

Practical Realism as Metaphysics

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Mainstream analytic metaphysics is a priori metaphysics. It is hemmed in by basic assumptions that rest on no more than a priori intuitions. Jaegwon Kim's (1989) arguments about causation are a paradigm example of sophisticated arguments with little or no justification from the world as we know it. And Peter van Inwagen's (1990) arguments about material objects are motivated by a question that, I think, has no nontrivial answer: Under what conditions do some x's compose an object y? The trivial answers are 'Always' and 'Never'. Any other answer, including van Inwagen's, seems to me to be arbitrary—and again based on a priori intuitions.

To cite two more examples that I find egregious: (1) The assumption that there is a metaphysically important distinction between what is mind-independent and what is not, and (2) the assumption that there is a metaphysically important distinction, among things that are real, between what is fundamental and what is not. A priori intuitions, especially when not shared by philosophers outside a small circle of specially trained people, seem a weak reed on which to hang metaphysical systems.

Philosophers who question the use of a priori intuitions as a basis for metaphysics have tried to remedy the situation by becoming naturalists, who take metaphysics to be solidly grounded in science, especially physics. However, some philosophers—e.g., Ladyman and Ross in *Every Thing Must Go* (2007)—point out that much naturalistic metaphysics is just pseudo-scientific. It is based on outdated science, or on false conceptions of science. For example, David Lewis bases his Humean supervenience on a picture of the world in which the fundamental physical properties are “local qualities:

perfectly natural intrinsic properties of points or point-sized occupants of points.”¹

(Lewis 1999, p. 226) Although I am no authority, Ladyman and Ross (2007, p. 18) have argued that Lewis’s picture runs afoul of entanglement (the nonseparability of quantum states), and so finds no basis in contemporary physics. Scientific naturalism has achieved such a status that pseudo-scientific metaphysics has become almost a commonplace, say Ladyman and Ross.

Perhaps a version of scientific naturalism stripped of nonscientific or outdated scientific elements would provide an alternative to a priori metaphysics. Such a naturalized metaphysics has been urged by Ladyman and Ross (2007). They conceive of metaphysics as the unification of science. They put two constraints on such a metaphysics. One constraint is the Primacy of Physics:

Special science hypotheses that conflict with fundamental physics, or such consensus as there is in fundamental physics, should be rejected for that reason alone. Fundamental physical hypotheses are not symmetrically hostage to the conclusions of the special sciences. (Ladyman and Ross 2007, p. 44)

It seems to me that special-science hypotheses never conflict with The Primacy of Physics Constraint, and thus The Primacy of Physics Constraint courts triviality.

Consider an example of a special-science hypothesis from The National Bureau of Economic Research:² In a study of eight cohorts of freshmen, totaling 15,662 students, who entered Northwestern University from the fall of 2001 to the fall of 2008, researchers found that teachers who were not in the tenure system outperformed tenured or tenure-track teachers. "A nontenure-track faculty member increases the likelihood that a student

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will take another class in the subject by 7.3 percentage points," the authors wrote, "and increases the grade earned in that subsequent class by slightly more than one-tenth of a grade point." The researchers hypothesized that "the growing practice of hiring a combination of research-intensive tenure-track faculty members and teaching-intensive lecturers may be an efficient and educationally positive solution to a research university's multitasking problem." (I shall not venture an opinion on the truth of this hypothesis.)

Like other social-science hypotheses, this hypothesis seems simply irrelevant to anything that may go on in fundamental physics. In the absence of any way to connect the vocabularies of social science with those of fundamental physics, no conflict between hypotheses of social science hypotheses and hypotheses of fundamental physics is even possible. So, the Primacy of Physics Constraint seems otiose.

Ladyman and Ross call the other constraint on metaphysics 'the Principle of Naturalistic Closure,'. (Ladyman and Ross 2007, p. 37):

Any new metaphysical claim that is to be taken seriously at time t should be motivated by, and only by, the service it would perform, if true, in showing how two or more specific scientific hypotheses, at least one of which is drawn from fundamental physics, jointly explain more than the sum of what is explained by the two hypotheses taken separately, with three stipulations (Ladyman and Ross 2007, p. 38).

