

Throwing the Baby Out With the Bathwater

Katherine Hawley, November 24th 2008

Every Thing Must Go is wildly ambitious. It advances substantive views on the proper scope of metaphysics (unifying science), the nature of reality (things subservient to structures), the current state of play in quantum gravity (fragmented), and the connection between fundamental physics and the rest of science (hard to summarise). It is both fascinating and infuriating. A key theme is the dismissal of ‘neo-scholastic’ metaphysics and the promotion of ‘naturalised metaphysics’. I fear my own work qualifies as neo-scholastic, and although I’m reassured to have ‘some extremely intelligent and morally serious people’ as company, I’d hate to think we were ‘wasting [our] talents – and, worse, sowing systematic confusion about the world, and about how to find out about it’ (vii). So I will focus my attention on this theme.

Broadly speaking, *ETMG*’s objection to contemporary analytic metaphysics is that it is typically conducted in ignorance of contemporary science. Now, whilst metaphysicians vary significantly in their scientific knowledge, it is certainly true that most of us don’t know much more than we can read in *Scientific American*, and many of us don’t even know that much. Those who *do* know plenty of science tend to be classified as philosophers of physics (or biology), not metaphysicians. But why does all this matter?

The authors of *ETMG* think that it matters for a number of reasons. They argue that scientifically-ignorant metaphysicians often (mistakenly) think of the world as fundamentally composed of tiny billiard-ball-like particles, and that this gives rise to errors about causation, composition, extension, objecthood and so on. Relatedly, they argue that metaphysicians often rely on thought experiments concerning simple worlds, and underestimate how unlike actuality these possibilities are. They argue that metaphysicians pronounce *a priori* on matters concerning which scientists have empirical evidence. They assert that metaphysics is worthwhile only when it aims to unify different scientific hypotheses, and that this, of course, cannot be done in ignorance of science. “Metaphysics, as we will understand it here, is the enterprise of critically elucidating consilience networks across the sciences.” (28)

These are serious challenges, worthy of serious responses. Moreover, though the details are new, they fit into a venerable tradition of anti-metaphysical thought stretching back through the logical positivists to Hume. Yet it is striking that this challenge from science is not the methodological issue which most preoccupies metaphysicians right now. Metaphysics as a sub-discipline of analytic philosophy has flourished – or run amok – over the last few decades, drawing inspiration from the work of David Armstrong, David Lewis and D.H. Mellor on topics like causation, laws of nature, time, persistence and modality. But the sub-sub-discipline *du jour* is ‘metaontology’ or ‘metametaphysics’: friends and foes of metaphysics have devoted conferences, collections and collaborations to thinking directly about the nature and scope of metaphysics (Eklund 2006 provides a nice way into this literature).

On such occasions, the main threat to standard metaphysics is taken to be some form of Carnapian conceptual-scheme relativism about existence claims. Do middle-sized objects – salamanders or samosas – exist, in addition to the more fundamental entities out of which these things are apparently composed? Various authors have argued that, strictly speaking, there are no composite objects; others have disagreed. The metaontological challenge to both sides focuses on that notion of ‘strictly speaking’ – is there a metaphysicians’ sense of ‘exist’ which is in some sense more basic, more revealing than the everyday sense of the word? This challenge is raised, and met, using tools drawn primarily from the philosophies of language and of logic.

My guess is that the authors of *ETMG* would be as impatient with this debate about the nature of ontology as they are with its target, the ontological debate about composite objects. For them, the problem with standard metaphysics and ontology is not that it tries to go beyond everyday language and common sense; the problem is that it sticks much too closely to everyday language and common sense, more closely than many of its practitioners realise, because they do not realise how very far modern physics has already moved away from common sense. The claim that there are only fundamental, indivisible particles, not composite objects, looks like a radical one. But it’s not as radical as rejecting the very coherence of the idea of big things’ being made out of little things, and denying that there are any such things as fundamental, indivisible particles.

For me at least, this vigorous reassertion of the challenge from science is a welcome redressing of the balance in metametaphysical debate – after all, it is science which is the ‘great epistemic enterprise of modern civilization’ (310, the closing sentence of the book), and it is with respect to science that we need to position ourselves as philosophers, not just as metaphysicians. That said, I want now to argue that neo-scholastic metaphysicians are useful members of philosophical society. In particular, I will argue that even if we accept *ETMG*’s story about the primary goal of metaphysics – unifying science, or at least critically elucidating its consilience networks – analytic metaphysics as it is currently practiced, even by those who know little of science, has much to contribute to this project.

