10 Three dogmas of metaphysical methodology

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> Disputes are multiplied, as if every thing was uncertain; and these disputes are managed with the greatest warmth, as if every thing was certain.
>
> (Hume 1739/1939, *A Treatise of Human Nature*, xiv)

A puzzle about progress in philosophy

In what does philosophical progress consist?

Let us start by distinguishing, by attention to certain extrema, two ways in which progress in a given field might proceed. The first presupposes a single standard paradigm, accepted by most practitioners of the field, where by "paradigm" I have in mind what Kuhn (1962) called a "disciplinary matrix," and what Carnap (1950/1956) called a "linguistic framework." Paradigms, so understood, are not so much theories as frameworks for inquiry – ways of thinking about the subject matter, which include certain theoretical and methodological assumptions effectively treated as axiomatic or constitutive of the investigative approach at issue. Here progress consists mainly in constructing, refining, extending, exploring the consequences of, and testing theories within the constraints of, the preferred paradigm. Revolutions aside, such "vertical" progress, involving development of a single framework for theorizing, is characteristic of the sciences. Such common focus plausibly reflects that scientists are typically concerned to explore what is actually the case, so that their efforts are most efficiently expended within the framework(s) seen by their community as most likely to encode or otherwise model the way things actually are. Hence it is that when a given paradigm is ultimately deemed unworkable, it is replaced by a new paradigm – there is a *shift* from one preferred framework (or one restricted set of such frameworks) to another.

A second, more ecumenical sort of progress consists in the identification and development of new paradigms – new ways of thinking about or engaging with the subject matter at issue. Conservatism aside, this sort of "horizontal" progress, involving the creative construction and development

of new frameworks for inquiry, is characteristic of progress in the arts and in pure mathematics. To be sure, individual practitioners in these fields may (at least for a time) primarily operate within a preferred paradigm and make vertical progress therein; but the fruitful identification of new terrain is itself seen as valuable, and importantly, there is no general presupposition that any one paradigm is closer to actuality or otherwise more "correct" for purposes of inquiry into the topic. The visual arts, for example, have seen a huge expansion of means, motive, and execution, and suppositions that new forms of expression would overthrow the old have repeatedly been seen to be unsound: to the extent that there are recognizable "schools" or associated "isms" – realism, cubism, fauvism, abstract expressionism, conceptualism – these are now understood as irreducibly diverse ways of visually exploring life's rich pageant. Pure mathematics has also seen enormous diversification, with areas such as number theory, analysis, group theory, and Boolean algebra being identified and developed in separate streams, notwithstanding the recent ultimate unification of these branches in set- or category-theoretic terms. Diverse focus on multiple paradigms plausibly reflects that both art and mathematics admit of a number of potentially interesting ways of thinking about the general subject matter at issue. These disciplines are in part constituted by such diversity, and indeed, competence and creativity in either field is frequently marked by the ability to identify new and interesting frameworks for inquiry, to be added to the mix.

Does philosophical progress primarily proceed along horizontal or vertical dimensions? The answer is delicate, and, as we'll see, initially puzzling.

Certainly, much significant progress in philosophy involves the horizontal identification and development of new ways of thinking or theorizing about a given phenomenon. Here we might think of Hume's revolutionary reconception of causation as a matter of systematic correlations (as opposed to locally productive powers or forces), or of Lewis's initially astonishing suggestion that modality is grounded in concrete worlds, each as real as our own.

Such horizontal conceptual leaps are not only interesting in their own right, as expanding (in Lewis's case, quite literally!) the space of possibility, but also as giving practitioners in fields other than philosophy new theoretical tools. So, for example, Hume's correlational conception of causation was massively influential in the sciences (see J. Wilson 2006), first in providing a broadly empiricist motivation and basis for the descriptive accounts of natural phenomena advanced by Galileo and Newton, and later in directly inspiring Pearson, the founder of modern statistics. Hume's legacy continues to this day, with the work of Pearson, Wright, and others having contributed, for better or worse, to the prevailing approach to causal inference in the sciences as proceeding via statistical or probabilistic notions,

according to which, as Pearl (2000, xiii) put it, "probabilistic relationships constitute the foundations of human knowledge, whereas causality simply provides useful ways of abbreviating and organizing intricate patterns of probabilistic relationships."[1] Other cases in which a philosophical framework is incorporated into some other field of inquiry include the influence of logicians such as Frege and Turing on computational science, of American pragmatists such as Dewey and Peirce on education and public policy, of functionalists such as Putnam and Lewis on artificial intelligence, of ethicists such as Rawls and Nozick on competing notions of the welfare state, and so on, and so on. In identifying new paradigms and bringing them up to speed for the use of philosophers and non-philosophers alike, philosophy is indeed, as Hellie (2011, n.p.) evocatively put it, "the neonatal intensive care unit of theory."

