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The Pragmatist Enlightenment
(and its Problematic Semantics)

I. A Second Enlightenment

Classical American pragmatism can be viewed as a minor, parochial philosophical movement that was theoretically derivative and practically and politically inconsequential. From this point of view—roughly that of Russell and Heidegger (Mandarins speaking for two quite different philosophical cultures)—it is an American echo, in the last part of the nineteenth century, of the British utilitarianism of the first part. What is echoed is a crass shopkeeper’s sensibility that sees everything through the reductive lenses of comparative profit and loss. Bentham and Mill had sought a secular basis for moral, political, and social theory in the bluff bourgeois bookkeeping habits of the competitive egoist, for whom the form of a reason for action is an answer to the question “What’s in it for me?”. James and Dewey then show up as adopting this conception of a practical reason and extending it to the theoretical sphere of epistemology, semantics, and the philosophy of mind. Rationality in general appears as instrumental intelligence: a generalized capacity for getting what one wants. From this point of view, the truth is what works; knowledge is a species of the useful; mind and

language are tools. The instinctive materialism and anti-intellectualism of uncultivated common sense is given refined expression in the form of a philosophical theory.

The utilitarian project of founding morality on instrumental reason is notoriously subject to serious objections, both in principle and in practice. But it is rightfully seen as the progenitor of contemporary rational choice theory, which required only the development of the powerful mathematical tools of modern decision theory and game theory to emerge (for better or worse) as a dominant conceptual framework in the social sciences. Nothing comparable can be said about the subsequent influence of the pragmatists' extension of instrumentalism to the theoretical realm. In American philosophy, the heyday of Dewey quickly gave way to the heyday of Carnap, and the analytic philosophy to which Carnap's logical empiricism gave birth supplanted and largely swept away its predecessor. Although pragmatism has some prominent contemporary heirs and advocates—most notably, perhaps, Richard Rorty and Hilary Putnam—there are not many contemporary American philosophers working on the central topics of truth, meaning, and knowledge who would cite pragmatism as a central influence in their thinking.

But classical American pragmatism can also be seen differently, as a movement of world historical significance—as the announcement, commencement, and first formulation of the fighting faith of a second Enlightenment. For the pragmatists, like their Enlightenment predecessors, reason is the sovereign force in human life. And for the later philosophes, as for the earlier, reason in that capacity is to be understood on the

model provided by the forms of understanding distinctive of the natural sciences. But the sciences of the late nineteenth century, from which the pragmatists took their cue, were very different from those that animated the first enlightenment. The philosophical picture that emerged of the rational creatures who pursue and develop that sort of understanding of their surroundings was accordingly also different.

Understanding and explanation are coordinate concepts. Explanation is a kind of *saying*: making claims that render something intelligible. It is a way of engendering understanding by essentially discursive means. There are, of course, different literary approaches to the problem of achieving this end, different strategies for doing so. But there are also different operative conceptions of what counts as doing it—that is, of what one needs to do to have done it. It is a change of the latter sort (bringing in its train, of course, a change of the former sort) that the pragmatists pursue. For the original Enlightenment, explaining a phenomenon (occurrence, state of affairs, process) is showing why what *actually* happened *had* to happen that way, why what is actual is (at least conditionally) *necessary*. By contrast, for the new pragmatist enlightenment, it is possible to explain what remains, and is acknowledged as, *contingent*. Understanding whose paradigm is Newton's physics consists of universal, necessary, eternal principles, expressed in the abstract, impersonal language of pure mathematics. Understanding whose paradigm is Darwin's biology is a concrete, situated narrative of local, contingent, mutable practical reciprocal accommodations of particular creatures and habitats. Again, the nineteenth century was "the statistical century", which saw the advent of new forms of explanation in natural and social sciences. In place of deducing what happens from

exceptionless laws, it puts a form of intelligibility that consists in showing what made the events *probable*. Accounts in terms both of natural selection and of statistical likelihood show how observed order can arise, contingently, but explicably, out of chaos—as the cumulative diachronic and synchronic result respectively of individually random occurrences.

The mathematical laws articulating the basic order of the universe were for enlightened thinkers of the seventeenth and eighteenth century the ultimate given, the foundational unexplainable explainers—structural features of things so basic that this explanatory residue might even (as it did for the transitionally post-religious Deists) require and so justify a final, minimal, carefully circumscribed, nostalgic appeal to the Creator. Charles Sanders Peirce, the founding genius of American pragmatism, elaborated from the new selectional and statistical forms of scientific theory a philosophical vision that sees even the laws of physics as contingently emerging by selectional processes from primordial indeterminateness. They are *adaptational habits*, each of which is in a statistical sense relatively stable and robust in the environment provided by the rest. The old forms of scientific explanation then appear as special, limiting cases of the new. The now restricted validity of appeal to laws and universal principles is explicable against the wider background provided by the new scientific paradigms of how regularity can arise out of and be sustained by variability. The “calm realm of laws” of the first enlightenment becomes for the second a dynamic population of habits, winnowed from a larger one, which has so far escaped extinction by maintaining a more or less fragile collective self-reproductive equilibrium. It is not just that we cannot be sure that we

