there seems to be a fundamental tension between Eleatic naturalism and the Quinean message for metaphysics, properly (i.e., 'thinly') construed. Quinean deflationism counts against Eleatic naturalism, as much as its 'Quinean' cousin.

So much the worse for Quinean deflationism, perhaps—one can certainly imagine an Eleatic challenge to the Quinean message. Such a challenge would not conflict with the main claim of this paper, namely, that accepting the Quinean view means rejecting naturalism, in either form. But I want to finish by noting something that a Carnapian pluralist can do to defuse the kind of intuition that seems to support the Eleatic proposal.

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<sup>30</sup>'Truth, Realism, and the Regulation of Theory', in *Essays in Quasi-Realism*, New York: Oxford University Press, 1993, 15–34, at p. 31. (Cf. *Spreading the Word*, Oxford: Oxford University Press, 1984, p. 257.) Blackburn goes on to call attention to some difficulties for this suggestion, however—here, as elsewhere, he is by no means an unqualified Eleatic naturalist.

<sup>31</sup>Yablo argues convincingly for this conclusion, in 'Does ontology rest on a mistake?', *op. cit.*

## 9 The perspectival fallacy

Recall Blackburn's gloss on the Eleatic intuition: to 'give the facts [a] role in explaining our practice ... is to embrace their real distinct existence, or so it might seem.' When we seek the causes of our beliefs and practices, we are engaged in forensic science. The task of explaining our beliefs and utterances is a small but significant part of the scientific enterprise as a whole.

As we engage in this project, there is an inevitable but potentially misleading difference between the scientific framework and others. We are engaged in a scientific practice, in seeking the explanations for various other practices (or, indeed, for scientific practice itself). In other words, we are *employing* scientific vocabulary, to *talk about* the genealogy of vocabularies in general. We *use* scientific vocabulary, but *mention* the various object vocabularies with which we are concerned.

In general, presumably, the explanations we offer from this perspective will appeal to extra-linguistic states of affairs of various kinds—to the various features of ourselves and our environments that explain our linguistic practices. Thus, roughly, it is characteristic of the project that it appeals to non-linguistic ontology, in the service of explanations of various kinds of linguistic behaviour. In the case in which the latter behaviour 'involves' a distinct ontology of its own—an ontology of moral values, in the moral case, for example—the project embodies the starkest possible asymmetry between this ontology and that of science. It invokes scientific ontology, while ignoring moral ontology. (Our *explanandum* is the use of moral language, not moral states of affairs.)

No wonder, then, that the natural facts that play a role in explaining our practices *look* privileged from this perspective. They are privileged, *from this perspective*, for it simply is the scientific explanatory perspective. However, if we take this perspectival privilege for an absolute ontological criterion, we must be presupposing that science is (necessarily) the only ontologically-committing game in town. I've suggested that science itself ought to challenge that presupposition, regarding the range, functions and possible plurality of our ontological commitments to be a matter to be addressed *a posteriori*, from within a naturalistic reflection on our own linguistic behaviour.

If this seems doubtful, note that we can consider our linguistic practices from other perspectives. We can evaluate them, in various senses, for example.<sup>32</sup> If we invoke evaluative or normative properties in this context, the resulting ontological commitment is once again a product of the perspective—a product of the framework in play, in Carnapian terms. (Again, none of this depends on a rigid syntactical partition of frameworks, of the kind opposed by Quine.)

Thus Carnapian pluralism offers a natural (indeed, naturalistically respectable) way to

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<sup>32</sup>Arguably, in fact, they cannot count as full-blown linguistic practices—as 'sayings', or 'assertings', say—unless they are taken to be subject to normative assessments of various kinds. But the present point doesn't depend on this claim.

deflate the Eleatic intuition—to explain it as a product of a kind of perspectival fallacy. We Carnapians should certainly embrace the project of explaining our linguistic practices—for that way, if all goes well, lies a scientific foundation for the suggestion that different parts of language serve different functional ends, in some sense overlooked by Quinean and Eleatic naturalists. As I've noted elsewhere,<sup>33</sup> the upshot would be that science might properly take a more modest view of its own importance. Naturalism of both varieties would be defeated from within, as it were, by a scientific discovery that science is just one thing among many that we do with the linguistic tools of ontological commitment.

For the moment, pending such developments, Carnapian pluralism remains somewhat promissory. I've argued, however, that it has nothing to fear from the Eleatic challenge, or from Quine's objections to Carnap's own formulation of the pluralist view. In all respects bar one, in fact, Quine is an ally. Most importantly, he, too, is a metaphysical deflationist—thereby endorsing a view that already drains most of the blood from the issue between naturalists and their opponents. The one significant disagreement between Carnap and Quine turns on Quine's view that science is the only game in town—the only serious activity to make use of existential quantification. And on this matter, as I've said, we Carnapians should put our faith in science itself.

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<sup>33</sup>'Naturalism Without Representationalism', in David Macarthur and Mario de Caro, eds, *Naturalism in Question*, Cambridge, MA: Harvard University Press, 2004, pp. 71–88.