THE FRAGMENTATION OF PHILOSOPHY,
THE ROAD TO REINTEGRATION

SUSAN HAACK

... every fact leads to every other .... . Only men do not yet see how, always. And your business is to make plainer the way from some one thing to the whole of things; to show the rational connection between your fact and the frame of the universe. ... To be master of any branch of knowledge, you must master those that lie next to it ... —Oliver Wendell Holmes (1886).¹

British and American philosophy has recently become extraordinarily scholastic, obsessed with questions about how many philosophers can sit on a niggle.—Jenny Teichman (1989).²

Over dinner at a conference a few years ago, the graduate student sitting next to me solemnly announced that what she did was virtue epistemology; and what, she politely inquired, did I work on? I was partway through explaining how developing my foundherentist epistemology³ had got me thinking about the evidence with respect to scientific claims, which in due course led to my Critical Common-sensist account of scientific evidence and scientific inquiry and my Innocent Realist account of their metaphysical underpinnings,⁴ and how I was drawn from there to issues about legal proof generally,⁵ and about legal efforts to domesticate scientific testimony

¹ Münster Lecture, Universität Münster, November 2013. © 2013 Susan Haack. All rights reserved.
² Jenny Teichman, “Don’t be Cruel or Reasonable” (review of Richard Rorty, Contingency, Irony and Solidarity) (1989), reprinted in Teichman, Polemical Papers (Aldershot, Hants, U.K.: Ashgate, 1997), 134-36, p.134. (This, the common use of “scholastic” today, is probably unfair to the Scholastics; but here I will let it pass.)
specifically, and from there to questions about the evolution of legal systems, ..., and so on, when I realized she was looking at me as if I were a Martian. “You don’t have an area?” she asked, in the incredulous tone in which people sometimes ask me, “you don’t have a cell-phone?” This, naturally, set me thinking about how radically out of step I find myself with the hyper-specialized, quasi-technical work that, of late, seems to be (almost) ubiquitous in professional philosophy—and why this fragmentation is, to my way of thinking, so counter-productive.

And only a few months ago, serving on a panel at another meeting, I listened in disbelief as another participant insisted that this hyper-specialization is perfectly OK. After all, he said in a blithely confident, “let’s be reasonable” tone, such specialization is both normal and productive in the sciences—so why not in philosophy, too? That’s preposterous, I found myself protesting; the two cases are quite different. In a mature branch of the sciences, individual scientists or laboratories will take on this or that highly specialized problem because there’s a body of well-warranted theory to be applied and extended. But the situation in philosophy is quite different; and the way our discipline is splitting into a congeries of small sub-specialties is a sign, not of its maturity, but of the careerism and cliquishness of our profession. These thoughts nagged at me on my way home; and set me thinking about how detached philosophy now seems from its own history, and how very different this is, also, from working scientists’ usual indifference to the history of their fields—and, again, how counter-productive.

Hence this paper, which will fall into four parts: first, contrasting the highly specialized professional philosophy we see today with the philosophy of the past, even the quite recent past

---


9 In some fields, to be sure, specialized division of intellectual labor may be helpful because it enables the collection of large amounts of data (as a law librarian may assemble a bunch of cases illustrating a key idea or argument, so that I can take up the task of interpreting and assessing them); but there’s nothing like this in philosophy, either.
(§1); then, explaining why this fragmentation is intellectually disastrous (§2); next, suggesting how this disaster came about (§3); and finally, offering some ideas about how to reverse, or at least resist, this unhappy trend (§4).

1. The Fragmentation of Philosophy

When I teach an introductory philosophy course I use (not one of those big, heterogeneous, and desperately confusing anthologies with which, in the US, textbook publishers bombard professors, but) Plato’s Republic. Why so? Because it ranges over every major area of philosophy—metaphysics, epistemology, philosophy of mind, philosophy of education, philosophy of art, etc., as well as political and social philosophy; and does so in a way that manifests their intimate interconnections.¹⁰

To be sure, only Plato is Plato. But the breadth of Plato’s vision, so far from being unique in the history of philosophy, is if anything the rule rather than the exception. Indeed, many of the most important figures in that history, from Aristotle to Aquinas to Francis Bacon, from Descartes to Leibniz to Kant, from Locke and Hume to Reid to J. S. Mill, ..., etc., etc., contributed not only to a wide range of philosophical issues, but also to questions in other areas: the sciences, theology, mathematics, history, political theory, law, and so on. And we find the same kind of breadth even in much more recent philosophers: in Santayana, Russell, Whitehead, ..., etc.; and in the philosophers of the classical pragmatist tradition, from whom I have learned so much.

In this context it is worth recalling that the members of Metaphysical Club, the birthplace of pragmatism, were a very varied bunch—among them Chauncey Wright,¹¹ who was beginning

---

¹⁰ Sometimes I combine this with a more recent book, Jonathan Rauch’s Kindly Inquisitors, the core argument of which is that campus “speech codes” rest on essentially Platonic conceptions of knowledge and politics—conceptions which, Rauch continues, are deeply flawed; because this book brings home to students who are still struggling to get their bearings how Plato’s work is relevant to their everyday lives, and suggests to students who are already getting a feel for the subject how a more defensible epistemology might interlock with a more defensible political theory. Jonathan Rauch, Kindly Inquisitors: The New Attacks on Free Thought (Chicago: University of Chicago Press, 1993). Mr. Rauch, by the way, isn’t a philosophy professor, but a journalist.

¹¹ For more about Wright (1830-1875), see Edward Madden, Chauncey Wright and the Founders of Pragmatism (Seattle, WA: University of Washington Press, 1963).
to apply the then-new theory of evolution to psychology;\textsuperscript{12} Oliver Wendell Holmes, Jr.,\textsuperscript{13} a young attorney who would in due course become a Justice first of the Massachusetts and then of the US Supreme Court; and Unitarian clergyman and theologian Francis Ellingwood Abbot.\textsuperscript{14} And the two members who were to be the founders of pragmatism, C. S. Peirce and William James, weren’t trained in philosophy, either.

Peirce was trained in chemistry; and for many years did scientific work for the US Coastal Survey\textsuperscript{15} (indeed, the only book he published in his lifetime was a scientific one).\textsuperscript{16} But he had long been fascinated by logic. At the age of twelve or thirteen, he recalls, finding a copy of Whately’s \textit{Logic} in his older brother’s room, he “flung [himself] on the floor and buried [himself] in it”;\textsuperscript{17} and in due course he would make pioneering logical innovations. He arrived at a unified propositional and predicate calculus a few years after, and independently of, Frege,\textsuperscript{18} and went on not only to introduce a novel diagrammatic notation for logic,\textsuperscript{19} but also to experiment with

\begin{itemize}
  \item Holmes’s father, Oliver Wendell Holmes, Sr., was a well-known Boston physician and poet.
  \item Peirce, \textit{Collected Papers} (note 18 above), 4.347-529 c.1903. On the title page of this Book II of \textit{The Simplest Mathematics}, “Existential Graphs,” (immediately before 4.347), Peirce described this work as “my chef d’oeuvre,” perhaps because he believed that necessary reasoning is essentially diagrammatic. \textit{Id.}, 1.54 (c.1896).
\end{itemize}
modal\textsuperscript{20} and many-valued systems\textsuperscript{21}—and to map the hitherto little-explored territory of semiotics, the general theory of signs.\textsuperscript{22} Extraordinarily well-read in the history of philosophy, he developed a subtle theory of inquiry\textsuperscript{23} and philosophy of science,\textsuperscript{24} a panoramic metaphysics,\textsuperscript{25} a distinctive philosophy of mind,\textsuperscript{26} a unique approach to philosophy of religion,\textsuperscript{27} ..., etc., etc. And while some have thought (given his somewhat unkind remarks about “vitaly important topics”)\textsuperscript{28} that he was dismissive of ethics, in fact he developed his own, very distinctive, idea of “concrete reasonableness” as the \textit{summum bonum}.\textsuperscript{29} He even tried his hand at writing fiction.\textsuperscript{30}