Here are paraphrases of the stipulations:

Stipulation (i): A ‘scientific hypothesis’ is an hypothesis that is taken seriously by institutionally bona fide science.

Stipulation (ii): A ‘specific scientific hypothesis’ has been or will be or might be investigated as a primary object of verification, falsification, or quantitative refinement, “where this activity is part of an objective research project fundable by a bona fide scientific research funding body.”

Stipulation (iii): An ‘objective research project’ has the primary purpose of establishing objective facts about nature that would, if accepted on the basis of the project, be expected to continue to be accepted by inquirers aiming to maximize their stock of true beliefs, notwithstanding shifts in the inquirers’ practical, commercial, or ideological preferences.”

I have three comments about the Principle of Naturalistic Closure:

First, the Principle of Naturalistic Closure seems to be as a priori as any analytic metaphysician’s claims. The Principle of Naturalistic Closure is as a priori as, say, Kim’s Principle of Causal/Explanatory Exclusion. (Kim 1989, p. 89) I suspect that Ladyman and Ross would appeal to the impressive track record of science to justify science as an exclusive basis for metaphysics. This answer would just evade the point: The Principle of Naturalistic Closure is, clearly, a closure principle. The fact that science is successful does not preclude the success of any other kind of endeavor.

(The Principle of Naturalistic Closure says that to be taken seriously, a metaphysical claim must be motivated by a service that it could perform for fundamental physics. Well, Mark Johnston wants his metaphysical claims to be taken seriously. One of his metaphysical claims is that in a naturalistic universe, one can survive death by ceasing to consider oneself as an entity of special concern. (Johnston 2010) This

metaphysical claim seems to be indifferent to any scientific hypothesis. Should it, therefore, not be taken seriously?)

Second, by limiting permissible metaphysical claims to those in “objective research projects” that, if true, perform a service for fundamental physics, the Principle of Naturalistic Closure makes metaphysics the handmaiden of fundamental physics—no doubt with the approval of many philosophers. However, metaphysics should underwrite *all* of natural reality. If there are any mind-dependent or subjective aspects of nature, the Principle of Naturalistic Closure rules them out by stipulation (aka a priori).

Third, and this is related to my second comment, the Principle of Naturalistic Closure seems to preclude any metaphysical basis for persons. It is difficult to see how a metaphysical claim about persons could be “motivated by, and only by, the service it would perform, if true, in showing how two or more specific scientific hypotheses, at least one of which is drawn from fundamental physics, jointly explain more than the sum of what is explained by the two hypotheses take separately.” For these reasons, I think that the Principle of Naturalistic Closure is an unwarranted constraint on metaphysics.

The Primacy of Physics Constraint and the Principle of Naturalistic Closure seem to me to put a straightjacket tight around metaphysics—as tight as any armchair analytic philosopher’s. Metaphysics, as I see it, has to contain the materials for all reality, including errors and hallucinations. That is, the correct story of reality must be able to account for our errors. If (per impossibile, in my opinion) Descartes’ fantasy in *Meditation* I were actual, then metaphysics should recognize only an Evil Demon and finite immaterial minds, on the basis of which it would account for our mistaken judgments (such as “I am seated in my dressing gown in front of the fireplace). It is the

task of metaphysics to recognize what *really* exists. (And what *really* exists must explain how things can nonveridically appear to exist.)

What *really*, fundamentally exist, I believe are concrete material objects and properties that are ineliminable and irreducible. A putative object or property is irreducible if it exists and its addition to ontology is not redundant; it is ineliminable if the supposition that it did not exist (or was not instantiated) would make ordinary life unintelligible. If metaphysics, the province of all reality, encompasses all concrete objects and properties that are neither reducible nor eliminable, then I do not believe that a scientific metaphysics hemmed in by the Primacy of Physics Constraint and the Principle of Naturalistic Closure can be an adequate metaphysics; at best, it would be incomplete.

In short, the Principle of Naturalistic Closure and the Primacy of Physics Constraint seem to me to reflect a truncated outlook on metaphysics. Let me propose a more capacious conception of metaphysics.

