9-1-2007

Naturalism, Realism and Pragmatism

Michael Williams
Johns Hopkins University

The College at
BROCKPORT
STATE UNIVERSITY OF NEW YORK

Michael Williams

Naturalism, Realism and Pragmatism[a]

Michael Williams

1. Introduction.

Many contemporary philosophers call themselves naturalists. Of these, I would guess that most also think of themselves as realists, making realistic naturalism (or naturalistic realism) the dominant form of naturalism in philosophy today. The question I want to raise is whether realistic naturalism represents the only or the best way of being a naturalist? My answer is "No." I think that pragmatists can be naturalists too, at least in all the ways that matter or ought to matter. Indeed, pragmatists can be *realists* in any sense that ought to matter. Since the outlook I am calling "realistic naturalism" raises metaphysical problems that pragmatic naturalism lets us avoid, without any obvious gains, pragmatic naturalism is the way to go.

2. "Realistic" Naturalism.

I now turn to naturalism in contemporary philosophy, beginning with realistic naturalism. Realistic naturalism is a complex position involving commitments in metaphilosophy, epistemology, the philosophy of language and mind, metaphysics and the theory of truth. The position I shall be describing is something of an ideal type and is not meant to be an account of the views of any philosopher in particular. Nevertheless, the configuration of views I shall point to should be familiar enough.

Metaphilosophy. Philosophy has often been conceived as a discipline dealing with questions about the principles that underlie all particular forms of inquiry. This conception of philosophy receives a particularly influential articulation in the writings of Kant. According to Kant, certain principles, because they function as the necessary presuppositions of all empirical investigation, can themselves only be validated *a priori*. Philosophy, as the discipline devoted to validating such fundamental principles, is therefore an essentially *a priori* undertaking, distinct from natural science. Essentially neo-Kantian conceptions of philosophy are still with us: for example, the view that the business of philosophy is conceptual analysis. Contemporary naturalism represents a rejection of the Kantian outlook. Philosophers who think of themselves as naturalists, particularly those influenced by Quine, reject appeals to the *a priori*, typically expressing scepticism about the very distinction between *a priori* and *a posteriori* knowledge. However, with this distinction in jeopardy, it is not clear what philosophy is supposed to be. Anti-apriorism is therefore taken to blur and perhaps abolish the distinction between philosophy and natural science (or to abolish philosophy altogether, letting it be

replaced by science).

Epistemology. Epistemology has been much concerned with answering scepticism. Some philosophers who call themselves naturalists take the Humean view that scepticism is not so much false as pointless. The sceptic argues that we cannot justify our belief in an external world or our commitment to certain inductive practices. But, say Humean naturalists, it is pointless to argue either for or against such fundamental commitments, which are built into human nature and so beyond questions of justification. This line of thought has also been attributed to Wittgenstein,[2]

This Humean naturalism is not the dominant naturalistic outlook. More popular among naturalists is a positive epistemological doctrine: reliabilism. On this view, epistemology has gone wrong (and encouraged scepticism) by an excessive interest in justification. For reliabilists, knowledge has no essential connection with justification. At the most general level, knowledge is true belief reached by some kind of reliable cognitive process. Justification--inference from evidence--is at best one instance of such a process. Much knowledge--ordinary perceptual knowledge, for example--results from the unselfconscious exercise of certain cognitive capacities. Reliabilism is thus "externalist" in that the factors in virtue of which a belief of mine counts as knowledge need not be things of which I am aware. What cognitive capacities human beings have, how they work, and how reliable they are, are matters for empirical investigation, cognitive science. This aspect of externalist reliabilism makes it the epistemology of choice for metaphilosophical naturalists.

Philosophy of language and mind. Thought and language are infused with meaning or "intentionality." They represent or are about things in the world. To understand meaning in a broadly naturalistic way, realistic naturalists generally invoke another reliabilist idea: signaling. On this view, there is no deep distinction between the way in which clouds mean rain and the way in which "Dog" refers to dogs. Some theorists give this approach an evolutionary twist: our discriminative responses are *about* whatever they evolved to respond to (even if they can be triggered by other stimuli). If this evolutionary approach can be worked out, there is hope of understanding intentionality in broadly causal terms.[3] (However, as we shall see, realistic naturalists are not the sole proprietors of evolutionary explanation.)