Peirce endorses Kant’s conception of philosophy as “cosmic” or “architectonic”;\textsuperscript{31} and
writes that his pragmatism was “designed and constructed ... architectonically.”” He means, he
tells us, that just as a civil engineer will first consider the properties of the materials to be used,
and test those materials to ensure that they will serve his purpose in building the bridge, the road,
or whatever, so pragmatism begins by considering the properties of concepts so as to choose those
most suitable to the purpose of philosophical theorizing.32 Philosophy must grow, he continues (in
an observation to which I will return in due course) “by the fission of minute parts and not by
accretion.”33 And in response to Paul Carus’s criticism that he is positivistic, he replies that the
“cautious reflectiveness” of his procedure shows that his method “has neither been in theory
purely empirical, nor in practice mere brain-spinning.”34

As a young man, James had aspired to be an artist; but at his father’s insistence he studied
medicine at Harvard instead.35 From there he gradually moved to psychology—writing his
enormously successful Principles of Psychology36 and Varieties of Religious Experience,37
involved with the earliest psychological laboratories in the US,38 and inviting important European
psychologists, among them Hugo Münsterberg, to visit39—and to philosophy.40 And his
philosophical work also spans a broad range: philosophy of mind,41 philosophy of religion,42

---

32 Peirce, Collected Papers (note 18 above), 5.5 (c.1905).
33 Id., 1.177 (c.1896).
34 Id., 6.603-04 (1893). The quotation is from 6.604.
chapters 7 and 8; H. Standish Thayer, ed., Pragmatism: The Classic Writings (Indianapolis, IN: Hackett
36 William James, The Principles of Psychology (1890), eds. Frederick H. Burkhardt , Fredson
37 William James, The Varieties of Religious Experience: A Study of Human Nature (Gifford
Lectures, University of Edinburgh, 1901-2) (1902), eds. Frederick H. Burkhardt , Fredson Bowers, and
38 Perry, The Thought and Character of William James (Boston: Little, Brown and Company,
1935), vol.2, pp. 6 ff.
40 James was appointed instructor in physiology and anatomy at Harvard in 1873, and professor of
philosophy in 1885; between 1889 and 1897 his title was professor of psychology.
41 See e.g., William James, “Does ‘Consciousness’ Exist?” (1904), reprinted in James, Essays in
Radical Empiricism (1912), in Richard Bernstein, ed., Essays on Radical Empiricism and A Pluralistic
metaphysics, epistemology, ethics, ... , etc.

John Dewey, who would carry the pragmatist tradition forward, was trained in philosophy (and had been a student at Johns Hopkins University during the period when Peirce was, briefly, an instructor there); but his philosophical work rivals Plato’s both in its scope—from logic and theory of inquiry, philosophy of science, and metaphysics, to ethics, aesthetics, philosophy of mind, philosophy of education, philosophy of law, political philosophy, ... , etc.


See e.g., William James, “Reflex Action and Theism” (1881), in Frederick Burkhardt and Fredson Bowers, eds., The Will to Believe and Other Essays in Popular Philosophy (Cambridge, MA: Harvard University Press, 1979), 90-113; “The Will to Believe” (1896) in the same volume, 13-33.


etc.—and in its interconnectedness. Indeed, much of Dewey’s work could be seen as a constructive reaction against Plato’s quest for certainty, his hyper-rationalism, and his denigration of democracy as the next-to-worst form of government. Moreover, Dewey’s work was read and admired by educated people far beyond the limited circle of philosophy professors—so much so that he was once described in the New York Times as “America’s philosopher.”\(^{56}\) His thought had a profound influence on the US system of public education;\(^{57}\) and he was active in political causes.\(^{58}\)

Dewey died, at the ripe old age of 93, in 1952. It seems safe to say we haven’t seen his like—or Peirce’s, or James’s—since. To the contrary: over my working life, philosophy seems to have become ever more fragmentated and internally splintered, ever more hermetic and aloof from neighboring fields, and ever more detached from its own history; in short, ever more “academic,” in the pejorative sense of the word. For me, this is most immediately apparent in epistemology—which I think of as a core area in which almost everyone in philosophy could, and should, take an interest, but which has for decades now been the specialty of a relatively small sub-group; a small sub-group that is by this point itself visibly fragmenting, with the virtue epistemologists (such as the young woman with whom my paper opened) forming one circle, the reliabilists another, the contextualists another, the social epistemologists another, the Gettierologists yet another, the feminist-epistemologists another again. Indeed, there seem to be sub-groups even within the sub-groups: e.g., in the virtue epistemology camp, those who follow Ernest Sosa’s\(^{59}\) lead and those

---


\(^{59}\) Ernest Sosa, “The Raft and the Pyramid,” Midwest Studies in Philosophy V (1980): 3-25. (By “virtue” Sosa means something like “power,” and his approach seems to be a distinctive kind of reliabilism.)
who follow Linda Zagzebski’s.\textsuperscript{60}

Most of these academic-epistemologists seem largely indifferent to neighboring fields; at any rate, my efforts to interest them in issues about evidentiary procedures in the law,\textsuperscript{61} or in what we can learn from epistemological novels like Samuel Butler’s \textit{The Way of All Flesh}\textsuperscript{62} (a brilliant depiction of self-deception, hypocrisy, and sham reasoning) or Dorothy Sayers’s \textit{Gaudy Night}\textsuperscript{63} (an illuminating exploration of the place of women in the life of the mind), or in former-Secretary of State Donald Rumsfeld’s much-derided observations about the pitfalls of “unknown unknowns” in military intelligence,\textsuperscript{64} or in what it is to believe something,\textsuperscript{65} or ..., etc., seem to fall mostly on deaf ears. Nor, apparently, do those academic-epistemologists have much interest in the history of their field; at any rate, I’ve sat through many a lecture on epistemology without hearing a word about anything written more than ten years or so before. And the cliquishness is disturbing, as people in this or that sub-sub-specialty focus more or less exclusively on work by others of the same stripe.

At this point in time, I can’t participate in an epistemology conference without \textit{feeling} like a Martian—a Martian anthropologist, sitting on the sidelines noting the constant mutually-reassuring references of each participant to the others’ work, the coded jargon alluding to the

\textsuperscript{60} Linda Zagzebski, \textit{Virtues of the Mind} (New York: Cambridge University Press, 1996). (Zagzebski uses “virtue” in the more ordinary sense; and, unlike many of her followers, draws a good deal from the philosophical past, notably from Aristotle and Dewey.)


\textsuperscript{64} “[A]s we know, there are known knowns; there are things that we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don’t know we don’t know.”—Donald Rumsfeld (Secretary of Defense under President George W. Bush), Department of Defense news briefing, February 12, 2002. For an analysis of Rumsfeld’s epistemological insight, see Susan Haack, “Erkendelsetori—hvem har brug fur det? (“Epistemology: Who Needs It?”), \textit{Kritik} 200 (2011): 26-35. [English version available from the author.]

narrow seam of niche literature that defines this or that sub-sub-field—“high-stakes situation,” “Lackey-type counter-examples,” “knowledge first,” etc., etc.—and the conspicuously chummy use of first names. At the conference I mentioned at the beginning of this paper, for example, I was the only speaker who referred to older work in the field—Locke, Mill, Peirce, etc.; the only speaker who referred to the other participants as Professor X, Professor Y, and Professor Z, rather than as Tom, Dick, and Harry; and—though the topic of the conference was ostensibly “The Point and Purpose of Epistemic Evaluation”—the only speaker who even mentioned the real world.

And, so far as I can tell, just the same kind of fragmentation is happening in the rest of philosophy, too. At a recent meeting, for example, I heard three philosophers of science from three different continents tell almost exactly the same story about where their field is currently at (reminding me of the reviewer who, apparently miffed because I didn’t discuss his and his friends’ work, complained that my Defending Science focused too much on ideas from dead people—dead people like Thomas Huxley, Albert Einstein, Percy Bridgman, James Conant, John Dewey, and Gustav Bergmann). Those three speakers all agreed, in particular, that philosophy of science has now divided into sub-specialties: philosophy of physics, philosophy of biology, philosophy of the social sciences, etc. At a subsequent meeting I learned that there is also, by now, another sub-group of philosophers of science who focus on questions about causation (and, probably, there are other such sub-groups I haven’t encountered).