have got the principles right. For the correct principles and laws may themselves change. The pragmatists endorse a kind of *ontological fallibilism* or *mutabilism*. Since laws emerge only statistically, they may change. No Darwinian adaptation is final, for the environment it is adapting to may change—indeed *must* eventually change, in response to *other* Darwinian adaptations. And the relatively settled, fixed properties of things, their *habits*, as Peirce and Dewey would say, are themselves to be understood as such adaptations. The pragmatists were naturalists, but they saw themselves confronting a new sort of nature, a nature that is fluid, stochastic, with regularities the statistical product of many particular contingent interactions between things and their ever-changing environments, hence emergent and potentially evanescent, floating statistically on a sea of chaos.

The science to which this later enlightenment looked for its inspiration had changed since that of the earlier in more than just the conceptual resources that it offered to its philosophical interpreters and admirers. In the seventeenth and eighteenth centuries, the impact of science was still largely a matter of its *theories*. Its devotees dreamed of, predicted, and planned for great social and political transformations that they saw the insights of the new science as prefiguring and preparing. But during this period those new ways of thinking were largely devoid of practical consequences. They were manifestations, rather than motors, of the rising tide of modernity. By the middle of the nineteenth century, though, technology, the practical arm of science, had changed the world radically and irrevocably through the Industrial Revolution. From the vantage point of established industrial capitalism, science appeared as the most spectacularly

successful social institution of the previous two hundred years because it had become not only a *practice*, but a *business*. Its practical successes paraded as the warrant of its claims to theoretical insight. Technology *embodies* understanding. The more general philosophical lessons the pragmatists drew from science for an understanding of the nature of reason and its central role in human life accordingly sought to comprehend intellectual understanding as an aspect of effective agency, to situate knowing *that* (some claim is true) in the larger field of knowing *how* (to do something). The sort of explicit reason that can be codified in principles appears as just one, often dispensable, expression of the sort of implicit intelligence that can be exhibited in skillful, because experienced, practice—flexible, adaptable habit that has emerged in a particular environment, by selection via a learning process.

Like their Enlightenment ancestors, the pragmatists were not only resolutely naturalist in their ontology, but also broadly empiricist in their epistemology. For both groups, science is the measure of all things—of those that are, that they are, and of those that are not, that they are not. And for both, science is not just *one* sort, but the very form of knowing: what it knows not, is not knowledge. But in place of the atomistic sensationalist empiricism of the older scientism (which was later rescued and resuscitated by the application of powerful modern mathematical and logical techniques, to yield twentieth century logical empiricism) the pragmatists substituted a more holistic, less reductive, practical empiricism. Both varieties give pride of place to experience in explaining the content and rationality of knowledge and agency. But their

understandings of that concept are very different, corresponding to the different characters of the science of their times.

The older empiricism thought of the unit of experience as self-contained, self-intimating events: episodes that constitute knowings just in virtue of their brute occurrence. These primordial acts of awareness are then taken to be available to provide the raw materials that make any sort of learning possible (paradigmatically, by association and abstraction). By contrast to this notion of experience as *Erlebnis*, the pragmatists (having learned the lesson from Hegel) conceive experience as *Erfahrung*. For them the unit of experience is a Test-Operate-Test-Exit cycle of perception, action, and further perception of the results of the action. On this model, experience is not an *input* to the process of learning. Experience *is* the process of learning: the statistical emergence by selection of behavioral variants that survive and become habits insofar as they are, in company with their fellows, adaptive in the environments in which they are successively and successfully exercised. (This is the sense of 'experience', as Dewey says, in which the job ad specifies "Three years of experience necessary.") The rationality of science is best epitomized not in the occasion of the theorist's sudden intellectual glimpse of some aspect of the true structure of reality, but in the process by which the skilled practitioner coaxes usable observations by experimental intervention, crafts theories by inferential postulation and extrapolation, and dynamically works out a more or less stable but always evolving accommodation between the provisional results of those two enterprises. The distinctive pragmatist shift in imagery for the mind is not from mirror to lamp, but from telescope and microscope to flywheel governor.

These new forms of naturalism and empiricism, updated so as to be responsive to the changed character and circumstances of nineteenth century science, meshed with each other far better than their predecessors had. Early modern philosophers notoriously had trouble fitting human knowledge and agency into its mechanist, materialist version of the natural world. A Cartesian chasm opened up between the activity of the theorist, whose understanding consists in the manipulation of algebraic symbolic representings, and what is thereby understood: the extended, geometrical world represented by those symbols. Understanding, discovering, and acting on principles exhibited for them one sort of intelligibility, matter moving according to eternal, ineluctable laws another.