Interestingly, however, these horizontal efforts are not of the same ecumenical character as those in art or mathematics. Rather, philosophers tend to suppose, like scientists, that only *one* of the candidate paradigms treating a given phenomenon is correct. (To be sure, philosophers may offer anti-realist or relativist views of a given phenomenon; but these views do not so much as embrace diversity as subsume it within a single paradigm.) Hume did not just offer his account of causation as a logically or metaphysically possible alternative – he thought that it was the only viable such account; Lewis similarly took the truth of concrete modal realism to be supported by considerations of simplicity and fruitfulness. Indeed, it is common for philosophers to suppose that their favored theories – hence the theoretical presuppositions of the paradigms guiding the construction of these theories – are not just true, but are *necessarily* so.[2]

It is no surprise, then, that much philosophical progress occurs along the vertical dimension, with philosophers often working for the majority of their careers within a single paradigm, refining the framework, extracting its consequences, and testing these for internal coherence and fit with reality, in ways that – modulo the more general purviews of subject matter and methodology in philosophy – are not much different from practitioners of this or that normal science. For example, Hume's various projects were conducted within the strict epistemological constraints of his version of empiricism, requiring that the content and justification of our beliefs be ultimately traceable to experiences of outer or inner sensations, either individually or as combined in one of a few acceptable ways; and one can plausibly see his oeuvre as aimed at establishing that a representative range of important concepts and beliefs could be treated in accord with these foundational presuppositions. Lewis too had a favored framework, as per the introductory remarks to his (1986c) collection: "Many of the papers, here and in Volume I, seem to me in hindsight to fall into place within a prolonged campaign on behalf of the thesis I call 'Humean

supervenience' … the doctrine that all there is to the world is a vast mosaic of local matters of particular fact, just one little thing and then another" (ix).

It seems, then, that philosophical progress proceeds along *both* vertical and horizontal dimensions. And this fact poses something of a puzzle. If – as philosophical vertical investigations typically presuppose – not all philosophical paradigms are created equal, then what explains the multiplicity of philosophical paradigms, and continued disagreement about which paradigms are most likely to be true?

Resolving the puzzle

One response to the previous question would be to say that philosophers are wrong to disagree about which paradigms are true or are otherwise best suited for inquiry into a given phenomenon. Philosophy, one might maintain, is not about finding the "right" answer to this or that question; it is about mapping the space of possible answers. Much of Hawthorne's work reflects such an ecumenical view, perhaps also expressed in his remark that "metaphysics is a speculative endeavor where firm opinions are hard to come by (or rather, they ought to be)" (2006, vii). And it seems that such a view is what Hellie (2011) has in mind when conceiving of philosophy as the neonatal intensive care unit of theory, with the idea being that the job of philosophers isn't to defend a specific paradigm or theory, but rather to cultivate and "bring up to speed" a range of paradigms and associated theories.

While I agree that it is some part of the project of philosophy to neutrally map theoretical space, I don't see why this isn't compatible with its also being some part of the project of philosophy to figure out which paradigms and associated theories are most likely correct. After all, a philosophical paradigm, like a scientific paradigm, typically does aim to get it right about how to think about some or other aspect of reality. Why not suppose that there is a fact of the matter about which paradigm (or limited set of competing paradigms) achieves this aim, as the many philosophers engaging in committed vertical investigations apparently do?

I'll shortly consider one sort of pessimistic answer to this question. First, though, I want to offer what seems to me to be a better explanation of continuing philosophical disagreement; namely, that we are at present very far from the end of philosophical inquiry. It is not just that, for any given phenomenon of interest, we are not yet in full possession of all of the data that might possibly be relevant to our theorizing about that phenomenon – this much is true of the sciences. It is more crucially that, for any given phenomenon of interest, we are not yet in full possession of agreed-upon standards for assessing whether a given philosophical theory about that phenomenon is correct. The problem here is not lack of data; it is lack of agreed-upon methodology.

Note that I say that we are not *yet* in full possession of agreed-upon methodology. Carnap famously suggested that metaphysical claims, in particular, were lacking any agreed-upon methods of confirmation, and so, by his verificationist lights, were meaningless:

> Suppose that one philosopher says: "I believe that there are numbers as real entities." … His nominalistic opponent replies: "You are wrong: there are no numbers." … I cannot think of any possible evidence that would be regarded as relevant by both philosophers, and therefore, if actually found, would decide the controversy or at least make one of the opposite theses more probable than the other.
>
> (1950, 254)

Such a pessimistic view might be used to support the claim, above, that philosophers should not be in the business of trying to figure out which philosophical frameworks best match reality, or are otherwise correct. But unlike Carnap, I don't see any reason to think that we might not someday come to principled consensus on what sort of evidence would decide such questions. Indeed, just in the last decades there has been considerable progress in determining what sorts of evidence, and more generally what sorts of methodological considerations, might weigh in favor of or against a given metaphysical or other philosophical hypothesis. As it happens, a verificationist criterion of meaning of the sort endorsed by Carnap has been widely rejected as a necessary condition on the truth of a given theory (philosophical or otherwise).[3] A number of philosophers have raised concerns about whether conceiving alone can provide a suitable basis for a priori deliberation.[4] Much attention has lately focused on identifying the sorts of theoretical desiderata (simplicity, fruitfulness, etc.) that may enter into inference to the best explanation, in elucidating how these desiderata may compete against or support one another, and the extent to which these should be individually weighted.[5] And so on. We are making methodological strides in philosophy, and presumably will continue to do so, notwithstanding that we still have a considerable way to go.