Metaphysics seems no less fragmented. I won’t soon forget a long drive with another graduate student, who told me she was working on tropes. For several miles I was happily telling her about the fun I and the students in my class on philosophy and literature had exploring such figures of speech as metaphor, simile, litotes, synecdoche, etc.—until I realized that she was

---

66 Actually, I exaggerate just a little: In the discussion period at the end of the conference, when another speaker observed in passing that human beings are social animals, I pointed out, very politely, that this was the first time anyone besides myself had mentioned the world; another participant replied, rather indignantly, that there was nothing wrong with philosophers’ speculating about how the concept of knowledge could have arisen, but that it wasn’t their job to check out whether those speculations were correct—not even, apparently, by looking in an etymological dictionary. After the conference, the organizers requested that, for publication in the conference volume, I please make my paper more like the others’. I declined, and gave my paper, instead, to Ratio Juris (see note 61 above).
completely baffled; what “trope” meant to her was something entirely different, a technical concept native to a small, then-fashionable metaphysical niche. More recently, the authors of a paper entitled “What’s Wrong with Contemporary Philosophy?”—urging that philosophers get real about the true complexity and variety of the world—complained about the *horror mundi* of the metaphysics cliques. In fact, in all the areas in which I work, where I’m sometimes asked to referee, or occasionally read a journal issue, I see the same fragmentation. Journals, meetings, job advertisements, and even departments seem ever more specialized, and the “parochialism of the recent” ever more severe.

Of course, I am speaking only of a trend, and primarily about how things seem to be going in English-language philosophy and among those non-native English speakers influenced by these developments. Still, some might object that, even with these caveats, there are obvious exceptions to what I have said. Wasn’t Richard Rorty’s philosophical scope, they might ask, and his openness to other fields, quite as broad as, say, Dewey’s, and his knowledge of the history of philosophy quite as comprehensive as Peirce’s? Isn’t there a trend, now, towards an “experimental philosophy” closely tied to psychology? Isn’t the history of philosophy flourishing? My answer to all these questions would be the same: well, yes, in a way; but not really—not in the way that matters.

Rorty certainly wrote about a wide range of subjects; but since his point was almost always essentially the same—a wearily disillusioned insistence there’s less to this or that (truth, the world, evidence, representation, science, or whatever) than most people naively imagine—I don’t believe he did much, if anything, to advance our understanding of these questions. And neither, though he certainly dropped a lot of names (on *one page* of one of Rorty’s avalanche of articles picked more or less at random I found “Heidegger,” “Descartes,” “Dewey,” “Dewey’s Baconianism,” “Brandom,” “Husserl,” “Plato,” “Carnap,” “Putnam”), his ostentatious displays

---

67 The late James [B.] Conant, that is, former President of Harvard and author of *Science and Common Sense* (New Haven, CT: Yale University Press, 1951), not the living philosopher of the same name.


of learning and transparent efforts to press Big Names from the past onto his team could hardly be
more different from Peirce’s engagement with, and willingness to learn from, the advances, and
the mistakes, of the philosophical past.70

Some of the work offered under the rubric “experimental philosophy” seems to be nothing
more than conceptual or linguistic analysis conducted by the survey method;71 which, I should
add, is nothing new: seventy-five years ago Arne Ness had conducted surveys to elicit people’s
intuitions about the concept of truth.72 Other work offered under the rubric “experimental
philosophy” might be interpreted, with a little charity, as trying to tie philosophical ideas to, or
draw them from, the results of psychological surveys;73 which, again, is nothing new—except that
in its current manifestation it seems often to rely, not on the work of psychologists, but on surveys
conducted, well or not-so-well, by philosophy professors themselves. And some experimental

Brandon, I assume, Rorty was doing a small favor for an admirer.) In fairness to Rorty, however, I should
add that his review of Scott Soames’s two-volume history of analytic philosophy is quite scathing, as it
should be, about Soames’s defense of fragmentation as actually a good thing. Richard Rorty, “How Many
http://www.lrb.co.uk/v27/no2/richard-rorty/how-many-grains-make a heap (reviewing Scott Soames,

70 In just the first few paragraphs of “The Fixation of Belief,” for example, Peirce comments on
the insight of Roger Bacon (“almost a scientific man”); reflects on the shortcomings of Francis Bacon’s
conception of scientific inference (“wrote on science like a Lord Chancellor”); describes how Kepler tried
one hypothesis after another; and points to Lavoisier’s originality in recognizing the importance of
“manipulating real things instead of words and fancies.” Peirce, Collected Papers (note 18 above), 5.359-
64 (1877). (The quotations are from 5.360 [Roger Bacon], 5. 361 [Francis Bacon], 5.363 [Kepler], and
5.363 [Lavoisier]).

describes experimental philosophy as “a diverse movement” and lists, as the first of its “different
programs,” eliciting people’s philosophical intuitions by the survey method (pp. 2-3).

72 Arne Ness, “‘Truth’ as Conceived by Those Who are not Professional Philosophers,” Skrifter
Utgitt av der Norske Videnskap-Akademi i Oslo II, Hist.-Philos. Klasse, no.4 (1938): 11-118 (as the length
of this article suggests, Ness’s survey work was quite sophisticated and rigorous—more so than much
recent “experimental philosophy”). I believe Timothy Smiley did something similar, though much mire
informally, in the 1960s, in his case focusing on people’s intuitions about non-referring definite
descriptions. (At a conference in 2007 I quietly mentioned to a young enthusiast for experimental
philosophy—who, instead of presenting a paper, had simply surveyed the other participants over whether
they would say in these or those, rather under-described circumstances, that an employer had acted
intentionally—that Ness had conducted a very careful “philosophical” survey long before. “Great!” he
replied, “Ness anticipated me.” Gosh.)

73 Alexander (note 71 above), p.3, listing as the second of those “different programs,” the use of
such surveys in showing us “something philosophically important” about how our minds work.
philosophers, apparently, have by now come to suspect that maybe philosophical intuitions aren’t the be-all and end-all of our work, which is true, but hardly news to anyone not totally immersed in the analytic mainstream. Some of the work conducted under the rubric, “experimental philosophy” is probably decent interdisciplinary stuff. But the fact that the “experimental philosophy” crowd now boasts a logo, and even an anthem, tells us unmistakably that, on the whole, it represents less an encouraging move towards the desirable kind of interdisciplinarity than yet another clique promoting yet another fad.

And, yes, there are plenty of historians of philosophy about, though my impression is that in analytically-oriented departments they tend to be low on the totem pole. But all too often, these days, historians of philosophy tend not only to focus quite narrowly, but also to devote much of their energy to arguing with other specialists in the same field or sub-field. The history-of-philosophy dissertation on Quine I recently examined, for example, seemed to have more to say about other contemporary Quine-specialists than about the older philosophers who influenced Quine; and a recent book on Quine that did give those older philosophers the attention they deserve arrived as a gift from the author with an inscription to the effect that I was probably one of only three people alive who could understand it! Even the call for submissions to the Peirce Essay Contest, I regret to say, now recommends that essays submitted discuss the recent literature in the area.

Now, however, I need to emphasize once again that I am talking only about a trend. There

---

74 Ibid.
Knobe and Nichols’ introductory essay to a volume of papers on experimental philosophy suggests that what is proposed is a return to a traditional vision of philosophy as not very clearly distinct from neighboring disciplines, and as only adding a new tool to the philosophical toolbox. Joshua Knobe and Shaun Nichols, “An Experimental Philosophy Manifesto,” in Knobe and Nichols, eds., Experimental Philosophy (New York: Oxford University Press, 2008), 3-16. The logo, however (a burning armchair), suggests something much more radical, that the old model of conceptual analysis is to be replaced by something new. (The phrase “bait and switch” comes to mind!)
76 It’s significant in itself that work on Quine, who died only in 2000, already counts as history of philosophy.
78 I quote: “... entrants should .... take care to locate their views in relation to published material that bears directly on their topic.”
surely *are* exceptions: philosophers who follow a problem where it leads, even if that takes them across into another area, or outside philosophy altogether; and some knowledgeable and modest enough to learn from philosophers of the past. I believe I can claim to be among them. But we in the philosophical resistance are distinctly a minority; and—as the fact that the word “resistance” comes so readily to mind suggests—we are swimming against the tide.