Metaphysics. Ontologically, realistic naturalists tend to be physicalists, holding that the only things that ultimately exist are physical things. One reason why they favour causal or causal-evolutionary theories of reference is that they find such theories physicalistically acceptable. Approaches to reference and meaning that are not physicalistically acceptable are sometimes dismissed as "magical." Generally, realistic naturalists take very seriously a whole range of "placement" or "location" problems. For example, what is the place of values in a world of particles?[4]

Theory of Truth. Here we come to realism. In the first place, realistic naturalists

are scientific realists, holding that scientific theories are not just instruments for predicting observations but aim to determine how things really are. The goal of science is not just empirical adequacy but truth. However, this distinction would be in danger of collapse if truth were defined in epistemic terms: for example, as some kind of ideal justification. So in the second place, realistic naturalists insist on a "correspondence" conception of truth, though virtually all admit that this conception stands in need of clarification. One appealing suggestion is to follow Tarski in defining truth in terms of reference, adding that reference can itself be understood causally.[5]

This conception of meaning, reference and truth itself makes certain metaphysical worries pressing. First of all, realistic naturalists think that, in understanding linguistic meaning, the theoretically fundamental notions are "representational": they are "semantic" or "word-world". But if semantic relations have to be physicalistically acceptable, how can we talk about apparently non-physical things, such as values? In general, as Huw Price argues, this kind of seriously referential semantics is "ontologically profligate." In explaining how it is that certain ways of talking are meaningful, we automatically pick up the ontological commitments that those ways of talking involve. This means that semantics *inevitably* brings up questions of ontology.[6]

These, then are the commitments of realistic naturalism: global anti-apriorism, a reliabilist conception of knowledge, a representationalist approach to meaning (cashed out in broadly causal terms), a physicalist ontology, and a realistic or correspondence conception of truth.

Pragmatism.

Like realistic naturalists, pragmatists are anti-aprioristic. As global fallibilists, pragmatists hold that nothing we believe is in principle immune from revision. But on other issues, pragmatism and realistic naturalism are starkly opposed. Since pragmatism is often thought of as advocating a distinctive view of truth, the theory of truth is the place to start.

The original pragmatists were tempted to explain truth in epistemic terms. James said that the true is whatever is good in the way of belief or whatever "works". Peirce identified a statement's being true with its being ideally assertible: assertible at the end of inquiry. Obviously this puts them at odds with realists, for whom truth is not an epistemic notion of any kind.

Realists are right to complain about epistemic definitions of truth. "True" certainly does not *mean* "verified" in the sense of "rationally assertible on the basis of the evidence currently at our disposal." Something can be assertible on current evidence but not true: that is just fallibilism. As for "assertible at the end of inquiry" or "ideally assertible," it is far from clear how such phrases are sup-

posed to be taken. We have no clear conception of what it would be for inquiry to have an end. As for "ideally assertible," if this phrase means anything, it means "assertible in conditions in which all relevant sources of error are either absent or have been allowed for," which is a long-winded way of saying "assertible in conditions where there are no barriers to determining what is true."

Mindful of these objections, contemporary pragmatists opt for a *deflationary* approach to truth. This is contemporary pragmatism's major advance over its classical predecessor.

An early deflationary account of truth is Ramsey's redundancy theory, according to which "It is true that Caesar was murdered" *means no more than* that Caesar was" murdered. Any difference is entirely "stylistic": for example, we may use "It is true that…" to speak more emphatically. Because it stresses the use of "true" in performing such special speech-acts, this approach is sometimes also called the "performative" theory. However, more recent views, such as Quine's disquotational theory, do not claim that "p" and "It is true that p" are synonymous. Rather, what matters about "true" is given by certain logical equivalences. Thus:

> "Snow is white" is true if and only snow is white; "France is oc-tagonal" is true if and only if France is octagonal…and so on.

Appending "is true" to a quoted sentence is just like canceling the quotation marks ("disquotation").

The deflationary approach does not trivialize truth-talk. To the contrary, Quine's view shows *why* truth-talk is important. By offering a systematic way of replacing talk about the world with logically equivalent talk about words ("semantic ascent"), the truth-predicate gives us new things to generalize over–i.e. sentences--thereby enabling us to express agreement and disagreement with sentences that we cannot specify: for example because we do not know exactly what they are ("What the President said is true"), because there are too many of them ("Every sentence of the form 'P or not P' is true"), and perhaps even because we do not completely understand them ("I didn't follow everything the speaker said, but I'm sure it was all true"). This expressive gain is of considerable significance. Truth talk allows us to make explicit, in general form, the epistemic, inferential and methodological principles that are implicit in our practices of inquiry and argument. It is thus an essential component in what Robert Brandom calls "expressive rationality."[7] However, while from the deflationary perspective the predicate "true" is of considerable *expressive* significance, it is not the name of a property requiring (or even susceptible of) deep analysis.

Quine's disquotationalist account of "true" is only one version of deflationism. Other deflationary views are Paul Horwich's minimalism and Robert Brandom's anaphoric theory. Horwich thinks that truth is a property of propositions, so he thinks that our understanding of "true" is constituted by a primitive disposition

to accept all non-paradoxical instances of the schema

(MT) The proposition that-p is true if and only if p.