So there is no special mystery about the fact that philosophers work within multiple paradigms (like artists and mathematicians) while maintaining that only one of these paradigms is correct (like scientists): this fact is plausibly explained by the still-rudimentary state of philosophical methodology. There is no need to respond to this acknowledgement either with methodological or metaphysical nihilism, however, for we are slowly but surely making progress in clarifying and achieving consensus about our methodological standards. In addition to exploring the space of theoretical possibility for its own sake (or the sake of practitioners in

other disciplines), philosophers can and should aim to figure out which philosophical frameworks come closest to capturing the reality at issue.

That's the good news. The bad news is that, while the lack of consensus about methodological standards is plausibly behind continuing philosophical disagreement, such disagreement at least sometimes reflects insufficient sensitivity to our present epistemic situation. Hence it is that philosophers engaged in vertical investigations within their preferred framework frequently dogmatically take for granted their favored paradigms – that is, their favored theoretical and methodological assumptions – never putting these, as they periodically should, to the test. In the next sections I'll offer three case studies of dogmatism presently operative in metaphysical contexts; along the way we'll see how dogmatism impedes both horizontal and vertical progress, in philosophy and beyond.

Dogma 1: Hume's Dictum

Hume famously argued that there are no necessary causal connections between distinct existences, and more generally claimed:

> There is no object, which implies the existence of any other if we consider these objects in themselves …
>
> (*Treatise*, bk I)

The contemporary version of Hume's Dictum, further generalized and refined, is along the lines of:

> (HD): There are no metaphysically necessary connections between distinct, intrinsically typed entities.[6]

Contemporary philosophers frequently appeal to HD in service of destructive projects – against, e.g., states of affairs (Lewis 1982) or necessitarian accounts of properties and laws (Armstrong 1983; Schaffer 2005). And they frequently appeal to HD in service of constructive projects – in support, e.g., of combinatorial accounts of modality (Armstrong 1989; Lewis 1986b), "lonely world" accounts of intrinsicness (Lewis and Langton 1998), and supervenience-based formulations of physicalism (Van Cleve 1990; Kirk 1996). HD frequently serves as a crucial combinatorial premise, as in e.g., arguments that certain supervenience relations are equivalent (Paull and Sider 1992; Bennett 2004; Moyer 2008). And many take violation of HD by a theory as sufficient reason to reject it, such that efforts are expended to show that certain theories of tropes or truthmakers do *not* so violate the dictum (Cameron 2006, 2008).

HD, then, serves as a foundational assumption and methodological guide in a wide range of metaphysical debates, constitutive of a broadly Humean approach to metaphysical theorizing. But why believe HD – why operate within the paradigm – if you're not Hume?

If you're Hume, HD makes some sense. On Hume's strict, idea-istic version of empiricism, the content and justification of all of our beliefs has ultimately to be grounded in experience – in particular, of sensory qualities or experienceable combinations of such qualities. On this view, for example, one's idea of a billiard ball (or idea of a billiard ball's rolling) would be a compendium of certain of the ball's superficial sensory characteristics. It is indeed plausible that objects and events characterized so superficially do not stand in any necessary connections. But contemporary proponents of HD don't accept Hume's strict empiricist constraints; rather, they are typically happy to allow that we can justifiably believe in the existence of entities lying beyond the reach of experience (e.g. as a matter of inference to the best explanation).

Nor do proponents of HD provide other reasons for believing HD. As MacBride (2005) notes:

> [I]t is a curious fact that the proponents of the contemporary Humean programme—Lewis included—having abandoned the empiricist theory of thought that underwrites Hume's rejection of necessary connections provide precious little by way of motivation for the view.
>
> (127)

But surely some motivation is needed here! For underlying HD is the supposition – plausible for superficial objects of perception but decidedly less so for objects themselves – that *what it is to be* an object (or property, or event) of a given broadly scientific type is completely divorced from anything the object (property, event) does or can do. But again, why believe this? Surely neither common sense nor the sciences give us the faintest reason to believe that, e.g., the property of being negatively charged has some intrinsic character that is only contingently associated with – really, has nothing deep to do with – the fact that negatively charged entities repel each other, such that electrons might have attracted each other, or played leapfrog, or whatever. On the contrary: in everyday thought and action we obviously characterize the objects (features, processes, etc.) of our attention in terms of what these can do with or for us – which characterization is not crudely behavioral, of course, but includes how their qualitative aspects may affect us or other entities, sensorily or otherwise; and the sciences are even more explicitly concerned with characterizing, in the laws that are their ultimate expression of understanding, natural phenomena in terms of broadly causal evolution. We have no clear access,

and moreover no clear concern, with whatever non-causal core is, according to the Humean, supposed to underlie the contingently sprinkled causal and other connections.[7] So again: why believe HD?