2. The Intellectual Costs of Fragmentation

This unhappy combination of fragmentation, hermeticism, and ahistoricism carries a heavy price; indeed, I would go so far as to describe it as an intellectual disaster. It blinds us to the intimate interconnectedness of the various branches of philosophy; it closes our eyes to the consilience of knowledge more generally; and it condemns us both to repeat the philosophical mistakes of the past, and to fumble around in the dark when the philosophical advances of those who have gone before could light our way. As John Locke put it long ago, “some Men of Study and Thought, that reason right, and are Lovers of Truth, do make no great advances in their Discoveries of it,” because:

... they converse but with one sort of Men, they read but one sort of Books, they will not come in the hearing but of one sort of Notions ... . They have a pretty Traffick with known Correspondents in some little Creek, within that they confine themselves, but will not venture out onto the great Ocean of Knowledge, to survey the Riches that Nature hath stored other parts with, no less genuine, no less solid, no less useful, than what has fallen to their lot in the admired Plenty and Sufficiency of their own little Spot, which to them contains whatsoever is good in the Universe. 

Of course, Locke wasn’t writing, as I am, about the condition of philosophy in the early twenty-first century. So my next task is to explain more exactly why the fragmentation of philosophy that we see today is inducing just the kind of tunnel-vision Locke described so vividly centuries ago.

This task is itself a philosophical one; for, as Wilfrid Sellars famously observed, philosophy is the discipline to which it falls to understand “how things in the broadest sense of the

---

word hang together in the broadest sense of the word.”

I would say (not, as Sellars does, that this is the task of philosophy, but) that it is a task of philosophy to understand how, for example, ethical, aesthetic, and epistemological standards of appraisal relate to each other; whether, and if so, how results from the human sciences bear on epistemological questions; whether, and if so, how sociological or historical studies of the sciences bear on questions about the assessment of evidence with respect to scientific claims, or about the method, or methods, of the sciences; how the sub-atomic particles postulated by physics fit in with the other furniture of the world, or vice-versa; how, if at all, biological truths about species bear on metaphysical questions about whether there are real kinds, and if so, what kinds of kind; whether theological explanations are legitimate, and if not, why not; ..., and so on.

Central to the first part of my explanation, then, will be the philosophical concept of consilience; which—though the word doesn’t appear—is clearly at work in the quotation from Holmes with which I began. The term was coined by William Whewell; as I use it, however, the concept of consilience is not confined, as in Whewell, to the logic of induction, and neither is it given the reductionist spin that, more recently, E. O. Wilson puts on it. What I mean, rather, is that there is one real world—albeit a very complex and varied world, a “pluralistic universe,” to borrow James’s phrase, and that all the truths about this complex and various world must, somehow, fit together. “Somehow,” here, is intended to signal that articulating what this “fitting

---

82 E. O. Wilson, Consilience: The Unity of Knowledge (New York: Knopf, 1998). As I argued in “Six Signs of Scientism” (2012), in Putting Philosophy to Work (note 8 above), 105-20, Wilson’s book wavers between two mutually incompatible understandings of “consilience”: that all the truths about the world must be consistent (which is of course true), and that all the truths about the world must be reducible to scientific truths (which, I believe, is false).
84 William James, A Pluralistic Universe (note 41 above).
together” amounts to requires some subtlety. All the truths about the world must be mutually consistent, but “fitting together” requires more than this; not, however (as reductionists dream), that all the other truths about the world must be derivable from some privileged sub-set of truths, but rather that they must interlock, as entries in a crossword puzzle do.

Let me give some examples. The modern theory of evolution, the “post-Darwinian synthesis,” interlocks with Mendelian particulate genetics, with cosmologists’ current estimates of the age of the earth, with molecular biology, etc. The explanation of how humans came to have one chromosome fewer than other primates is an especially striking example: at some time in the far-distant past, two chromosomes merged into one—an explanation neatly confirmed by the traces of this long-ago fusion on a human chromosome with telomeres at the center besides, as in all the others, at the ends.¹⁸⁵ Truths about when human populations moved from A to B during our prehistory must interlock with truths about when continents shifted and land-bridges became seas, and with truths about the ethnic characteristics of ancient human remains; truths about how tyrants, serial killers, philanthropists, and saints behave must interlock with truths about the mainsprings of human motivation and their possible variations and distortions; truths about human artifacts and works of art must interlock both with truths about the materials from which they are made and with truths about human beings’ perceptual, linguistic, and cognitive abilities and limitations; truths about what is real as opposed to illusory or fictional must interlock with scientific, historical, and other truths about what there is in the world; truths about the scope and limits of human knowledge must interlock in turn with those truths about human capacities and weaknesses and about the character of the world we try to understand; truths about what it’s good for human beings to do, and what social institutions and rules are better and what worse, must interlock with truths about what enables, and what frustrates, human flourishing; ..., and so on.

And the same kind of interlocking is needed within philosophy: truths in one branch must interlock with truths in other branches. Again, I’ll start with epistemology. True answers to questions about what makes beliefs more, or less, warranted must interlock with true answers to

---

questions in philosophy of mind—about the nature of belief, of perception, and of introspection, for example; with true answers to questions in metaphysics—about how we, and the world, must be if we are to have knowledge of it, and whether any, and if so what aspects of the world might be in principle beyond our ken; even with true answers to questions in ethics—about the character of ideals and norms, the place of epistemic virtues among the virtues more generally, ..., and so on. And these in turn must interlock with the answers to questions about how it’s possible to learn about what makes human beings tick not only from psychological, sociological, and anthropological studies and from history, but also from works of fiction; which in turn must interlock with answers to questions about the ontological standing of fictional characters, about the relations of reason and emotion, and about the role of the imagination in literature and in science. The answers to questions in philosophy of science must interlock with the answers to epistemological, metaphysical, ethical, and even aesthetic questions, ..., and so on; indeed, by my lights, philosophy of science really is, in significant part, a branch of epistemology and metaphysics.

But what, more exactly, is this “interlocking”? Let me begin with an example mentioned earlier. One presupposition of Darwin’s theory of evolution by random mutation and natural selection was that the earth is old enough for these processes to have produced the vast variety of species we find around us; another was that mutations that contributed to survival would be passed to offspring. Had Lord Kelvin’s calculation of the age of the earth been correct, the former presupposition would have been false; had the “blending” theory of inheritance that Darwin himself accepted been correct, the latter presupposition would have been false. Subsequent calculations of the age of the earth, together with Mendelian particulate genetics, however, revealed that these presuppositions of Darwin’s theory are true. Again: one presupposition of my foundherentist theory of empirical justification is that people have beliefs. If Stich and the Churchlands had been correct in claiming that the ontology of beliefs is unsustainable “folk

---


psychology,” this presupposition would be false; but if my account of belief is correct, this presupposition of the foundherentist theory is true.

What’s at stake, however, isn’t simply consistency; as Peirce’s comment that philosophy advances “by the fission of minute parts” suggests, it’s both more complex, and subtler, than that. Actually, as I see it, philosophy advances both by fission and by fusion. Merriam-Webster’s dictionary gives as the first meaning of “fission,” “reproduction by spontaneous division.” Peirce doesn’t give examples; but I think of how his idea of “relatives,” as he calls them, led by something like “spontaneous division” to his pioneering work on the logic of relations, his critique of Kant’s definition of analyticity (which, he argues, is based on Aristotelian syllogistic logic, incapable of expressing relations), and his analysis of his categories by reference to their adicity (Firsts are monadic, Seconds dyadic, Thirds triadic). Again, his conception of continuity leads, by something like “spontaneous division,” to the methodological principle of synechism, and this to his reflections on mind and body, and even on immortality; and the biological conception of evolution “reproduces” in his work to yield produce a trio of types of evolution and an account of how the universe has evolved, and is still evolving, from chaos to order—the theory


89 Susan Haack, Evidence and Inquiry (note 3 above), 226-36; Defending Science (note 4 above), pp.157-61; and, especially, “Belief in Naturalism” (note 65 above).

90 Itself, as Peirce makes clear, a sport of the chemical concept of valency. Collected Papers (note 18 above), 5.469 (1907). (The modern terminology for what Peirce calls “relatives” would be “relations,” or “relational properties.”)

91 Id., 5.84 (1903): “Kant’s view of the relation between his Analytic and Synthetic Judgments [is] a view that a study of the logic of relatives would at once have exploded.”

92 Id., 5.469 (1907).


94 “Man’s Glassy Essence” (1892), Collected Papers (note 18 above), 238-71; “Mind and Matter” (c.1893), id., 6.272-86; “The Law of Mind” (note 93 above).