On the pragmatist understanding, however, knower and known are alike explicable by appeal to the same general mechanisms that bring order out of chaos, settled habit from random variation: the statistical selective structure shared by processes of evolution and of learning. That structure ties together all the members of a great continuum of being stretching from the processes by which physical regularities emerge, through those by which the organic evolves locally and temporarily stable forms, through the learning processes by which the animate acquire locally and temporarily adaptive habits, to the intelligence of the untutored common sense of ordinary language users, and ultimately to the methodology of the scientific theorist—which is just the explicit, systematic refinement of the implicit, unsystematic but nonetheless intelligent procedures characteristic of everyday practical life. For the first time, the rational practices embodying the paradigmatic sort of reason exercised by scientists understanding natural

processes become visible as continuous with, and intelligible in just the same terms as, the physical processes paradigmatic of what is understood. This unified vision stands at the center of the pragmatists' second enlightenment.

A number of these master ideas of classical American pragmatism evidently echo themes introduced and pursued by earlier romantic critics of the first enlightenment. Pragmatism and romanticism both reject spectator theories of knowledge, according to which the mind knows best when it interferes least and is most passive, merely reflecting the real. Knowledge is seen rather as an aspect of agency, a kind of doing. Making, not finding, is the genus of human involvement with the world. They share a suspicion of laws, formulae, and deduction. Abstract principle is hollow unless rooted in and expressive of concrete practice. Reality is revealed in the first instance by lived experience, in the life world. Scientific practice and the theories it produces cannot be understood apart from their relation to their origin in the skillful attunements of everyday life. Pragmatists and romantics accordingly agree in rejecting universality as a hallmark of understanding. Essential features of our basic, local, temporary, contextualized cognitive engagements with things are leached out in their occasional universalized products. Both see necessity as exceptional, and as intelligible only against the background of the massive contingency of human life. Both emphasize biology over physics, and see in the concept of the organic conceptual resources to heal the dualistic wound inflicted by the heedless use of an over-sharp distinction between mind and world. Where the European enlightenment had seen the "natural light of reason" as *universal* in the sense of *shared*, or *common*, so that what one disinterested, selfless scientist could add as a brick to the

edifice of knowledge, another could in principle do as well, the pragmatists, looking at the division of labor in what had become a modern industrial economy saw the enterprise of reason as *social* in a more genuine, articulated, *ecological* sense, in which the contributions of individuals are not interchangeable or fungible, but each has potentially a unique contribution to make to the common enterprise, which requires many different sorts of skills, responses, ideas, and assessments, which all collectively serve as the environment in which each adapts and evolves. Here too they made some common cause with the romantics on some general issues, while offering their own distinctive blend of rationalism, naturalism, and Darwinian-statistical scientism as a way of filling in those approaches.

Nonetheless, pragmatism is not a kind of romanticism. Though the two movements of thought share an antipathy to Enlightenment intellectualism, pragmatism does not recoil into the rejection of reason, into the privileging of feeling over thought, intuition over experience, or of art over science. Pragmatism offers a conception of reason that is practical rather than intellectual, expressed in intelligent doings rather than abstract sayings. Flexibility and adaptability are its hallmarks, rather than mastery of unchanging universal principles. It is the reason of Odysseus rather than Plato. But both are thought of as part of the natural world—in the sense in which natural science is acknowledged to have final authority over claims about nature. The pragmatists are also materialists—though theirs is Darwinian, rather than Newtonian materialism. Evolutionary natural history aside, the biology that inspires them is the result of the shift of attention (largely effected in Germany in the first half of the nineteenth century) from anatomy to

physiology, from structure to function. The climate of German romanticism may have provided an encouraging environment for this development, but the vitalistic biology that provided their organic metaphors was only a by-then-embarrassing, prescientific precursor of the recognizably modern sort of biology pursued in the German laboratories in which William James trained.

In fact, Romanticism had almost no direct influence on American pragmatism—another point of contrast with the various forms of nineteenth century materialism in Europe. There was an indirect influence, through Hegel’s idealism (which was particularly important for Peirce and Dewey)—but Hegel’s rationalism mattered as much for them as his romanticism. The Transcendentalism of Emerson is another conduit for idiosyncratically filtered and transfigured romantic ideas. It was pervasive, though perhaps not dominant, in the Boston milieu in which Charles Peirce, William James, and Oliver Wendell Holmes Jr. (who was a pragmatist, even though he disavowed the label because he associated it with James’s “sentimental” attempt to find a place for religion in the modern world-view) were first acculturated, and it clearly affected their thought in complex ways. But the pragmatists thought of themselves as continuing the Enlightenment philosophical tradition of Descartes, Locke, Hume, and Kant—all of whom thought that being a philosopher meant being a philosopher of *science*, understanding above all what the new science had to teach us not only about the world, but about us knowers of it and agents in it. The advances of nineteenth century science were to provide the corrective needed to remedy the conceptual pathologies to which the giants of the Enlightenment had fallen prey. Those advances, properly understood,

would make it possible to reconcile its central rationalist and materialist impulses in an irenic empiricist naturalism. Although pursuing some elements of the anti-Enlightenment agenda of Romanticism by quite other means, the pragmatists always thought of themselves as offering friendly amendments in support of the basic philosophical mission of rethinking inherited ideas of rationality, understanding, agency, and self, in the light of the very best contemporary scientific understanding of the natural world.