One of my pet projects is looking for good reasons to believe HD, on the assumption that you aren't Hume. So far, I haven't found any (see J. Wilson 2010a, 2010b, forthcoming-a, and forthcoming-b). But my project isn't complete, and in any case my point here is not that there aren't any good reasons to believe HD. My point is that, though HD is open to question for obvious reasons, it is, as above, nonetheless frequently taken for granted – indeed, very commonly wielded as a decisive methodological sword – in metaphysical contexts.

Relatedly, I am not suggesting here that philosophers shouldn't continue their vertical explorations of the Humean paradigm, as characterized by HD. Maybe we should judge a project by its fruits, independent of our confidence in its seeds. What I am suggesting is that failure to be explicit that one is operating under still-unsettled presuppositions – or worse yet, not recognize that this is the case – impedes philosophical progress along both horizontal and vertical dimensions.

Such dogmatism impedes horizontal philosophical progress, for it perpetuates the false impression that the truth and methodological import of the presupposition is a settled affair, encouraging ignorance of and discouraging exploration of still-live and indeed – for all that has been yet established – potentially more promising alternative paradigms. Such dogmatism also impedes vertical philosophical progress, for part of rigorously developing and testing a paradigm and associated theories is setting these up against worthy rivals. To the extent that horizontal alternatives are underdeveloped or ignored, vertical testing cannot effectively proceed – which in turn may further encourage unwarranted complacency and dogmatism about the paradigm-relative presuppositions at issue.

Consider, by way of illustration, supervenience-based formulations of physicalism, according to which the distinction between an entity's being nothing, rather than something, over and above some physical entities upon which it synchronically depends can be cashed in terms of the distinction between nomological and metaphysical necessitation. This sort of "correlational" criterion of what is effectively a grounding relation is subject to a number of counterexamples, including – to take a personal favorite – one where a supremely consistent Malebranchean God occasions a mental state of a given type upon the occurrence of a physical state of a given type in every possible world. I still remember my surprise – which inspired my investigations into existing support for HD – when this counterexample was dismissed on grounds that it violated HD. This response struck me, and still strikes me, as quite beside the point of the case, which serves perfectly well to indicate that mere correlations, no

matter how strong, do not suffice for the holding of a relation sufficiently intimate to serve physicalist purposes. Adherence to HD here served mainly – with years of attention lavished on specifying varieties of supervenience and associated (unsuccessful) versions of physicalism – to distract from more potentially illuminating investigation into what specific metaphysical relations might be up to the task of establishing the requisite nothing-over-and-aboveness (see J. Wilson 2005 for further discussion).

Moreover, lack of attention to alternatives to supervenience among the many philosophers working in the Humean paradigm has had a further unfortunate consequence, namely, that as the cumulative weight of problems with supervenience-based approaches has made inroads with these philosophers, their response has been, not to turn attention to the specific metaphysical relations already on the scene, but rather to introduce a broadly primitive relation or notion of "Grounding" as needed to do the work that supervenience can't do. Hence Schaffer (2009) motivates a primitive notion of Grounding as follows:

> [S]upervenience analyses of grounding all fail (cf. McLaughlin and Bennett 2005: S3.5). … There have been other attempts to analyze grounding, including those centered around existential dependence counterfactuals … I know of none that succeed.
>
> (364)

> Grounding should rather be taken as *primitive*, as per the neo-Aristotelian approach (cf. Fine 2001: 1). Grounding is an unanalyzable but needed notion – it is *the primitive structuring conception of metaphysics*.
>
> (364)

But it's wrong to present the main alternative to supervenience or other correlational relations (e.g. those at issue in "existential dependence counterfactuals") as being a broadly primitive "Grounding" relation. Metaphysicians working outside the Humean paradigm have been identifying, cultivating, and testing specific metaphysical alternatives to supervenience (for purposes of characterizing physically acceptable dependence, among other tasks) for decades – including type and token identity, the determinable/determinate relation, the part/whole relation, and the subset relation between powers of the dependent and base entities. It is, I think, some testament to the hegemony and broadly dogmatic endorsement of Humeanism that such non-HD-based accounts are not, post-supervenience, even on the menu of options.

Premature dogmatism in favor of a broadly Humean world view has also impeded scientific progress. Hume's correlation-based account of causation was, after all, offered as a revisionary alternative to one more

intuitively based in locally productive causal relations (which Hume took to involve suspect necessary connections); and as above, a correlational (statistics-based or probabilistic) approach to scientific inference has been wholeheartedly embraced in the sciences. But there is increasing suspicion that the Humean assumption that productive causation can be reduced to or dispensed with in favor of statistical or probabilistic correlations is incorrect. Consider the larger context of Pearl's (2000, xiii) remarks:

> Ten years ago … I was working within the empiricist tradition. … Today, my view is quite different. I now take causal relationships to be the fundamental building blocks both of physical reality and of human understanding of that reality, and I regard probabilistic relationships as but the surface phenomena of the causal machinery that underlies and propels our understanding of the world. Accordingly, I see no greater impediment to scientific progress than the prevailing practice of focusing all of our mathematical resources on probabilistic and statistical inferences while leaving causal considerations to the mercy of intuition and good judgment.