Peirce calls “agapism,”96 Other examples might include the way, in John Searle’s work, the concept of speech-act97 “reproduces” to help create a theory of the intensional, and then of social intensionality and the construction of social reality;98 or the way the crossword analogy, itself a sport of Michael Polanyi’s metaphor of a jigsaw puzzle,99 reproduces and mutates in my work.100

That’s fission; but fusion, the process by which solutions to apparently separate problems interact to make both deeper, is no less important. An account of what it is to believe something, for example, should fuse with an understanding of the role that experience, sensory and introspective, can play in causing and modifying people’s beliefs, with a grasp of the role socialization plays in a human infant’s becoming “minded,” with a conception of what it is for a belief to be true and why true is what a belief has to be to be good, with an appreciation of what it might mean to demand of a witness that he tell “the whole truth and nothing but the truth,”101 ..., and so on. Again, a decent account of what “real” means should fuse with an understanding of how the physical differs from the mental, the natural from the social, the particular from the

---

100 See, e.g., my Evidence and Inquiry (1993) (note 3 above), chapter 4, spelling out the crossword analogy; “Dry Truth and Real Knowledge: Epistemology of Metaphor and Metaphors of Epistemology” (2005) in Haack, Manifesto of a Passionate Moderate: Unfashionable Essays (Chicago: University of Chicago Press, 1998), 69-89, working out how metaphors function as intellectual tools; Defending Science (2003) (note 4 above), chapters 3 and 4, using the metaphor to understand both the character of scientific evidence and issues about the supposed “scientific method”; “Proving Causation: The Holism of Warrant and the Atomism of Daubert,” Journal of Health and Biomedical Law IV, no.2, (2008): 253-89, deploying the metaphor to show that, and when, a combination of pieces of evidence can warrant a claim to a higher degree than any of the components alone; “El probablismo jurídico” (2013) (note 5 above), deploying the metaphor to show that degrees of warrant have a quite different logical structure from that of mathematical probabilities.
general, etc.\textsuperscript{102}

Consilience, in turn, interlocks with other key philosophical ideas. As I have argued elsewhere, when various pieces of evidence with respect to a claim point in the same direction, the degree to which that claim is warranted by the combined evidence can be higher than the degree to which it is warranted by any component piece;\textsuperscript{103} so the fusion of one bit of philosophical theorizing with another can enhance the warrant of the overall account. And, as I have also argued elsewhere, our concepts grow as our knowledge grows;\textsuperscript{104} so the fusion of hitherto-separate bits of theory—with one aspect of belief, or truth, or reality, or, etc., linked to another—constitutes a step not only towards a better-warranted overall account, but also towards more versatile and better-designed conceptual tools.

***

However, appeal to consilience, whether of truths in philosophy with truths of neighboring disciplines, or of truths in one branch of philosophy with truths in another, can’t by itself be sufficient to show that the kind of specialization I have been complaining about is as disastrous as I have claimed. Why not? Because everything I have said so far in this section applies (as Holmes saw) to any discipline, including the natural sciences. True answers to questions in molecular biology must interlock with true answers to questions in organic chemistry, in physics, ..., and so on; and truths within molecular biology must interlock with each other. The same goes for all the sciences. And nevertheless, in the sciences (as my co-panelist at that recent meeting said), specialization is not only normal, but can be very productive.

By now, after centuries of work, the natural sciences deserve to be called “mature.” To be sure, the maturity of a scientific field isn’t categorical, but a matter of degree; and even within the most mature sciences there will always be a continuum of ideas (a continuum within the continuum of more and less mature disciplines) from the very firmly established, to the


\textsuperscript{103} Haack, “Proving Causation” (note 100 above).
reasonably well-established, to the as-yet largely speculative, to the presently wild and implausible. That said, it is precisely the well-warranted theories in physics, chemistry, evolutionary biology, etc., that pave the way for productive specialization. For example: once the evidence was in that DNA and not protein is the genetic material, that it is a double-helical, backbone-out macromolecule with like-with-unlike base pairs, and that it carries genetic information by somehow coding for proteins, the outstanding challenge for molecular biologists was to figure out how, exactly, this coding works. Many specialists worked on the problem; and in 1961 Marshall Nirenberg and Johann Matthaei figured out the first “word” in the genetic code when they discovered that “one or more uridylic acid residues appear to be the code for phenylalanine” so paving the way for others to decode other “words.”

The situation in philosophy, however, could hardly be more different. Around 1903, Peirce described metaphysics as “a puny, rickety, and scrofulous science”; and now, more than a century later, philosophy hardly seems—in metaphysics or any other area—in much better shape. Even more than the social sciences (by my lights, at least, still very far from full maturity), philosophy remains a field of competing schools and approaches, fads and fashions. And for a discipline in this condition—perhaps especially for this discipline in this condition—over-specialization impedes progress rather than enabling it, because it means that time and energy are inevitably wasted on “niche” problems that won’t survive the half-baked theories that gave rise to them.

I think, in this context, of the “Davidson program.” The underlying idea, of course, was that meaning can be explained in terms of truth-conditions, and that truth-conditions can be spelled out by means of the methods Alfred Tarski used in developing his theory of truth for

---


106 Peirce, *Collected Papers* (note 18 above), 6.6 (c.1903).

formalized languages. The challenge was that, while his approach is well-suited to handle the regimented formal languages of logic and mathematics it is, as Tarski himself pointed out, signally ill-suited to deal with the complexities, the raggedness, the constant evolution (and, Tarski thought, the inconsistencies) of natural languages. In particular, as Davidson realized, there are numerous aspects of English, and presumably of other natural languages too—from adverbs to verbs of propositional attitude to metaphors and malapropisms—to which it can’t readily be applied. The “program” was to regiment these recalcitrant aspects of natural language so as to make them amenable to those methods. For a while, within a limited circle and from a limited perspective, philosophy began to look a lot like what Kuhn called “normal science.” After decades of work, however, it seems finally to have been acknowledged that Tarski was right all along—his methods apply only to well-behaved formal languages, and could be applied to natural languages only if they were first rigidified beyond all recognition.

Eventually, Davidson himself concluded that, after all, there is no such thing as a language, at least in the sense that philosophers of language like himself had taken for granted. Less time might have been wasted had more people been willing to go back and think through Tarski’s reasons for pessimism before jumping on the Davidsonian bandwagon; and it might all seem like less of a waste of energy had more people been willing, after the collapse of the program, to explore what a more realistic understanding of language might look like. But as it was, I fear the program advanced more careers than it did philosophical frontiers.

Now I begin to see that there’s a kind of vicious spiral here: when specialization is

---

109 Id., p. 154.
premature, it wastes time and energy because there is as yet nothing like the body of well-warranted theory needed to make it productive. When premature specialization becomes commonplace, the prospects for achieving something solid to build on seem to recede indefinitely; and so people keep themselves busy arguing over and over the same puzzles—until boredom sets in, and they set off in pursuit of a new fad. Problems are never solved, but simply abandoned: philosophers of science leave the “grue” paradox behind unresolved; metaphysicians lose interest in older debates about realism vs. nominalism, about realism vs. “anti-realism,” about internal realism vs. metaphysical realism, ..., etc., and chase after a new, post-post-modern realism—or a new “deflationism”; philosophers of language abandon Davidson to argue over Kripke and, especially, over X’s, Y’s, and Z’s interpretations, critiques, and defenses of Kripke and A’s, B’s and C’s interpretations, critiques, and defenses of X’s, Y’s and Z’s interpretations, critiques, and defenses of Kripke, ..., etc; and so on.

As those critics I mentioned earlier observe:

[i]n the recent history of [analytic philosophy] a series of puzzles have been mooted, flared up as trends, attracted a significant portion of graduate students, and then died down with no obvious solution having established itself and the world not much the wiser. These problems include: paradigms, rules, family resemblance, criteria, “gavagai,” Gettier, rigid designation, natural kinds, functionalism, eliminativism, truth-minimalism, narrow versus wide context, possible worlds, externalism versus internalism, vagueness, four-dimensionalism, and, just now, presentism.\(^{113}\)

This list dates from 2006; and (since, as the authors note, such fashionable “niche” problems typically last somewhere between a couple of years and a decade or so)\(^{114}\) today’s list would be somewhat different. But their point remains valid: the puzzles that would be missing if they wrote

---

(However—as his titles suggest—Prof. Chen’s work might be better described as post-Kripkean than as post-Davidsonian.)