II. Pragmatist Semantics

Pragmatism was a distinctively American movement of thought in ways far more important than its immunity to romantic impulses, however. We have recently been taught just how much it owes to the peculiarities of its native cultural and historical soil by a magnificent book: Louis Menand's *The Metaphysical Club: A Story of Ideas in America*.¹ The pragmatists themselves tended to situate and motivate their views by reference to the specifically philosophical tradition. They were, after all (with the exception of Holmes), at least at some point in their careers, professional philosophers. (In Peirce's case, a chronically *unemployed* professional philosopher—but the point remains.) Their interpreters, also professional philosophers, have generally followed them in this practice. Menand's great achievement is to widen the cultural focus and increase the depth of field of the scene in which they show up for us.

The context Menand provides extends far beyond the sort of philosophical and scientific considerations sketched by way of introduction above. He shows how much more there is to the history of ideas than just their intellectual history. The rise of mass democracy, the ascendancy of industrial capitalism, the institutional professionalization of university education and the high culture more generally, and the decentralization and shift of the cultural center of gravity of the country away from its original seat in Boston are all shown so to shape the development of pragmatism as to stamp it indelibly as a specifically American phenomenon. Menand deftly portrays the relations between these

grand historical forces and the particularities, peculiarities, and personalities of the idea-empowered pragmatists who are his heroes. A principal limb of his argument concerns the significance of the experience of the Civil War on the birth and growth of pragmatism.

Northern politics before the war was driven by the disagreement between Abolitionists and Unionists. Abolitionists saw slavery in terms of absolute moral principles: slavery was evil, and so the country had to pay whatever price was required to eliminate it—including, if necessary, splitting the South off so as to keep the Union pure. The Unionists, by contrast, acknowledged slavery as an evil, but urged that means be found to eliminate it more gradually, over a period of decades, so as to acknowledge the economic and cultural interests of white Southerners, and keep the Union whole. The South's secession rendered the Unionists' arguments moot, by uniting both parties as patriots of the Union. The attack on Fort Sumter made unavoidable a war that the bulk of the Abolitionists, no less than the Unionists, had neither anticipated nor desired. The horrific violence that ensued changed forever the thinking of the young generation of Harvard men who went off idealistically to fight. Holmes, who had been a staunch Abolitionist, was severely wounded more than once. James was not a combatant, but two of his younger brothers were, and one was seriously wounded. Peirce, like the others, had friends and classmates maimed and killed.

¹ Farrar, Strauss, and Giroux, New York, 2001.

They saw the Civil War as above all a colossal failure of American democracy. The democratic institutions on which we pride ourselves had proven themselves incapable of dealing with the high stakes moral and economic issue of slavery. Politically unresolvable disputes degenerated into military conflict. Holmes, closest to the fighting, was also the most explicit about the lessons he drew from his experience, and about their effect on the lifelong course of his thought. As Menand puts it: “The lesson Holmes took home from the war can be put in a sentence. It is that certitude leads to violence” [61]. But Menand also makes a persuasive case that roughly the same dynamic moved the other founder members of the Metaphysical Club to draw the same general conclusion. What had choked democracy was inflexible, uncompromising commitment to principles. What was needed was a different attitude toward our beliefs: a less ideologically confident, more tentative and critical attitude, one that would treat them as the always provisional results of inquiry to date, subject to experimental test and revision in the light of new evidence and experience, as permanently liable to obsolescence due to altered circumstances, shifting contexts, or changes of interest. Though the point is not put this way in the book, we are to see the American Civil War as playing a role in shaping the pragmatist enlightenment comparable to that played by the wars of religion for the earlier European enlightenment.

Menand makes a cumulatively plausible case for how the climate of ideas in which pragmatism arose was shaped by the experience of passionate political convictions overwhelming democratic institutions and leading with seeming inevitability to the sort of senseless slaughter Holmes experienced (and happened to survive) at Ball’s Bluff,

Antietam, and the Bloody Angle of Spotsylvania. But he is not very clear about just what sort of connection he envisages between this historical impetus and the contents of the philosophical theories the pragmatists came to hold. A number of issues need to be separated. For it could be that while pragmatism would not have arisen without the influence of the war, that merely necessary condition is of little help in understanding the thought to which it gave rise. After all, one of the crucial material conditions that made possible jazz—another distinctively American cultural phenomenon—was the flood of cheap, war surplus trumpets and military band instruments left over from the same war. But knowing that won't tell one much about what makes the music special.