Whether Pearl is correct that scientific inquiry cannot satisfactorily proceed using statistical or probabilistic inference alone is controversial. I'm inclined to think that he's correct, but again, the deeper point is that it is too early for either philosophers or scientists to be throwing all their metaphysical or methodological eggs into one basket.

Dogma 2: Composition as mereology

A second dogma of metaphysical methodology starts with the embrace of classical mereology. Classical mereology is a particular theory of wholes and parts, according to which (among other presuppositions) it is assumed that any collection of parts "sums" to a whole, and that wholes having the same parts are identical.[8] It's a nicely vertically developed formal theory, useful in a variety of contexts. Embracing classical mereology is fine; what is dogmatic is taking classical mereology to be the only possible way of understanding the relations between parts and wholes – even when, in particular, what is at issue is how a material object is composed by smaller parts. Lewis (1986a) expresses this highly restricted understanding of part/whole relationships in saying:

> What is the *general* notion of composition, of which the mereological form is supposed to be only a special case? I would have thought that mereology already describes composition in full generality.
>
> (39, italics in original)

Under Lewis's influence (one may already be sensing a pattern here – the sociology of philosophy deserves greater attention[9]), the latter claim has taken on the status of dogma. As Koslicki (2008) notes:

> [F]or Lewis, there is no other mereology besides standard mereology. This conception of parts and wholes … proved to be a perfect fit with Lewis's more general ontological outlook [and] gave rise to something akin to a "movement" among contemporary metaphysicians, an approach to many of the classical problems in metaphysics that has proven to be simply irresistible to several generations of philosophers.
>
> (5)

But why believe that there is no other mereology besides classical mereology, such that cases of ordinary composition involving, e.g. tables and chairs, should be understood as conforming to the principles of classical mereology – notably, the principle that objects having the same parts are identical? If you're a nominalist like Quine, who thinks that only particulars exist, you might have some reason to understand material object composition in terms of classical mereology, with mereological "fusion" standing in for more substantive relations among objectual parts. But philosophers endorsing the assumption – including Lewis, who granted the viability of an ontology including tropes or universals, as per his (1983) – are typically not nominalists, but rather accept the irreducible existence of properties in one form or another.

In addition to having no clear motivation, the assumption that material object composition is a matter of classical mereology faces clear prima facie difficulties, which can only be addressed by endorsing one or other counter-intuitive account of material objects. To start, the difficulties. Some of these reflect the broadly axiomatic assumption that a fusion has its parts essentially or necessarily.[10] Intuitively, material objects typically do not have their parts essentially or necessarily; so how can they be fusions? Other difficulties reflect the standard assumption (reflecting, perhaps, the initially nominalist applications of classical mereology) that neither relations nor formal components (imposing constraints on or expressing the holding of certain relations) are among the composing parts. Given this, and given that fusions with the same parts are identical, can a heap of disassembled motorcycle parts be distinct from the motorcycle assembled from these same parts? The obvious concerns here are that both *modal flexibility* and *structure* are crucially relevant to the composition of material objects;[11] yet classical mereology appears to be both modally inflexible and blind to structure.

Here again, dogmatic adherence to a specific thesis and associated theoretical framework has led to heavy vertical focus on developing positions that are less than perfectly natural. So, for example, the seeming

persistence of composed material objects through changes in their parts can be accommodated by endorsing a view of such objects as four-dimensional entities that, in being spread out in time as well as space, exist in the manner of events (as per perdurantism); effectively, here objects are understood as diachronic collections of synchronic fusions (that is, of "temporal parts"). With perimeters on the collections appropriately drawn, the strategy also serves to distinguish heaps from structured entities (motorcycle and heap are collections of different temporal parts), and more general modal flexibility can be accommodated by appeal to counterpart theory. But a perdurantist conception of objects is counter-intuitive (as proponents typically admit), unmotivated (Lewis's 1986b argument for perdurantism is notoriously enthymematic), and brings other difficulties in its wake;[12] and similarly for other attempts (e.g. Sider's "stage-theoretic" account) to characterize the persistence and modally flexible nature of composed objects using only the resources of classical mereology. Vertical explorations may be more or less illuminating; but in my view, the valuable time of Lewis, Sider, and many other able philosophers wasn't particularly well spent on this sort of project.

Meanwhile, more plausible ways of understanding material or abstract object composition have gone ignored or underexplored. Here again it's indicative of the degree of assimilation of the dogmatic assumption at issue that the primary alternatives to classical mereological accounts of composition largely retain the mereological approach to material object composition, notwithstanding that they admit "formal" entities (Fine 1999 and Koslicki 2008) or trope-theoretic relations (McDaniel 2001) as parts in addition to the standardly assumed material parts (perhaps with some function-theoretic bells and whistles, as on Fine's account). But why think material composition has anything at all to do with classical mereology? Isn't the intuitively plausible thing to say here that material object composition involves *causation* – in particular, for a start, bonding relations between the material parts?[13]

Again, the point here is simply that the assumption that material composition must be understood in classical mereological terms is both lacking in motivation and clearly open to question. It is yet another distracting dogma of metaphysical methodology.