\(^{113}\) Mulligan, Simons, and Smith, “What’s Wrong with Contemporary Philosophy?” (note 68 above), p. 64.

\(^{114}\) One puzzle, however, seems extraordinarily long-lived: the problem posed by the “Gettier Paradoxes,” which have by now been around for fifty years. Edmund Gettier, “Is Justified True Belief Knowledge?” *Analysis* 23 (1963): 121-23. I believe I identified the source of the paradox—that “knows” is categorical, but “is justified in believing” a matter of degree—in a paper written in 1983; which, however, I thought not interesting enough to publish, ... until Gettierology flared up all over again. Susan Haack, “‘Know’ is Just a Four-Letter Word” (1983) in the 2\(^{nd}\) edition of *Evidence and Inquiry* (note 3 above), 301-30.
the list today weren’t crossed off because they’d been solved; they were simply set aside when people got bored with them—like the hula hoops and bell-bottomed trousers stuffed, with the rest of the detritus, in the garage. No wonder I’m so often put in mind of Peirce’s complaints about the literary dilettanti of his day, who have “so perverted thought to the purposes of pleasure,” that “a positive discovery which takes a favorite subject out of the arena of ... debate is met with ill-concealed dislike,”115 and about those “over-cultivated Oxford dons ... whom any discovery that brought quietus to a vexed question would evidently vex because it would end the fun of arguing around it and about it and over it.”116

And now I begin to see, also, how fragmentation, hermeticism, and ahistoricism fit together in a kind of syndrome of intellectual decay. By closing our eyes to consilience with other disciplines, fragmentation encourages hermeticism; and by closing our eyes to the possibility that better answers to this or that philosophical question might be found, not in the work of the subgroup presently focusing on it, but in outsiders’ ideas, or in ideas from the philosophical past, fragmentation encourages ahistoricism. And in philosophy ahistoricism isn’t, as it usually is in the sciences, harmless. Successful past work on a scientific problem will usually already have been incorporated into the textbooks and into current approaches; but nothing like this is true in philosophy. And so, as George Santayana famously observed, “[t]hose who cannot remember the past are condemned to repeat it.”117

I will illustrate, once more, with an example from epistemology, this time from my own work. After Evidence and Inquiry (which focused on individual knowing subjects), in the process of writing Defending Science I began puzzling over questions about the evidence with respect to scientific claims, which is usually the shared resource of many people in the field in question. Dipping into the then-burgeoning literature on “social epistemology” proved disappointing. But eventually I figured out for myself what the fundamental problem was: that the evidence with respect to scientific claims must include scientists’ seeing, hearing, etc., this or that; but sensory

115 Peirce, Collected Papers (note 18 above), 5.396 (1878). “This disposition,” Peirce continues, “is the very debauchery of thought.” Indeed.
116 Id., 5.520 (c.1905).
experience is always someone’s, i.e., some individual’s, sensory experience. And so, I concluded, to understand warrant in the impersonal sense (i.e., the degree of warrant of this or that scientific claim at a time), you have to start with the degree of warrant of a claim in light of the evidence possessed by a individual scientist, and proceed from there to an account of the degree of warrant of a claim for a group of people, and only then can you construct an account of a claim’s being more, or less, warranted at a time. Years later I discovered that, long before, Russell had put his finger on the key point in Human Knowledge: Its Scope and Limits (1948). “In considering the reason for believing in any empirical statement, we cannot escape from perception with all its personal limitations,” he wrote; and “[i]ndividual percepts are the basis of all our knowledge, and no method exists by which we can begin with data which are public to many observers” — just exactly what I had spent too long figuring out for myself.

Now, however, I need to emphasize that, while for simplicity I have written as if specialization in philosophy and specialization in the sciences were two entirely different kettles of fish, a better statement would acknowledge that this is a matter of degree. After all, there is plenty of waste, banality, etc., in specialized scientific work; and some progress is occasionally made even in prematurely-specialized philosophical work. (Even a stopped clock is right twice a day!) But I don’t see how it could be denied that, though progress in the natural sciences is ragged, uneven, and unpredictable, and though the now-very-substantial body of well-warranted natural-scientific claims and theories is accompanied by a vastly larger trash-heap of discarded unsuccessful efforts, there is progress in the sciences. By contrast, in philosophy the prospects for this kind of real-though-ragged progress seem at present, as the saying goes, somewhere between slim and none.

3. The Causes of Fragmentation

If the current fragmentation of philosophy is as intellectually disastrous as I have claimed, then

---

118 Haack, Defending Science—Within Reason (note 4 above), chapter 3.
119 Bertrand Russell, Human Knowledge: Its Scope and Limits (New York: Simon and Schuster, 1948), p. 8. It is worth adding that Russell notes that we might look, here, to the law; which, as he observes, has long wrestled with some of the issues this raises about the appraisal of the worth of testimony.
there can’t be intellectually respectable reasons for the disintegration of our discipline into petty fiefdoms; in particular, the explanation can’t be that people realize that this or that important discovery has brought solutions to these and those more specific problems within reach, and so focus on solving them. In short, the explanation can’t be intellectual opportunity—philosophers’ fastening on promising ways to contribute to the growth of knowledge; it must be at least in part a matter of academic opportunism—philosophy professors’ fastening on promising ways to advance their careers.

The verbal shift in the last sentence, from “intellectual” to “academic,” suggests where to begin the explanation: with the professionalization of philosophy. The words “amateur” and “professional” are often used to contrast relatively less well-informed and skilled efforts in a field (the “amateurish”) with more skilled, sophisticated, and better-informed efforts (the “professional”); and it’s undeniable that skilled and well-informed efforts are, in general, more likely to be successful than unskilled and ill-informed ones. It doesn’t follow, however, that the professionalization of a field, in the purely sociological sense of its becoming a recognized profession with recognized training, qualifications, standards, etc., necessarily advances it; that requires, in addition, that the training, the qualifications, the standards, etc, be of the right kind.

For example, as Michael Polanyi pointed out many years ago, the scientific peer-review system will contribute to the advance of science only on the assumption that authors and referees (and, I would add, editors) are acting in good faith; while

[i]f each scientist set to work each morning with the intention of doing the best bit of safe charlatanry which would just help him into a good post, there would soon exist no effective standards by which such deception could be detected. ... Only if scientists remain loyal to scientific ideals rather than try to achieve success with their fellow scientists can they form a community which will uphold those ideals.\(^\text{120}\)

I really wish that, as I read this passage, I weren’t struck by how disturbingly close it comes to describing the situation in philosophy today ... .

An amateur, as the etymology of the word suggests, pursues his projects for the love of it; whereas the professional makes his living by pursuing them. This, of course, is why a career in
academia seems so attractive to the intellectually-inclined; what could be better, after all, than being paid to do what you love? And indeed, all would be well if professional success in the academy tracked real intellectual achievement, at least roughly. But the more success in a profession and real achievement come apart, the more the professionalization of a field will encourage the kind of professional opportunism I described earlier, and the more it will tend to impede progress rather than enable it. And while the correlation between academic success and real achievement in even the natural sciences is far from perfect—there is, in my opinion, too much emphasis on such unreliable surrogate measures as how much grant money someone brings in, how often they are cited, how “prestigious” the journals in which they publish are, etc.—the correlation between academic success and real achievement in philosophy is much, much further from perfect.