As a preliminary, I note that *ETMG* often over-estimates the degree of consensus amongst metaphysicians, and the degree of confidence with which metaphysical beliefs are held. For example, on p.151 we are told that ‘standard metaphysics’ assumes, amongst other points, the truth of both Humean Supervenience and the Principle of Identity of Indiscernibles, whilst on p.261 ‘neo-scholastic metaphysicians’ are to be found collectively embracing mereological atomism. On p.202 ‘conservative metaphysicians’ assert that ‘a thing cannot have causal efficacy over and above the summed causal capacities of the parts with which it is allegedly identical’. Yet all of these doctrines are up for debate in contemporary metaphysics, where consensus about substantive theses is rare. (How could we hog so much space in the journals if we just nodded quietly in mutual agreement?)

Much of what has lasting value in the metaphysical literature, as in many areas of philosophy, consists in the careful, detailed work of distinguishing conflated questions

and issues, investigating the space of possible theories, and establishing relationships of confirmation or even entailment between different claims. Can you be both a four-dimensionalist about time and a three-dimensionalist about objects? Do four- and three-dimensionalism exhaust the options? Can you be an anti-realist about numbers without being a realist about spacetime points? David Lewis is perhaps the most widely-admired and influential metaphysician of recent times. But he is admired and influential not because he is generally agreed to have established that there are many concrete worlds, across the closest of which all facts supervene upon point-by-point property-instantiations. Instead, his contribution was to show what could be done with the resources of concrete possibilities and similarity relations, how these could be parlayed into accounts of properties, causation, persistence and the like, what sorts of explanation are available against such a backdrop, how we might think of chance and determinism, and so on.

Similarly, Peter van Inwagen hasn't brought many people round to his view that the only composite objects are living organisms. But he has clearly shown us the differences between asking what relations hold amongst objects when they compose something, what relations hold between whole and its parts, and what property an object has when it has proper parts; moreover he has shown us how answering any one of these questions can leave the others unanswered (this point is relevant to the dismissal of mereology on p.21). Hugh Mellor hasn't turned us all into B-theorists about time, but he has shown us how to tease apart questions about the indispensability of tensed language from questions about the reality of tensed facts (a distinction endorsed as if obvious on p.163).

Well, who cares about any of that? The authors of *ETMG* should care, because, like Lewis, van Inwagen, Mellor, and the rest of us, they are interested in the nature of objects, properties, relations, time, modality, causation and so on, even if sometimes they prefer different categories and terminology. Much of *ETMG* is concerned with developing a positive metaphysical view, one based on the findings of current science and aimed at unifying those findings, so far as is possible. And there are many points at which the conceptual tools and distinctions developed by neo-scholastic metaphysicians would have come in handy. In what follows, I will outline a few examples piecemeal. Inevitably this involves quoting out of context and uncharitably highlighting what look like errors, but this is a method the authors themselves use in their attack on neo-scholasticism.

Time crops up on several occasions. In section 4.3 a 'block universe' view (taken, I think, to be the combination of realism about nonpresent events with the denial of 'temporal becoming') is taken to be at least superficially incompatible with the existence of temporally asymmetric influences, or real causal processes. 'And if causal processes are taken to require actualization of effects after actualization of their causes, then there may be an important sense in which nothing is a causal process at the level of abstraction suitable for metaphysical unification, since physics motivates the hypothesis that we may live in a block universe (as we argued in Chapter 3), and then an acceptable metaphysics will have to be set within such a universe.' (211) I find this quite baffling: if denial of temporal becoming undermined temporal asymmetry, or the distinction between 'before'

and ‘after’, we’d all accept temporal becoming. If on the other hand it’s the notion of ‘actualization’ that’s important, then I’d like to know what this means, and how to understand it without turning to neo-scholastic or even scholastic metaphysics.

Jonathan Lowe doesn’t get a great press in *ETMG*, though he is co-opted to the side of the angels when he challenges Trenton Merricks, whose philosophical sins are mortal (22-3). Yet Lowe (along with Kit Fine) has done significant work distinguishing different ways in which one entity can depend upon another – he clarifies notions such as ‘identity dependence’ and ‘existence dependence’ (which can be rigid or non-rigid), and he distinguishes an object’s essential properties from the properties it has necessarily. This is surely as neo-scholastic as it comes, but distinctions like these would have helped the authors enormously in their extensive discussions of the ways in which higher-level entities depend (or don’t) upon lower-level entities, and the ways in which structures are somehow prior to objects. The authors are concerned to deny that there are any ‘self-subsistent’ entities, but it is deeply unclear what this denial amounts to. Moreover, I often found myself wondering how there could be *naturalistic* facts about what depends upon what, going beyond extensional facts about what exists.