Brandom thinks that "true" is a "pro-sentence forming operator," where "true"-involving prosentences refer anaphorically to things that I or someone else has previously said, just as pronouns refer anaphorically to previously occurring singular terms.[8] However, for current purposes, the differences between Quine, Horwich and Brandom do not matter. Deflationary approaches to truth have two aspects: an account of the function of truth-talk, and an account of the logico-linguistic behaviour of the truth-predicate in virtue of which it subserves that function. It is with respect to the latter aspect that deflationists part company. But all deflationists agree that the function of truth-talk is *exclusively* expressive. This means that the concept of truth has no explanatory significance. This is not to say that truth talk has no use in explanations: only that, if it occurs in an explanation, it does so in the generalizing role that deflationists highlight. This is the sense in which deflationists do not regard truth as a "substantive" property. Deflationists do not draw the distinction between truth and more "substantive" properties on metaphysical grounds.[9]

It is important to recognize that, in calling attention to the expressive role of truth- talk, deflationists about truth do not simply *deny* that truth is "correspondence to reality." Rather, they say that everything there is to "correspondence" intuitions is captured by their favored version of the equivalence schema. In their view, attempts to read more than this into talk of correspondence have not been successful and have no evident point. Accordingly, the real point of contention between pragmatists and hard-core realists is the question of whether the concept of truth has any useful explanatory work to do: for example, in philosophy of science, or in theories of meaning.

Not only do deflationists not straightforwardly repudiate correspondence or "realist" intuitions, they do not define truth in epistemic terms. This complicates questions about what it is to be a realist. If scientific realism is just the repudiation of instrumentalism—the thought that theories are mere calculating devices for predicting observations—then deflationists can be scientific realists. However, deflationists have no motives—at least no semantic motives—for being physicalistic reductionists. The truth predicate applies equally well and in exactly the same way in all forms of assertoric discourse. Reflections on truth offer no way into placement problems. Accordingly, pragmatists distinguish sharply between admiration for the natural sciences and the philosophical proclivity for scientistic metaphysics. In particular, they see no reason to suppose that we need a physicalistically acceptable conception of meaning. I shall say more about this in a moment.

Since pragmatists find no explanatory uses for truth--truth not being the right

sort of concept--they cannot take truth to be a notion of deep epistemological significance. For pragmatists, epistemology, the theory of inquiry, enjoys a certain priority over the theory of truth. Thus pragmatists tend to raise their eyebrows when told, for example, that Truth is the Goal of Inquiry. However, we should be careful here. Pragmatists do not deny that, other things being equal, we prefer true beliefs to false. Their point is twofold: in formulating such preferences, we need only deflationary truth; and in illuminating or rationalizing them, we get no help from metaphysically inflated notions such as the correspondence theory. For pragmatists, our commitment to truth as the goal of inquiry does not rationalize or explain fallibilism. Rather, it *is* fallibilism: the willingness to revise one beliefs and theories in the face of difficulties. To improve our views is to resolve current problems, not to get closer to some *focus imaginarius*, the Truth (with a capital "T"). Why should we want to improve them? For many reasons, not one big reason.

I used to think that William James could be (charitably) understood along these lines. My thought was that James did not mean to *define* truth in epistemic terms, his point being rather that, in concrete terms, the pursuit of truth just is the attempt to keep improving our theories and methods. This is more or less Richard Rorty's view.[10] I now think that I was being too generous. James really did want to define truth as "what works," because he wanted to suggest an expansive account of working that would be friendly to religious belief. For James, the idea of a soulless Universe didn't "work" because it was emotionally unsatisfying: his definition of truth was in the service of a defense of wishful thinking. A version of pragmatism that incorporates a deflationary view of truth does not encourage this sort of thing (though it does suggest that the real issue with James is over the all-round advisability of adopting wishful thinking as a principle of belief).

Let us return to questions about meaning. For realistic naturalists, meaning, reference and knowledge are all to be explained using the same basic idea: reliable discriminative responsiveness. Accordingly, they see epistemology and the philosophy of language and mind as closely related. Since, in their own way, pragmatists do too, we can treat epistemology and the philosophy of language and mind together.