Dogma 3: Metametaphysics as quantifier semantics

A third dogma of metaphysical – more precisely, metametaphysical – methodology is that the best way to approach metametaphysical issues is by attention to semantics, and more specifically by attention to what quantifier or quantifiers might be at issue in ordinary or philosophical discourse.

So, for example, fourteen of the seventeen papers in the recent *Metametaphysics* anthology (Chalmers *et al*. 2009) take this as an operating assumption.[14] Among variations on the theme, Hirsch (2009) characterizes metaphysical dispute as reflecting disputants' using different (e.g. "nihilist" and "compositionalist") quantifiers, and more generally endorses "quantifier variance" as a metaontological position; Chalmers (2009) characterizes metaphysical indeterminacy as involving a defectively indeterminate quantifier; Hofweber (2009) couples the Carnapian supposition that metaphysical questions asked "internal" to a framework are insubstantial with the methodological supposition that metaphysicians should not meddle with other theories to imply that there is nothing substantive for metaphysicians to do; Thomasson (2009) argues that Carnapian insubstantialism is motivated by a theory of reference taking "frame-level application conditions" to be built into nominal terms; Yablo (2009) argues that since the truth of number-theoretic claims is independent of whether number terms refer, the question of whether numbers exist is objectively indeterminate; Hawthorne (2009) expresses concerns about the semantic presuppositions of Hirsch's translation-based account of verbal disputes; Hale and Wright (2009) reject claims that Fregean abstractionism requires quantifier variance; McDaniel (2009) develops the Heideggerian idea that there are many fundamental ways of being, interpreting this view as involving multiple equally fundamental ontological quantifiers; Sider (2009) argues that ontological discourse involves a single distinguished quantifier, that determinately tracks the natural ontological joints; and so on. More generally, both pessimists and optimists about metaphysics proceed in agreement with Sider's claim that "the central question of metaontology is that of whether there are many equally good quantifier meanings, or whether there is a single best quantifier meaning" (2009, 397).

Why look to language for insight into dispute about or prospects for answering metaphysical questions? Pessimist proponents of the approach typically cite Carnap by way of motivation. To be sure, Carnap expresses his metaphysical nihilism in terms of questions asked "inside" or "outside" linguistic frameworks; as such one might suppose that his nihilism reflected broadly semantic facts. In fact, however, Carnap's appeal to semantics is just so much verificationist window dressing. As above, Carnap's real beef with metaphysics is his supposition that there are no, and moreover could be no, common standards among metaphysicians that could serve to confirm or disconfirm metaphysical claims; it is on these clearly epistemological grounds that he supposes that (unlike frameworks involving numbers, or physical objects) there can be no properly metaphysical linguistic framework. Arguably, then, not even Carnap *really* thought that investigation into metametaphysical questions should proceed

by attention to semantics. Moreover, even after the rejection of Carnap's verificationism, his concern about metaphysical methodology remains entirely relevant. So, why suppose that language is the proper route to metametaphysics, even if you are Carnap? Why not cut to the chase and engage directly with the more fundamental epistemological concern?

Nor does Quine's commonly endorsed dictum – ironically, yet another dogma – that "to be is to be the value of a variable" support a semantic or quantificational approach to metametaphysics. To start, as Quine (1951) insists, his dictum "explicates only the *ontological commitments* of a theory and not the *ontological truth* about the world" (12). Only if we were in possession of a nature-revealing language would his dictum be a guide to what there is, as opposed to what a theory says there is. Moreover, Quine supposes that theories typically admit of multiple interpretations – as involving e.g. multiple variables of quantification, or only a single variable whose instances may be predicatively restricted; hence the commitments at issue pertain to a specific interpretation of a theory, not the theory *simpliciter*. Extracting ontological results from Quine's dictum thus requires us to have reason to think that a given theory has a privileged interpretation (aka "regimentation") and reason to think that the theory, so interpreted, is a trustworthy guide to reality. But whether we have these reasons will depend on metaphysical considerations. For example, the ontological status of properties will likely bear on whether the proper interpretation of a theory should include second-order variables of quantification, and general metaphysical considerations will bear on whether predicative claims in a candidate interpretation plausibly track genuine features of reality. Indeed, both observations apply to Quine's favored application of his dictum, which, on nominalist grounds that remain hotly debated, assumed that predicates do not encode properties, metaphysically understood. The upshot is that Quine's criterion provides no motivation for thinking that metaphysics should proceed by attention to semantics in general, or quantification in particular: no metaphysics in, no metaphysics out. But if metaphysics is not a semantic matter, why think metametaphysics is a semantic matter?