On pp.254-5 we read that the authors ‘are sanguine about ontological vagueness....[and] regard puzzles about where exactly mountains stop and start, and whether or not the table is the same if we remove a few particles from it, as pseudo-problems *par excellence*, of no scientific or factual relevance.’ A similar point is made on p.229. But nobody thinks we can work out exactly where mountains start and stop, nor that you destroy a table when you sand it. It’s a big step from there to accepting ontic vagueness; the interesting, genuine problems about vagueness concern its origins (in thought, language or elsewhere), and the question of how to reason correctly using vague terms, why slippery-slope arguments are fallacious, and so on.

The positive metaphysics advanced in *ETMG* crucially involves the notion of ‘real patterns’, an idea developed out of Daniel Dennett’s work. ‘From the metaphysical point of view, what exist are just real patterns’ (p. 121). A key goal is to integrate the traditional categories of object, event and process (much as neo-scholastic four-dimensionalists about objects do). I have failed to work out whether or where individuals (i.e. objects, I think) fit into the overall picture. Sometimes, individuals seem to be real patterns, i.e. real as can be. But sometimes ‘Individual things, then, are constructs built for second-best tracking of real patterns’ (242), or ‘epistemological book-keeping devices’ (240), or then again ‘All individuals, we will argue, are second-order real patterns’ (243), i.e. real patterns, i.e. existents. Things, on the other hand are ‘locators’, where ‘a locator is to be understood as an act of ‘tagging’ against an established address system’ (121), i.e. (I think) something at the level of sense or language, not reference or the world. The authors defend a form of ontic structural realism – this must surely involve the claim that structures are real – yet on p.299 we read that ‘structures describe real patterns’, which suggests that structures themselves are merely a representational device.

Now, this is a long, detailed book, and the authors take themselves to be advancing a revolutionary metaphysical view, one which cannot easily be expressed in traditional terms. So it is hardly surprising that I can juxtapose brief quotations from different chapters and thereby create a puzzling impression. Moreover, it is hardly surprising that I can find a few errors relating to my own areas of expertise in a book which draws upon so many areas of philosophy and science. But my point is that the literature of contemporary analytic metaphysics contains a wealth of resources, distinctions and concepts which the authors might profitably have used in developing and setting out their positive views, even if just by way of contrast. After all, one standard, very modest view of the role of philosophy with respect to science is that of conceptual clarification, and this is a role which seems compatible with the conception of metaphysics as the unifier of science.

So, for example, I would be interested to know what relationship there is between the metaphysical view advanced in *ETMG* and the following sketch:

The fundamental facts about the universe are facts about which properties are instantiated where; these can include irreducible facts about properties instantiated across extended regions, not just at points. We humans find certain regions interesting, and think of these as things; often these are regions which have some kind of thermodynamic stability, but beyond this our interest does not reflect a fundamental ontological feature of the world.

Whilst of course there's much more than this in *ETMG*, this basic picture is familiar to neo-scholastic metaphysicians, though by no means universally accepted. Indeed it's not so very different from what you'd get if you took Lewis's picture of actuality and subtracted his Humean Supervenience, a subtraction that Lewis himself was willing to make in the face of quantum entanglement (as noted on p.148).

I have offered only a very limited defence of contemporary metaphysics here. I have not shown how metaphysical methods of investigating reality can rival or conflict with the methods of science (if I revealed our secrets, I'd be expelled from the metaphysicians' circle). But I think it is evident that the actual work of many contemporary metaphysicians provides conceptual resources and tools which can be of great use to anyone who is attempting – admirably – to draw metaphysical conclusions from the detailed study of current science.

So should we all go off and study physics? Yes, indeed: it's always worth finding out more about the world, modern physics can be mind-blowing, and those philosophers who have the skills and background to really engage with contemporary science have the potential to teach the rest of us an enormous amount. But studying the details of science is not the only way in which we can contribute to the great epistemic enterprise of modern civilization. Even on the modest 'conceptual clarification' model of metaphysics, there is a place for blue-skies thinking, for ranging freely through the possibilities without an eye to what can immediately be applied to the critical elucidation of consilience networks. We mustn't let the short-term demands of commercialisation undermine our long-term potential to contribute to the intellectual economy.

Eklund, Matti (2006): 'Metaontology', *Philosophy Compass*, 1.3, 317-334.