To begin with, the view that immediately emerges from consideration of the failure of antebellum (more or less) democratic political practices concerns *how one holds* basic, action-orienting beliefs. What rules out compromise, accommodation, and reciprocal adaptation is the sort of unshakeable conviction that brooks no opposition, admits no qualification, ignores the possibility or significance of collision with other important principles, and is reckless of the practical consequences of its absolutism for the possibly worthy aims of others and the stability of the framework institutions of the community. But the pragmatists didn't just draw conclusions about the act of *believing*—roughly, that fallibilism is a better attitude than fanaticism. The centerpiece of their philosophical theory was an account of the *contents* that are *believed* or *believable*. To squeeze the most explanatory juice out of Menand's fascinating and instructive story, we need to know something about how an understanding of the act or attitude of believing might be

thought to connect with and inform an understanding of the contents of those acts or attitudes.

Again, even at the level of how beliefs should be held, the immediate lesson seems to concern *political* beliefs: the ones we use to orient our *practical* undertakings, in particular those that involve *cooperation* or decisions about what *we* all shall do. It is not obvious that considerations bearing on our assessment of admissible, desirable, or defensible features of such practical political commitments carry over to apply as well to theoretical and doxastic commitments—from claims about what *we should do* to claims about how *things are* in the natural world.

If, as Menand persuasively argues, the pragmatists' ideas were in fact motivated by the spectacle of abstract, absolute political principles proving indigestible by democratic institutions and leading to the most violent sort of conflict resolution imaginable, aren't they guilty of illegitimately extending a lesson appropriate to the practical sphere of deciding what we ought to do, to the theoretical sphere of deciding what beliefs are true? Here is a way one might think about such a move. In the practical sphere of morality, the European Enlightenment had taught us that we need not think of our moral principles as deriving their authority from their conformity to (mirroring of) an antecedent, eternal, non-human ontological (theological) reality. We could and should instead think of them as products of our own rational activity—as something for which we must ourselves ultimately take responsibility. As Kant put the point in "What is Enlightenment?", it is by acknowledging that responsibility that humanity passes from its age of self-imposed

tutelage by paternal authority into the autonomous maturity of its adulthood. A second enlightenment might then repeat that lesson, only now on the theoretical side. Doing that would be seeing norms for belief, no less than for action, as our doing and our responsibility, as not needing to reflect the authority of an alien, non-human Reality, which comes to seem as mythical, dispensable, and ultimately juvenile a conception as Old Nobodaddy came to seem to the *érudits*. Richard Rorty, inspired by Dewey and James, has been urging just such a conception of what would be required to finish the work of the first enlightenment.² He argues that the move from thinking of moral norms in terms of divine commandments to thinking of them in terms of social compacts should be followed by one from thinking of the truth of belief in terms of correspondence with reality to thinking of it in terms of agreement with our fellows.

Such a conception is vulnerable to the charge that in so assimilating the theoretical to the practical, the distinction between intentions and beliefs is being elided. Intentions have a world-to-mind direction of fit: the aim is for the world to conform to our attitudes.

Beliefs have a mind-to-world direction of fit: the aim is for our attitudes to conform to the world. In her classic work *Intention*³, Anscombe illustrates the difference with a parable of a man shopping from a list, followed by a detective assigned to write on his own list everything the man buys. The two lists exhibit the two different directions of fit. If what is bought doesn't match what is on the lists, in the first case the error lies in what is bought, and in the second it lies in what is written (cf. lamp shadows and mirror reflections). The first enlightenment can then be seen as liberating us from inappropriate

² See Rorty's essay "Universality and Truth", Chapter One of *Rorty and His Critics*, Robert B. Brandom (ed.) [Blackwell Publishers, 2000].

use of a theoretical, spectatorial model of the practical—as though our reasoning about what we ought to do should, like our reasoning about how we ought to believe things are, reflects an antecedent reality whose authority settles its correctness. The old picture used the wrong direction of fit for practical matters. But surely it would be a misunderstanding of this lesson simply to turn the old picture on its head by treating the theoretical as though it had the direction of fit, and so the structure of authority and responsibility, appropriate to the practical.

But the pragmatists don't do that. They reject the dualism of a practical sphere with just one direction of fit and theoretical sphere with just the complementary one. They start with the idea of a cyclical process of intervening and learning, of perception of an initial situation, action in it, and perception of the result, leading to new action (including the tweaking both of means and goals), with the loop repeated until it converges or is abandoned. This is what they call 'experience'. Talk of belief and intention makes sense for them only as the abstraction of phases or aspects from such a process. Our beliefs have practical consequences and our intentions have theoretical conditions. In the undertaking of actual inquiries and practical projects one does not find one direction of fit without the other. At this level, the pragmatists are not modeling the theoretical on the practical as the tradition had conceived those categories, but reconceptualizing both in terms of ecological-adaptational processes of interaction of organism and environment of the sort epitomized by evolution and learning.

³ G.E.M. Anscombe [Cornell University Press, 1957. Reprinted by Harvard University Press, 2000].