The last best motivation, also accepted by pessimists and optimists alike, is that acceptance of a "hands-off" approach to metaphysical theorizing, according to which metaphysicians should leave the truth values of other disciplines' claims alone, is best couched in quantificational terms: for the pessimist, these quantifiers are broadly on a par; for the optimist, there is a privileged ontological quantifier. But again, there is no serious motivation here, for four reasons. First, as per Fine 2009, the hands-off view can be couched in other terms (appealing directly to notions of Reality or fundamentality). Second, optimist characterizations of the hands-off view in quantificational terms are inefficient: what's the point of

approaching metaphysical or metametaphysical questions from a quanti-
ficational point of view if doing so requires introducing a new form of
language? Third, the hands-off view is an unuseful fiction. As above, the
historical record makes clear that the posits and presuppositions of meta-
physics frequently inform science, math, and logic; and results from all
these disciplines inform ordinary language. And there are ways of making
sense of this influence (which indeed, goes in both directions) on which
metaphysics is neither hegemonic over nor irrelevant to other areas.
Suppose (methodological concerns aside) that metaphysical investigation
in the limit of inquiry indicates that numbers don't really exist. Why
not take this as evidence, not that metaphysics and math have nothing
to do with one another, but that mathematical claims are true in virtue of
facts – plausibly, cardinality and associated relational facts – which
are neutral on the existence of numbers? Fourth, and relatedly, if an
area other than metaphysics has clear bearing on metametaphysics, it
is epistemology, not semantics. As I argued above, the persistent dis-
agreement associated with metaphysical disputes is plausibly explained
by reference to our understanding of methodological standards still
being a considerable way from the end of inquiry. This result is more
optimistic than Carnap's, but it similarly creates pressure on the philoso-
phical community to consider the status of our methodological standards.
Again, why not engage with these most-pressing epistemological issues
directly?

   I think the semantic approach to metametaphysics is fatally flawed,
but here again my point is not so much to argue against the approach as
to show that it obviously can be challenged, on any number of fronts,
so that its present hegemony is unwarranted. Unwarranted hegemony of a
given paradigm impedes horizontal philosophical progress, of course.
And in the present case the problem is exacerbated along both horizontal
and vertical dimensions, since heavy focus on semantics encourages neglect
of the very epistemological issues that might allow us to non-dogmatically
choose between frameworks, or determine that there really is nothing to
choose, as in Bennett (2009), the only contribution in *Metametaphysics*
that directly engages with whether metaphysical methodology is up to
the deliberative task. And here again there is an additional problem for
vertical progress in the form of "ineffective overachievement," whereby
the advanced vertical articulation of the semantic approach is likely not
worth the effort. On the contrary, the semantic approach introduces, as a
"degenerating problem shift," distracting attention to linguistic distinc-
tions and questions, concerning the individuation, interpretation, and
translation of languages; the nature of meaning and its relation to truth and
reference; the taxonomy of varieties of verbal dispute; the status of various
quantifiers as indeterminate, context-dependent, relativist, multi-sorted;

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and so on. Surely there are more natural and more illuminating approaches to the topic.

A remaining puzzle about progress in philosophy

The above case studies indicate that in many contemporary metaphysical investigations – and presumably the same is true in other areas of philosophy – certain dogmatic presuppositions are operative. More generally, we might say that many philosophical investigations are horizontally dogmatic, in failing to be properly sensitive to live concerns with presuppositions of the preferred framework and/or to live motivations for presuppositions of competing frameworks. These case studies also indicate that horizontal dogmatism is clearly problematic in at least three respects: first, in acting to shut down or marginalize alternative frameworks, impeding horizontal progress; second, in encouraging failure of practitioners to test their theories against an appropriate range of rivals, hence impeding vertical progress; third, in encouraging expenditures of effort on behalf of the dogmatic presupposition that are both distracting and misguided.

On the other hand, horizontal dogmatism may not be *all* bad; indeed, in certain respects it may be positively conducive to vertical philosophical progress. On some theories of action, acting requires that you commit to the course of action: I must believe – rightly or wrongly – that I will perform the barrel roll to even have a chance of doing it (see Hellie, forthcoming). Perhaps engaging in rigorous theoretical investigation also requires commitment, or at least the presupposition of commitment, to the assumptions constituting the paradigm at issue. Perhaps it is because they really *believe*, or fully occupy the stance of one who believes, that philosophers, like priests and painters, may be inspired to greater heights of theoretical inspiration. If so, then commitment (real or presupposed) to the assumptions of a given paradigm might be an important – perhaps even a crucial – component of vertical philosophical progress.

Let's assume that this last is correct. It follows that there is a tension between the two dimensions of philosophical progress. On the one hand, it is part of our job description to take a given paradigm and lovingly cultivate it, test it, and apply it. Such effort requires commitment. Why cultivate what you don't care about? On the other hand, we are presently far from the end of philosophical inquiry – in particular, far from any consensus regarding metaphysical, and more generally, philosophical methodology. We are just now starting to get just the faintest bit clear about the complex, multifaceted epistemology of our discipline. Moreover – and here I refer back to Hawthorne and Hellie's understanding of philosophy

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as mapping theoretical space – there is no doubt quite a bit of theoretical space that we haven't even thought up, much less appropriately assessed. At this rudimentary state of philosophical history, it would be unwise in the extreme to insist that *this* framework, involving *these* methodological assumptions, *must* be correct. Appropriate sensitivity to our present distance from the end of philosophical inquiry requires a *lack* of commitment.