Practical Realism

I call my view ‘Practical Realism’. Practical Realism is a marriage of Pragmatism and Realism. (*The Metaphysics of Everyday Life* (Baker 2007)) Practical Realism takes from Pragmatism the insight that philosophy should concern the world that we interact with and not with some hidden made-up world; and it takes from Realism the idea that philosophy should deliver an account of what is ontologically significant in its own right. Practical Realism is a profoundly nonreductive view. It is a kind of realism that takes the world of everyday life to be irreducible and ineliminable—as I’ve argued in *Naturalism and the First-Person Perspective* (Baker 2013)—and hence to qualify as real.

Let me sketch a metaphysical picture that supports Practical Realism. The linchpin of Practical Realism is the relation of constitution of one thing by another. The relation of constitution is exemplified by all macroscopic and (some microscopic) particulars. Integral to my idea of constitution is the notion of a primary kind. Every material object is of its primary kind essentially, and constitution is a contingent relation between items of different primary kinds. The basic idea of constitution is this: when things of certain different primary kind are in certain circumstances, a thing of a different primary kind—with different persistence conditions and different causal powers—comes into existence.

Here's a simple-minded example: Take three wooden cylinders, each one inch in diameter and 30 inches long, and one wooden circular disc 20 inches in diameter and one inch thick. Attach the cylinders to the disc in a certain way with a certain intention, and—*voilà*—a thing of a different primary kind (a stool) comes to exist. The sum of the pieces of wood comes to constitute the stool when in circumstances of being shaped as cylinders and disc and attached in a certain way with a certain intention. The stool has different persistence conditions from the sum of the pieces of wood. The stool would go out of existence if the cylinders and disc were separated, but the sum of the pieces of wood would survive being separated; hence, the stool is not reducible to the three cylinders and the disc.

This example illustrates a general feature of constitution: what is constituted has different persistence conditions from the persistence conditions of what constitutes it. Moreover, constitution is asymmetric: If *x* constitutes *y* at *t*, then *y* does not constitute *x* at *t*. Hence, constitution, though a ubiquitous relation of unity, is not one of identity.

Since things have their primary-kind properties essentially, a concrete object could not come into being or continue to exist without having its primary-kind property. *Person* is a primary kind; *teacher* is not: A teacher could cease to be a teacher and still exist; but a person could not cease to be a person without ceasing to exist altogether. An object's primary-kind property determines what sorts of changes it can undergo and still exist, and what sorts of changes would result in its ceasing to exist altogether. As I'll explain in a moment, a person's primary-kind property is a first-person perspective.

One of the major shortcomings of analytic metaphysics and scientific naturalism both is that neither is a metaphysics that has conceptual space for irreducible persons and their essential properties. Analytic metaphysicians—even those like John Perry who argue that beliefs must be first-personal if they are to move people to action—see no place for persons or first-person properties in metaphysics; the world, Perry says, “is objective.” (Perry 2002, 226) And Ladyman and Ross are explicit that what metaphysics is to explain is “the *objective* nature of the world” (Ladyman and Ross 2007, p. 6), which clearly excludes irreducibly first-person properties.

So, there is no doubt that mainstream metaphysicians lack room for persons in ontology. In that case, how are we to understand the reality of ourselves? I'm not thinking here only about knowing my own thoughts; I'm thinking about thoughts that I would express by saying, “I hope that I win the election” or “I wish that I owned a yacht” or “I am embarrassed that I am underdressed.” Note that not only do I *refer* to myself in the first person as the the bearer of these thoughts, but also in the content of each thought I *attribute* to myself a first-person reference. So, specification of *the content* of each of these thoughts requires further appeal to the first person. (Castañeda 1967; Baker 1981)

No third-personal paraphrase of such thoughts adequately expresses them. This strongly suggests that the first-person perspective is irreducible.

Practical Realism—unlike analytic metaphysics and scientific naturalism—has a place in ontology for persons and for first-person perspectives. On my view, persons are not redundant; they cannot be reduced to any subpersonal or impersonal things. Nor are they eliminable; I find it inconceivable that I do not exist now—Cotard’s syndrome, notwithstanding.