What about the other charge, that the pragmatists slide from a view about *how* beliefs should be held (tentatively, provisionally, negotiably) to a view about *what* beliefs are (something like practical coping strategies)—from an insight into the attitude of *believing* to a claim about the contents *believed*? Once again the pragmatists (in keeping with the Hegelian roots of Peirce's and Dewey's thought) seek to reconceptualize belief and meaning so as to resist a dualism of force and content, doing and thought, pragmatics and semantics. Their strategy may be thought of as coming in two pieces. First, believing or knowing *that* things are thus and so (the category of explicit, statable, theoretical attitudes characteristic of us) is to be understood in terms of skillful knowing *how* to do something (the category of implicit, enactable, practical capacities characteristic of our intelligent but not rational mammalian cousins and ancestors). Their question is what you have to be able to *do* in order to count as having conceptually contentful beliefs. And their answer will look to the role of those beliefs in practical reasoning, to their capacity to serve as reasons for action. For their second move is to offer a kind of *functionalism* about the propositional contents of beliefs, an account of *meaning* in terms of *use*. The contents of beliefs and the meanings of sentences are to be understood in terms of the roles they play in processes of intelligent reciprocal adaptation of organism and environment in which inquiry and goal-pursuit are inextricably intertwined aspects. Functionalist (and most recently, teleosemantic) strategies in the philosophy of mind dominate the second half of the twentieth century. But the pragmatists deserve to be thought of as having pioneered them.

If that is not generally recognized, it is in part because the pragmatists did not achieve the sort of clarity of methodological self-consciousness that would have allowed them to separate the general strategy of functionalism about the relations between pragmatics and semantics (what is done with words and what they mean, or the role of beliefs in the behavioral economies of believers and the contents of those beliefs) from the specific conceptual tactics they employed to pursue that strategy. And there are some real problems with their ideas at this more specific level. For they offer an *instrumentalist* semantics, understanding content in terms of *success* conditions rather than *truth* conditions. This is not a silly idea. But after a century of intensive subsequent work in philosophical semantics, we are in a position to be much clearer about the criteria of adequacy such accounts must answer to, and some of the sorts of ways they can go wrong. From this contemporary vantage point, we can see that the pragmatists' instrumentalist program involves four distinct mistakes.

First, in thinking about the functional role of belief in reciprocal interactions and attunements between believers and their environments, the pragmatists look only *downstream*, to the practical *consequences* of beliefs. That is to say that they look only at the role of beliefs as *premises* in practical inferences. They don't also look *upstream*, to the *antecedents* of belief, to their role as *conclusions* of inferences, or as the results of other processes of belief formation. In this regard, they simply invert the exclusive emphasis on the origin of belief in experience characteristic of the semantics of traditional empiricism. But each of these one-sided approaches to semantics leaves out the crucial complementary aspect of the functional role of beliefs. For whether one

thinks of the role of belief as a node in a network of matter-of-factual *causal* relations, or of normative *inferential* ones—corresponding to two flavors of functionalism—one must look *both* to antecedents *and* to consequences.

The meaning conferred on an expression by its role in a language game can be identified with the pair of its circumstances of appropriate application, specifying when it is properly uttered, and its appropriate consequences of application, specifying what properly follows from its utterance.⁴ Neither one by itself will do, for sentences can have the same circumstances of application and different consequences of application, or the same consequences of application and different circumstances of application. In either case they will have different meanings. As an example of the first kind, we could regiment the use of ‘foresee’ so that the sentence “I foresee that I will write a book about Hegel,” is appropriately asserted (the belief it expresses appropriately acquired) in just the same circumstances as “I will write a book about Hegel.” But they have different meanings, for different things follow from them, as is clear if we think about the very different status of the two conditionals “If I will write a book about Hegel, then I will write a book about Hegel,” and “If I foresee that I will write a book about Hegel, then I will write a book about Hegel.” The first, stuttering, inference is as secure as could well be. The truth of the second depends on how good I am at foreseeing (and whether I am hit by a bus). To see the second point, notice that one could know what follows from the claim that someone is responsible for an action, or that the action is immoral or sinful, without for that reason counting as understanding the claims or concepts in question

⁴ I discuss this way of thinking about semantics further in Chapter One of *Articulating Reasons* [Harvard University Press, 2000].

(grasping the meaning of the words), if one knew nothing at all about the circumstances in which it was appropriate to make those claims or apply those concepts. Empiricist, verificationist, reliabilist, and assertibilist semantic theories are defective because they ignore the consequences of application of expressions in favor of their circumstances of application. Pragmatist semantic theories are defective because they make the complementary mistake of ignoring the circumstances in favor of the consequences. In fact, both aspects are essential to meaning.