How did this happen? Why is the situation in philosophy so much worse? I can’t offer a full explanation—I’m not sure anyone could—but maybe I can identify at least some relevant factors. First: philosophers, like human beings generally, find it hard to resist acting so as to advance what Mill would call their interests “in the vulgar sense of the word”—the desire for prestige, status, worldly success, and, of course, money; and as it is presently organized our profession creates powerful perverse incentives— incentives, that is, not to be alert for and to seize opportunities to advance inquiry, but instead to be alert for and to seize opportunities to advance yourself. Second: once upon a time, philosophy professors felt affinity with others in the humanities; but, especially after “theorists” in literature departments began to flex their philosophical muscles, they began circling the wagons against these threatening outsiders. And again: once upon a time, philosophy professors were scholars learned in their field, and published

---


122 The temptations can be serious, subtle, and very hard to resist; think, for example, of the phenomenon of the dismissive endnote, seemingly an ever-commoner device for putting oneself front-and-center, and consigning those who made the key steps forward to a shadowy place where most readers won’t go. On this topic, see Mark Migotti, “Pragmatism, Genealogy, and Truth” (critical notice of Bernard
only when they believed they had discovered something or figured out something interesting; but, as the publish-or-perish ethos took hold, many soon came to believe that the only way to survive, let alone succeed, in their profession was to find some niche, some clique, some citation cartel, where—provided they used the right, i.e., the fashionable, jargon, and cited the right, i.e., the most influential, people—they could publish enough to get tenure, a raise, a promotion. Gradually and inexorably, philosophers’ work became narrower, their “little Creeks” smaller and shallower; and inevitably, also, those self-absorbed departments and self-absorbed cliques became the self-appointed judges of what work is good and what not, what topics worth pursuing and what not.\textsuperscript{123}

I really shouldn’t have been shocked—though, I admit, I was—when the young woman I mentioned at the beginning told me that her supervisor had advised her to “publish as much as possible as fast as possible”; nor that she had evidently realized that the easiest way to go about this was to concentrate her attention on a narrow seam of niche literature.

4. A Road to Reintegration

Am I suggesting, then, that every philosopher should aim to construct his or her own comprehensive world-view, or that everyone in philosophy should be a general practitioner, that no one should do specialized work? No. That, I’m afraid, would likely produce a vast quantity of pretentious, self-important rubbish,\textsuperscript{124} encourage dilettantes—Jacks of all trades and masters of none—and waste the talents of those who are strong in one area but flounder in others. So what am I suggesting? I don’t believe there’s any simple recipe; nor am I hopeful about the prospects for substantial improvement in the short term. I can only suggest some ideas about how best to

\textsuperscript{123} And matters are made still worse, of course, now that deans are usually professional administrators whose own intellectual ambitions have long ago been permanently shelved; and so are obliged to assess professors and departments by means of such very poor surrogate measures as the supposed “prestige” of journals in which someone publishes, or the amount of grant money he brings in. This is especially disastrous in philosophy, where Prof. Leiter’s ranking of departments—apparently an irresistibly lazy way of avoiding the need to make serious judgments of quality—is eroding the integrity of our discipline from the inside. All this is spelled out in “Out of Step” (note 8 above).

conceive our work and how best to go about it—a way that I have found fruitful, and that might, in the longer term, improve the prospects for reintegration, and for real progress.\textsuperscript{125}

I would urge, first, that philosophers and would-be philosophers heed Locke’s shrewd counsel: that, instead of reading only one kind of book and listening to only one kind of person, they “venture into the great Ocean of Knowledge”—that they read novels, newspapers, biographies, history books, journals beyond the very narrow scope of the Philosophers’ Index, philosophers long dead as well as their own contemporaries, etc., and that they listen to people in other areas in philosophy and in other disciplines and in other countries and, yes, outside the academy. (Now I’m remembering James’s splendid paper on the importance of individuals, where he quotes an extraordinarily shrewd remark due, as he says, to “an unlearned carpenter of [his] acquaintance”: “there is very little difference between one man and another; but what little there is, is very important.”)\textsuperscript{126}

Read, listen and, I would add, look around you, pay attention to what is before your eyes; never forget that philosophy, like physics or biology, is about the world, not just about our language or our concepts—\textsuperscript{127}and especially, not just about what another member of this or that little professional circle said last year. And cultivate your peripheral vision—as you work on one question, stay alert both to problems (e.g., what concepts seem thin or soggy, and how they might be improved, what aspects may be being oversimplified, and what continuities ignored) and, especially, to prospects (e.g., what other issues, perhaps in other areas, this work might contribute to). In my experience, working in philosophy really is like working on a huge crossword puzzle; and a robust solution to one question often provides a hook into another, just as filling in one entry provides a couple of letters that can help you complete others.

\textsuperscript{125} I don’t claim that this is the only way; which is why I have given this section a title somewhat more modest than the sub-title of the paper, “a road” not “the road.”

\textsuperscript{126} William James, “The Importance of Individuals” (1890), in James, The Will to Believe (note 000 above), 190-95. See also Susan Haack, “The Differences that Make a Difference: William James on the Importance of Individuals,” European Journal of Pragmatism and American Philosophy II, no.1 (2010): 1-10.

\textsuperscript{127} To say this, of course, is to repudiate the Central Dogma of analytic philosophy in its heyday. But that heyday is over, and that dogma has long been in trouble—as the popularity of the umpteen forms of “naturalized X” and “naturalized Y,” and the fad for experimental philosophy, testify.
Above all, perhaps, I would urge: be constructive, rather than simply ingenious. Try, not to come up with yet another wrinkle on a familiar idea, but actually to solve, or at least contribute to the solution of, problems that interest you. Maybe you will find it useful, as I have, to begin with an answer that seems undeniably true, but is unacceptably vague, and try gradually to refine it, without, in the process, making it false—keeping track of each step, so that you can retrace your path if you find you have gone astray.\textsuperscript{128} Remember Peirce’s observation about “cautious reflectiveness”: don’t be afraid to speculate, but don’t forget, either, that there is virtually no formulation of a philosophical idea that couldn’t be improved, or that a philosopher’s most essential equipment is his wastepaper basket.

“Pay attention to the world; be constructive.” Once again I’m echoing centuries-old advice, this time from Francis Bacon, who urged that philosophers emulate, not the ant, busily collecting and piling up material, and not the spider, busily spinning cobwebs out of its own substance, but the bee; because

... the bee takes a middle course; it gathers its materials from the flowers of the garden and of the field, but transforms and digests it by a power of its own. Not unlike this is the true business of philosophy ... .\textsuperscript{129}

If you really want to make progress, I would add, you will be wise to be leery of celebrities—and of celebrity. I mean, in part, that you should beware of deference to supposed “authorities” on a question (especially if their supposedly authoritative status derives from their institutional affiliation or their fancy title or the supposed “prestige” of the presses or journals with which they publish or their role in Prof. Leiter’s rankings); but also in part that, attractive as it might seem, the sort of cheap celebrity sometimes achieved in philosophy by the clever defense of outlandish claims or, these days, by self-advertisement in the blogosphere or even—heaven help us—on YouTube,\textsuperscript{130} is likely to make the mature reflection necessary for real progress

\textsuperscript{128} This is what I called, in Evidence and Inquiry (note 3 above), p. 118, “the method of successive approximation.”


\textsuperscript{130} In principle, the internet might have broadened philosophers’ horizons—and perhaps, in time, it will; but my suspicion is that, overall, thus far it has had the opposite effect: encouraging people (graduate students especially) to assume that only what they can readily find via the electronic
harder, not easier, to achieve. Now I’m echoing even older advice—from Roger Bacon, who writes that:

[t]here are four chief obstacles to grasping truth ...: namely, submission to faulty and unworthy authority, influence of custom, popular prejudice, and concealment of our own ignorance accompanied by ostentatious display of our knowledge.  

Let me be absolutely frank: serious philosophical work isn’t for the faint of heart. Like all serious intellectual endeavors, it carries inherent risks. You can spend a lot of time on something that doesn’t pan out as you hoped; and even if you succeed, you may be frustrated because someone else gets to print just before you. But then, as Holmes observes, “[n]o result is easy that is worth having.” If you can’t tolerate these risks—and can’t take comfort in the thought that, even if you fail, your unsuccessful efforts might in due course help someone else solve the problem you botched—then you’re in the wrong business.

But in the present academic environment, serious philosophical work also carries other, adventitious risks. For example, unless you conform, more or less, to the perverse incentives I described earlier, you will likely find it harder to publish, and harder, therefore, to get tenure, to get promoted, to get a raise—perhaps, as pressure mounts for even graduate students to publish, to get any kind of academic job in the first place. I don’t know what to say to someone who wonders whether they can, or should, tolerate this kind of risk for the sake of doing the work they care about. “My professional life hasn’t been exactly a bed of roses,” I might say; “that has been the price I’ve paid for keeping my independence, and for following my ideas where they lead.” But, I would have to add, I can’t predict whether our profession will get better, or worse, over the course of a budding philosopher’s working life (though I’d bet on its getting worse

Philosophers’ Index is worth reading, or that only the other subscribers to this or that electronic mailing list are worth listening to.