In general, things whose primary-kind properties are neither reducible nor eliminable belong in the ontology. As I said earlier, a person’s primary-kind property is a first-person perspective, and as I argued in *Naturalism and the First-Person Perspective* (Baker 2013), a first-person perspective is a two-stage dispositional property that is neither reducible nor eliminable. Both stages of a first-person perspective—rudimentary and robust—are irreducible and ineliminable. Hence, persons belong in the ontology.

More specifically: A person comes into existence when a human organism, at or near birth, develops a rudimentary first-person perspective—that is, when a human organism develops the capacity for conscious intentional behavior. As the human organism acquires a rudimentary first-person perspective, it comes to constitute a person, who then has a first-person perspective essentially. (Although a person has a first-person perspective essentially, an *organism* (human or not), whose primary-kind property is biological, has a first-person perspective contingently, if at all.)

A human infant differs from higher animals not only in having a rudimentary first-person perspective essentially, but also in having a remote (or second-order) capacity to develop a robust first-person perspective. A human person reaches the robust stage of the first-person perspective in the natural course of linguistic development. As she learns

a language, a person acquires numerous concepts, among which is a self-concept that she can use to *conceive* of herself as herself in the first person. On acquiring a self-concept, a person reaches the robust stage of the first-person perspective. That is, she reaches the stage of having an in-hand capacity to conceive of herself as herself in the first person, without identifying herself by a name, description or third-person demonstrative. For example, if I say or think, “I wonder how I’m going to die,” I manifest a robust first-person perspective—the capacity to conceive of myself in the first person. This capacity is manifested throughout one’s life in characteristically human activities—from making contracts to celebrating one’s anniversaries to seeking fame by entering beauty contests.

Metaphysically speaking, to have a first-person perspective (rudimentary or robust) is to exemplify a dispositional, nonqualitative property. Only persons have first-person perspectives essentially. A human infant, with only a rudimentary first-person perspective, exemplifies a dispositional property that she continues to exemplify in different ways as she learns a language and reaches the robust stage of the first-person perspective, and indeed, exemplifies as long as she exists. What makes you the same person that you were as an infant is that there is a single exemplification of the dispositional property of having a first-person perspective both then and now—regardless of the vast differences in its manifestations over the years.³

Now, let me discuss further the general features of the relation of constitution. If *x* constitutes *y* at *t*, then *y* has causal powers on an ontologically higher level than the causal powers that *x* would have if *x* hadn’t constituted anything.⁴ (Baker 2007, p. 236) The relation between a constituting thing and what it constitutes is not a part/whole relation. Another way to put it: constitution is not composition. (I think that it is wrong-headed to try to understand the material world wholly in mereological terms.) The causal

powers of a credit card derive not from its parts, but from the conventions and laws of our economic system. Primary-kind properties confer causal powers: The property of being a credit card confers on a piece of plastic the power to replace cash in purchases.

Once we have primary-kind properties, causal powers, and the relation of constitution, we have a partial ordering of ontological levels. On my view, levels are not just levels of description, but are ontological levels. A biochemist who lectures on cellular production is not just talking about a person at a different level of description. She is talking about something of a different primary kind from a person. If you talk about me, you are talking about a person—a person now constituted by a body that is constituted by a certain sum of cells.

In short: If x constitutes y at t , then y is on an ontologically higher level than x , and y has different persistent conditions from x ; and y has causal powers that x would not have had if x had not constituted something. Constitution is a vehicle of ontological novelty. When objects of new kinds come to be constituted (by means of natural processes or by intentional invention or by serendipity), there is a new and higher level of reality; and the objects of the new kinds are ontologically emergent.

Associated with the idea of ontological emergence is the idea of downward causation. Now Jaegwon Kim (2002), among others, has vigorously denied that there is any downward causation. All causation, he argues, occurs at the lowest level; all (apparently) higher-level properties are merely epiphenomenal.

Ladyman and Ross appear to agree with Kim that there is no downward causation. They say: “When someone pronounces for downward causation they are in opposition to science.” (Ladyman and Ross 2007, p. 57) Well, as I said, Practical Realism is not held hostage to science.