The second mistake the pragmatists make is to look only at the role of beliefs in justifying or producing *actions*. But their role in justifying or producing further *beliefs* is equally important in articulating their content, and there is no good reason to think that the latter can be reduced to or fully explained in terms of the former. Trying to define the contents of internal states just in terms of relations to *outputs* (even—taking on board the previous point—in terms of outputs and inputs) to the system is a broadly *behaviorist* strategy. And one of the things we have learned by chewing these things over in the last forty years or so is that taking into account also the relations of internal states to each other yields a much more powerful and plausible account. This is precisely the surplus explanatory value of functionalism over behaviorism in the philosophy of mind. Though the general considerations that motivate the pragmatists approach are recognizably functionalist, when it came to working out their ideas, the pragmatists did so in behaviorist terms because the various distinctions and considerations in the vicinity had not yet been sorted out.

Even if these two difficulties with the pragmatists' instrumentalist semantics are put aside, they face a third. For in seeking to move from (the success or failure of) *actions* to the contents of *beliefs*, they were ignoring the necessary third component in the equation: *desires, preferences, goals, or norms*. Your action of closing your umbrella underwrites the attribution of a belief that it has stopped raining only against the background of the assumption that you desire to stay dry. If instead you have the Gene Kelly desire to sing and dance in the rain, the significance of that action for a characterization of the content of your belief will be quite different. And the point is fully general. What actions beliefs rationalize or produce depends on what desires, aims, or pro-attitudes they are conjoined with.⁵ The conditions of the success of our actions depend on what we want just as much as they do on what we believe. Contemporary rational choice theory incorporates this insight. Coupling this fundamental observation with the insight that the semantic contents of beliefs and desires are also and equally up for grabs (contrary to the rational choice approach, which takes these for granted as inputs to its process) leads Donald Davidson to his sophisticated interpretivist successor to narrowly pragmatist approaches to semantics. It is clear in retrospect that without some such structural emendation, the pragmatist strategy cannot work.

The fourth problem is intimately connected with the third. For although the pragmatists failed to appreciate the significance of the fact that desires can vary independently of beliefs, they did not simply ignore desires. Rather, they equated the success of actions

⁵ In Chapter Two of *Articulating Reasons*, I argue for an inferential construal of the expressive role of statements of preference or pro-attitude, and of normative vocabulary generally. But this reconstrual does not affect the point that there is a further element in play, besides beliefs and actions or intentions, whose variability undercuts the possibility of any straightforward inference from things done to things believed.

with the satisfaction of desires, and wanted to attribute to the beliefs that conduced to satisfaction and hence success a special desirable property: their successor notion to the classical concept of truth. In their sense, true beliefs were those that conduced to the satisfaction of desires. But the notion of desire and its satisfaction required by their explanatory strategy is fatally equivocal. It runs together immediate inclination and conceptually articulated commitment in just the way Wilfrid Sellars criticizes, for beliefs rather than desires, under the rubric “the Myth of the Given”.⁶ For on the one hand, desires are thought of as things like itches and thirst: one can tell whether desires in this sense are satisfied just by having them. If one is no longer moved to do something, the desire is satisfied. If—bracketing the previous point—one could infer from the success of an action in satisfying a desire in this sense to the truth of a belief, the pragmatist semantic strategy would be sound. The idea is to make that transition by exploiting the role of beliefs and desires in practical reasoning: in inferences leading to the formation of intentions and the performance of actions. But the desires that, along with beliefs, play a role in rationalizing actions are not like itches and thirst. They have the same sort of conceptually explicit propositional contents that beliefs do. I can’t tell just by having raw feels whether my desire that the ball go through the hoop is satisfied—never mind my desire that the engineering problem have been solved or that the chances of achieving world peace have been increased. For finding out whether desires of that sort have been satisfied just is finding out whether various claims are *true*: that the ball has gone through the hoop, that the engineering problem has been solved, or that the chances of achieving world peace have been increased. Satisfaction of the sorts of desires that are elements of

⁶ In his masterwork, *Empiricism and the Philosophy of Mind* [reprinted by Harvard University Press, 1997].

reasons for actions gives us no immediate, nonconceptual point of entry into the conceptual realm of contents of beliefs. The *only* reason to think that explanatory ground is gained by starting with satisfaction of desires (success of actions) in attempting to explain the truth of beliefs—that is, the only reason to pursue the instrumental strategy in semantics—is that one has conflated of the two sorts of desire. For what is needed to make it work is something that is like an itch in that one can tell whether it has been scratched without needing to decide what is true, *and* like a conceptually articulated desire in that it combines inferentially with propositionally contentful beliefs to yield reasons for action. But nothing can do both.⁷ The traditional Early Modern conception of experience as *Erlebnis* wanted to have it both ways. (This difficulty is orthogonal to those caused by eliding what Sellars called “the notorious ‘ing’/’ed’ distinction” between acts of *experiencing* and the contents *experienced*.) It is just at this point that dispositional-causal and inferential-normative functionalisms part company. The challenge behind calling *givenness* a myth is a question Kant taught us to ask: does the experience (or whatever) merely *incline* one (dispositionally)? Or does it *justify* one in making a claim, drawing a conclusion?