132 Or, I’m afraid, because someone gets to print after you but, being from a more “prestigious” department, or publishing in a more “prestigious” journal or with a more “prestigious” press, or simply being more in tune with his time, gets the credit you deserved.
134 To someone who actually relishes the idea of publishing as much as possible as fast as possible, running around to conferences making lots of “contacts,” and promoting their work on the internet, I would have say, “you are in the wrong business, too!”
before it gets better, if it does); and I wouldn’t presume to advise someone else whether, for
them, the rewards would be worth the price. That is just too personal a matter.

* But perhaps you were expecting that, in this last section, I would offer a synoptic, unified
philosophical picture. The best I have, however, falls well short of that—a partially-completed
crossword puzzle in which there are huge blank spaces, and all the entries that are completed are
only in pencil, many of them rubbed out and redone more than once. But I will sketch some key
ideas that—though none is perfectly formulated, and some, doubtless, will prove more robust than
others—seem, so far, both to be holding up in their own right, and to be interlocking as
philosophical ideas should.

I’ll start my list in metaphysics, with the Innocent Realist conception of the world.

• “Real” contrasts with “figment,” and means something like “independent of how anyone
or everyone believes (or wants, or fears) it to be.” There is one real world, extraordinarily
rich and various but, at the same time, unified—but not in the crude way reductionists
suppose. “Our” part of this world, the earth we humans inhabit, is only one small corner of
a vast universe, perhaps itself only one of many “multi-verses.” But in this small corner,
besides natural things, stuff, phenomena, events, kinds, and laws, there are our mental
states and processes; and natural reality is overlaid by a dense mesh of human creations,
physical and mental, intellectual and imaginative: physical artifacts: social institutions,
rules, norms, laws; and a wealth of both intellectual, and imaginative, artifacts—
languages, theories, ..., works of art, plays, poems, novels and other works of fiction and
the imagined characters, scenarios, etc., that they introduce.

I’ll turn next to our efforts to describe this multi-faceted world, and in particular to truth.

• There are many and various truths about this rich and varied world, in many different, and
not always mutually inter-translatable, vocabularies. Some of those truths are made true
by things people do, some make sense only relative to a place, a time, or a jurisdiction,
some are vague; but truth, the phenomenon, is not man-made, not relative, and not vague.
There are many truths, but only one truth: whatever a claim is about, what it means to say
that it is true is the same—that it is the claim that \( p \), and \( p \). That technology based on true
theories works is neither a mystery nor a miracle: the reason airplanes don’t burst at the
seams, for example, is that they are constructed on the basis of a theory to the effect that
these materials will withstand this pressure, and these materials will withstand this
pressure.

This leads to questions about the process of discovering truths about the world.
• Inquiry, investigation—figuring out how the world is—requires seeking out, and appraising the worth of, evidence. It is better-conducted the more thorough and well-informed the search for evidence, and the more honest and well-informed its appraisal. Intellectual integrity crucially involves a willingness to go where the evidence leads; and other epistemic virtues, similarly, are evidence-related.

So we need a good, detailed, plausible understanding of what evidence is, and what makes it better or worse.

• The evidence with respect to the truth of a belief, claim, or theory involves both experience and (presumed) background information, and has the ramifying structure of a crossword puzzle. How warranted a claim is depends on how well it is supported by experience and other presumed background information—a matter, briefly and roughly, of the explanatory integration of evidence and claim; on how secure that presumed background information is, independent of the claim in question; and on how much of the relevant evidence the evidence includes.

This raises questions about the way(s), if any, in which scientific inquiry is distinctive.

• Inquiry in the sciences, like everyday empirical inquiry, involves making a conjecture that would explain something puzzling, figuring out its consequences, checking how well those consequences stand up to the evidence you have or can lay hands on, and then using your judgment whether to stick with the conjecture, modify it, suspend judgment until you can get more evidence, or dump that conjecture and start again with a new one. But over centuries of work, scientists have devised a vast array of specialized tools and techniques to strengthen the imagination, extend evidential reach, and stiffen respect for evidence: models and metaphors, instruments of observation, mathematical and statistical techniques, computers and computer programs, social mechanisms to encourage creativity and discourage dishonesty, ..., etc.

Does this, you may wonder, go for social-scientific inquiry too?

• Social-scientific inquiry uses (mostly) different specialized tools and techniques from those used in the natural sciences; and it seeks intentional, rather than physical, explanations. Moreover, social institutions, roles, rules, etc., the objects of social-scientific explanations, are real, all right, but also socially constructed—i.e., though independent of what you or I or any individual believes about them, they depend in part on what people in the society concerned believe about them.

What, you might wonder now, is it about human beings that makes us able, fumblingly and fallibly to be sure, to figure out something of how the world is?
Like all empirical inquiry, scientific inquiry is possible only because (i) there are real kinds and laws in the world, and (ii) we humans are able to perceive things and events around us, make generalized conjectures about what might explain what we see, etc., and then check these consequences against further experience.

And how do we humans come to have these capacities?

- Our senses are part of our biological inheritance. But our distinctively human cognitive capacities, innate in potential, develop by means of our interactions with others, specifically our linguistic (or other semiotic) interactions. Beliefs, for example, are dispositions to behavior, verbal and non-verbal: dispositions that are neurophysiologically realized, but that get their content, not from their neurophysiological characteristics, but from their relation to things and events in the world and to words in a person’s language and the relation of those words to these things and events.

This raises another kind of question, about the character of language.

- A natural language—probably best construed as a loose federation of similar-enough idiolects—is constantly evolving, with words gaining new meaning as our knowledge grows; and this growth of meaning in turn contributes to the growth of knowledge as, for example, the sciences gradually work towards a vocabulary that better corresponds to real kinds of thing and stuff in the world. This in part explains the failure of formal-logical models of scientific reasoning.

This also in part explains the failure of formal-logical models of legal reasoning.

- Legal concepts, like scientific concepts, shift and change—in this case, however, not so as better to represent kinds in the world, but so as better to accommodate changing social institutions, technologies, values, etc. And legal systems, like legal concepts, shift, change, adapt; and are sometimes transplanted from one part of the world to another and then adapt and evolve in their new niche.

This, together with the ideas about truth summarized earlier, resolves some puzzles about truth in the law.

- Legal truths, i.e., truths about what the law is, are a sub-class of social-scientific truths, specifically, truths about (a sub-class of) the norms of a society. Such truths are local to a jurisdiction and a time, and they are made true by things that people do; but what it means to say, e.g., that it is true that in 2013 Florida shifted from the Frye standard for the admissibility of scientific evidence to the Daubert standard is, simply, that in 2013 Florida did shift from Frye to Daubert.
Moreover, an adequate conception of the structure of evidence and the determinants of evidential quality can resolve some evidentiary issues with which the law has wrestled. I’ll remind you of two examples already mentioned briefly.

- Legal degrees and standards of proof are best construed as degrees of warrant, not as mathematical probabilities (the two have demonstrably different logical structures). This shed light on, e.g., why evidence of more than doubled risk among those exposed to a substance is neither necessary nor sufficient to prove causation “by a preponderance of the evidence.”

- If (i) it enhances supportiveness, and/or (ii) it enhances the independent security of positive reasons or lowers the independent security of negative ones, and/or (iii) increases comprehensiveness without lowering supportiveness, a combination of pieces of evidence none of which would be sufficient by itself to establish a factual claim to the required degree of proof, may do so jointly.

These last examples illustrate both something of how constructive philosophical work can be useful to neighboring fields, and something of how figuring out how to apply such work in other fields can enable further articulation of a philosophical theory—as I found as I put my epistemological ideas to work on questions about the legal concept of proof.

***

Innocent Realism, Laconicism, Foundherentism, Critical Common-sensism, the growth of meaning, the limits of formalism in science and in law, ..., etc. Of course, this is only a sketch, and a very sketchy one at that. But I dare to hope that, somewhere in this body of work, there is something, maybe more than one something, that will enable others to make progress.135

---

135 My thanks to Mark Migotti for very helpful comments on a draft and Claus Emmeche for helpful correspondence.