I ask: If there is no genuine downward causation, what are we to say about suggestive empirical evidence that various kinds of experience cause changes in the brain? Here are some examples of what seems like downward causation: (1) When people learn to juggle, the motor and visual areas of the brain get larger; and when they stop practicing, the areas retract.⁵ (2) A study of taxi drivers in London showed that the more time taxi drivers spent on the job, the larger the hippocampus grew.⁶ (3) “Chronic stress appears to have the potential to shorten the life of cells, at least immune cells.”⁷ These are just a few of recent results that strongly suggest downward causation. To deny that these examples are examples of downward causation by postulating a reductive interpretation seems like a “work-around,” especially in light of the fact that no one has an inkling of what a reduction of, say, learning your way around London might be or of how to go about finding it.

There is not only empirical evidence of downward causation, but reflection on what we know leads us (or at least leads me) to believe that there is downward causation. Expert testimony affects a juror’s hand’s rising in a vote for acquittal in a criminal trial; . otherwise, defense attorneys would not pay for expert testimony. Advertising affects people’s buying habits—otherwise smart executives would not buy advertising. If there is no downward causation, the apparent connections between expert testimony and jurors’ hand’s rising, and between ad men’s buying advertising and consumers’ handing over money for a new product become unintelligible. Surely, the need for intelligibility trumps the a priori principles that Kim appeals to in order to argue against downward causation. So, I make no apologies for endorsing downward causation.

Now we have the components of a metaphysical sketch that supports Practical Realism: Intertwined ideas of constitution, primary kinds, persistence conditions, causal

powers, ontological levels, novelty, emergence and downward causation. With these metaphysical features, we can see how Practical Realism might fulfill its aims:

One aim of Practical Realism is to show that the familiar things that we interact with daily have ontological significance in their own right: they are not *really* something else. Persons, microscopes, pieces of surveillance equipment, and horses and other inhabitants of the everyday world are of real kinds of things whose appearance in the world makes an ontological difference (that is, adds to what there is): Something that is a horse could not have existed without being a horse; something that is a microscope could not have existed without being a microscope. Ordinary objects are nonredundant: they cannot be omitted from ontology without rendering ontology deficient. An inventory of what exists is incomplete if it leaves out persons, microscopes, pieces of surveillance equipment, or horses, or the other kinds of things that we routinely interact with.

Conclusion

It is time to get on the table an alternative to the metaphysical theories that leave out the things that everyone cares about—not only concrete objects like one’s car keys, or the *Mona Lisa*, but also commonplace states of affairs like being employed next year, or having enough money to retire. It is not enough to have familiar sentences turn out to be true when paraphrased in unfamiliar ways. I do not want to relegate what really matters to mere concepts or semantics, nor to the distribution of microscopic qualities over spacetime. My aim is to see the ontological significance of the world as we encounter and interact with it—all day, every day. As the American pragmatist Charles Sanders Peirce wisely urged, “Let us not pretend to doubt in philosophy what we do not doubt in our hearts.” (Peirce 1958, p. 40)

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Notes

1. Lewis's natural/nonnatural distinction does not arise on my view. Although I take there to be levels—indeed, ontological levels—there is no privileging a fundamental level, if there is a “bottom” level. There is no comprehensive distinction between what is fundamental and what is not, and hence no need to try to figure out what is fundamental and what is not.
2. Reported in *The Chronicle of Higher Education*, September 13, 2013.
3. Compare butterflies and caterpillars: Since biological butterflies and caterpillars are the same species, what makes a particular butterfly the same insect as a particular caterpillar is that there is a single exemplification of a property that I'll call 'being a butterfly' exemplified by both the caterpillar and the butterfly.
4. I tell a story, similar to the one about constitution of concrete objects, about constitution of property-instances and causal powers in Baker (2013).
5. BBC News.
<http://newsvote.bbc.co.uk/mpapps/pagetools/print/news.bbc.co.uk/1/hi/health/3417045.stm>. Accessed 6.3.2006.
6. BBC News, 14 March 2000. <http://news.bbc.co.uk/1/hi/sic/tech/677048.stm>. Accessed 2.23.2005.
7. Scientific American.com. http://www.sciam.com/print_version.cfm?articleID=0005525A-9A84-11AB-9A8483414B. Accessed 12.7.2004.

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