From our privileged vantage point a century or more later, then, we can see that the pragmatists’ instrumentalist semantic strategy for explaining *credenda* in terms of *agenda*, and so their theory of meaning and truth, is fundamentally flawed. This is of course not to say that they didn’t have any good ideas, or that they didn’t make any progress, or that we don’t still have something to learn from them. I think we also know

⁷ Dewey at least appreciated and articulated this crucial distinction—but even he did not manage to think through its consequences for fundamental structural features of his guiding methodology.

by now that the semantic strategy of the logical empiricism that succeeded pragmatism in American academic philosophy is unworkable, and that its conceptions of meaning and truth are also wrong. The point is that forging, from the insights of either, a theory that fares better by the contemporary standards that were achieved with great effort in no small part by criticizing those earlier attempts, will require substantial selection, supplementation, and reconstrual.

It is a useful exercise to divide the pragmatists' motivations and conceptual responses to those motivations into two categories: large, orienting, strategic commitments, and the more local, executive, tactical ones. (Example of the genre: Descartes' ontological semantics generically divides the world into representings and representeds. He then filled in that picture with a theory of representings as immediately self-intimating episodes, and of representeds as extended and moving. Even given that way of setting things up, it is a nice question whether to treat the fact that his paradigm of the representing/represented relation is the relation between discursive algebraic equations and the extended geometrical figures they specify in his algebraic coordinate geometry as a generic, framing commitment or as part of the filling-in of such a picture.) My criticisms primarily address the latter: the more detailed ways in which the pragmatists trying to entitle themselves to the more sweeping framework commitments. Those framing commitments—the ones I take it they seek to entitle themselves to by doing the more detailed work—are by and large admirable.

Among the large features of their thought that I take to be progressive are these:

- They were Darwinian, evolutionary naturalists, aiming to reconstrue the world, us, and our knowledge of the world in the terms made available by the novel explanatory structures characteristic of the best new science of their time.
- In the service of a renovated empiricism to go methodologically with that naturalism in ontology, they developed a concept of experience as *Erfahrung* rather than *Erlebnis*: as situated, embodied, transactional, and structured as *learning*, a process rather than a state or episode. Its slogan might be "No experience without experiment." Representing and intervening were for them two sides of one conceptual coin—or less imagistically, reciprocally sense dependent concepts concerning aspects of processes exhibiting the selectional, adaptational structure common to evolution and learning.
- They appreciated the explanatory priority of *semantic* over *epistemological* issues, which had been one of Kant's great lessons. So they seek to understand *content* in terms of experience (as they construe it), that is, in terms of role in learning, rejecting an orienting goal thought of as achievement of *knowledge* as a static, permanent state, in favor of thinking of it as a dynamic process of *adaptation*.
- They understood the *normative* character of semantic concepts: that they must underwrite assessments of correctness and incorrectness, truth and falsity, success and failure. The semantic instrumentalism criticized above is the more specific strategy the pragmatists adopted in their attempt to give a naturalistic account of this normative dimension of semantic concepts.
- In semantics, they tried to develop nonmagical, indeed, scientific theories of content, by contrast to 'ideas' theories, which are constructively responsive to skeptical

worries about the *success* of ideas reference to things in the world—intentionality—but not about its *purport*. The pragmatists tried to figure out what it is we *do*—something continuous with what pre-conceptual critters can do—that adds up to *thinking* or *knowing* something, even *unsuccessfully*. They were broadly *functionalists* in thinking about the contents of the concepts that articulate intentional states, looking to the role the contentful states play in the whole synchronic, developing behavioral economy of an organism in order to understand the concepts they involve.

- While reason and the sort of intelligence that ultimately issues in scientific theories and technologies are given pride of place in their picture of us, they move decisively beyond the intellectualism and platonism that had plagued the first enlightenment, by privileging practical knowing how over theoretical knowing that in their order of explanation.

At this level of very general explanatory strategy, what one misses most in the pragmatists—at any rate, what most separates them from us—is that they do not share the distinctively twentieth century philosophical concern with *language*, and with the *discontinuities* with nature that it establishes and enforces. The dominant philosophical lineages of the century are soaked in a sense of the centrality of language: both the Husserl-Heidegger-Gadamer line and the structuralist-poststructuralist lines that come together in Derrida, on the one hand, and the Frege-Russell line that goes through Carnap to Sellars, Quine and Davidson and to Wittgenstein and Dummett on the other. This is partly because of the pragmatists' assimilationism about the conceptual: their

emphasizing *continuities* between concept users and organic nature. That emphasis, too, has good credentials, and I think it is fair to say that even now we have not yet sorted out the tensions between naturalistic assimilationism and normative exceptionalism about the discursive practices most distinctive of us. But I also take it that the philosophical way forward from the ideas of the American pragmatists must be a *linguistic* pragmatism, allied with the later Wittgenstein and the Heidegger of Division One of *Being and Time*.

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