Does this tension indicate that philosophical practice is inconsistent? What ways out might there be? Various philosophical paradigms may be able to help us out here.

One strategy might be to go contextualist or relativist so far as the notion of belief or commitment is concerned (see DeRose 1992). Qua neo-Humean, I am committed to HD; qua philosopher … not so much. Another might be to endorse "fragmentalism" as regards our mental states (see Lewis 1982; Fine 2005; Hellie, forthcoming). We are complex: we contain multitudes. There is no view from nowhere, and there is no one view from somewhere. There are only many views from many potentially shifting (and competing) perspectives. To be sure, the aforementioned tension will also arise about our allegiance to these views. But at least these understandings provide a way of thinking about our practice on which we do not end up being strangely inconsistent.

Alternatively, we can accept that our paradigms and associated theories are still in the neonatal intensive care unit, and acknowledge that, notwithstanding that commitment to a specific theoretical framework might be personally inspiring, philosophy is just at too rudimentary a stage for us to entirely commit ourselves in this way. This much is compatible, of course, with our being inclined, for one reason or another, to think that a certain paradigm or set of paradigms is most worth developing or testing. The suggestion here is that one works hard at what seems to one to be the most promising approach, while keeping at least periodically open to the horizontal possibilities. This seems reasonable to me, though whether we can reach the vertical philosophical heights enabled by a less circumspect attitude remains to be seen.

However the tension between vertical and horizontal progress in philosophy is resolved, one thing seems clear: it is crucial both for philosophical progress and for progress in the many fields in which philosophers have some influence that they explicitly acknowledge that philosophical methodology and theorizing is still at a fairly rudimentary stage of development – so rudimentary that any dogmatic presuppositions are unavoidably premature. For now we should take to heart an updated version of Carnap's (1950) counsel: Let us be cautious in making assertions and critical in examining them, but tolerant in permitting philosophical paradigms.

Notes

1 It might also be – though the pedigree here is less transparent – that Lewis's (1986b) development of concrete modal realism played a role in providing a metaphysical foundation for the increasingly popular "many-worlds" or "multiverse" interpretations of quantum mechanics. Hugh Everett (1957) suggested such an interpretation some decades before Lewis's work, but neither physicists nor anyone else took the idea seriously until relatively recently. Though Everett's worlds branch from a common point and Lewis's are spatially and causally isolated, one might reasonably speculate that Lewis's well-publicized development of the key idea underlying many-worlds interpretations – of there being a "plurality" of worlds, each as real as our own – showed this idea to be not just coherent but in certain respects attractive.

2 How this view is supposed to comport with philosophical ambitions to map the space of theoretical possibility (as to be discussed shortly) is an interesting question, into which I won't enter here.

3 See e.g. Quine 1951 and Boyd 1983.

4 See e.g. M. Wilson 1982 and Melnyk 2008.

5 See Harman 1964; Biggs 2011; Nolan, forthcoming.

6 The restriction to intrinsically typed or characterized entities reflects its typically being granted, even by proponents of HD, that extrinsically or relationally characterized entities might stand in necessary connections (such that e.g. the existence of a planet necessitates the existence of a sun). More precise formulations of HD also need to reflect (among other refinements) the distinction between *de re* and *de dicto* (broadly: particular vs general) applications of HD, and the operative notion of "distinctness" (as e.g. numerical or spatio-temporal), different strengths of which eventuate in different strengths of HD. See J. Wilson 2010b for further discussion.

7 Williams (1953) makes a similar observation about universals: "[A] little observation of a baby or of oneself in a babyish mood will convince the candid and qualified that the object of such absorption is not the abstract universal (the infant does not 'fall from the clouds upon the topmost twig of the tree of Porphyry') … but is in sooth the abstract particular or trope, *this* redness, *this* roundness, and so forth."

8 See Leonard and Goodman 1940; Simons 1987.

9 Collins 1998 is a fine start.

10 Admittedly, classical mereology is not an explicitly modal theory; but insofar as the theory takes fusions having the same parts to be identical, and identities are necessary, the modal supposition follows.

11 Structure is also clearly relevant to the composition of abstract objects: how can the set {a, b} and the set {{a}, {b}} be distinct, given that they share the same objectual members?

12 So, for example, there are concerns about whether a perdurantist view can accommodate genuine change, and concerns about whether a systematic account of change in non-instantaneous properties (e.g. being lazy) of intuitively enduring objects can be given in terms of collections of temporal parts. See Fine (2006) for discussion of yet further difficulties for four-dimensionalism.

13 Simons (2006) argues that composition has little to do with classical mereology, and that we should be investigating causal composition relations instead.

14 See J. Wilson 2011 for more detailed discussion; the material in this section draws heavily on this review.

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