From a pragmatic standpoint, mere discriminative responsiveness explains neither knowledge nor meaning. Justification is essentially connected, not simply with knowledge, but with belief itself. Wilfrid Sellars deserves much of the credit for showing why this is so. Sellars links epistemology with theory of meaning by making two moves. First, he suggests that intentionality is a fundamentally linguistic affair, in the sense that speakers of a language are the paradigmatic concept-users. Second, he asks: What distinguishes conceptual from non-conceptual activity? In particular, how does the human being who says "That's green" differ from the parrot trained to utter the same vocables in response to

the presentation of a green card? Sellars's answer is that, unlike the parrot, the human reporter has the *concept* "green" and so understands what he is saying. This understanding consists in his grasp of inferential connections between his observation reports and other statements. Unlike the parrot, the human speaker has a grasp (perhaps implicit and practical) of what *follows from* his reports, what is *evidence for* them, how they might be challenged, how various challenges might be met, and so on.[11]

It follows from this inferentialist approach to meaning that beliefs, as conceptually contentful, are essentially the sorts of things which can function as reasons and for which reasons can be given. But reasons can be good or bad, weak or strong. Language use is thus an activity that is essentially subject to normative-epistemological constraint. It follows that neither knowledge nor meaning can be understood in purely causal, thus wholly non-normative terms. But as I shall now argue, this commitment should not be seen as a departure from naturalism in any sense that ought to matter.

4. The Meanings of "Natural"

With the alternatives in place, we can return to the question of naturalism. But we immediately encounter another complication. "Natural" has more than one antonym. "Naturalism" and "anti-naturalism" take on different meanings, depending on which contrast we have in mind.

One contrast is between the natural and the unnatural. This distinction is tied to the Aristotelian conception of nature as an inner principle of change. Individuals with the same nature, in this sense of "nature," constitute a natural kind. Change, on this view, is the actualization of an individual's potentialities, so a thing's nature determines what it can be. An acorn has the potential to develop into an oak, but not into a beech and certainly not into a cat.

This conception of nature is idealizing, normative and teleological. A thing's nature determines, not what it will be, but what it ought to be: what it will be if things go as they should. But things can go wrong: if the sun does not shine, or the rain does not fall, the acorn will not grow. Alternatively, some inner disturbance can send an individual off the rails. Such an individual will then engage in unnatural acts: acts that are against nature in the sense of contrary to that individual's proper goal or function (the goal or function that is fulfilled in the actualization of that individual's nature).

Modern science is built on the rejection of Aristotelian naturalism. By treating the physical world exclusively as a realm of law, modern science extrudes purpose from physical nature both locally and globally. Locally, the stone falls to Earth because of gravitational attraction, not because it is heading towards its natural place at the centre of the Universe. Globally, though the Universe as we know

it might have a finite life span, this would be an "end" only in the sense of a terminating state, brought about by laws and initial conditions, not in the sense of a goal, the reaching of which fulfills a purpose. This extrusion of purpose is what Weber famously referred to as the disenchantment of Nature. It was begun by the likes of Galileo and Newton and completed by Darwin and his heirs. It has turned out to be a good idea, proving itself in the vast superiority of modern science to pre-modern speculation.

The natural can also be contrasted with the supernatural. Naturalists in this sense think that the natural world can be understood without appeal to factors beyond or outside that world. Thus the naturalistic attitude excludes invocation of the Divine, indeed the magical generally. The disenchantment of Nature, while perhaps not entailing anti-supernaturalism, certainly encourages it by making appeals to the Divine seem otiose. To conceive Nature as a realm of law is to conceive it as a self-sustaining, causally closed system which has no need of Divine supervision and which has no obvious room for Divine intervention. This makes Providence problematic. The modern conception of natural processes contrasts here with the Aristotelian conception, which, by allowing for happenings that are contrary to nature, permits hands-on Divine involvement.

Contemporary naturalists, realistic and pragmatic, are at one in accepting the disenchantment of Nature. They concur in rejecting both supernaturalism and a teleological conception of the physical world, both of which they see as rendered incredible by modern science. Since they concur also in their meta-philosophical anti-apriorism, we need to look further to see why pragmatists and self-styled realists are not naturalists in quite the same way.

This brings us to our final contrast, that between what the Greeks called *physis* and *nomos*, nature and convention. Stones fall to Earth always and everywhere, whether we like it or not. Such facts belong to nature. But acts that are acceptable in New York may be illegal in the State of Kentucky. Such facts seem to reflect locally variable standards of acceptable behavior and are, in that sense, a matter of convention (which need not mean that conventions are always arbitrary or non-rational). If we think (as pragmatists do) that norms or standards are instituted by human attitudes, then the distinction between *physis* and *nomos* turns into the distinction between the natural and the normative. In Brandom's terms, where natural laws concern the fundamental *properties* of matter, laws as norms concern *proprieties* of behavior.

With respect to this contrast, realistic and pragmatic naturalists diverge. Whereas, for naturalistic realists, knowledge and meaning are to be understood in terms of causal relations, Pragmatists regard this reductive approach as hopeless. For reasons already given, they think that knowledge and meaning can be understood only in relation to normatively constrained linguistic practices. Conceptual thought is essentially embedded in "the game of giving and asking

for reasons," the game in which we establish epistemic entitlement and fulfill epistemic obligations. Knowledge and meaning are in a certain sense non-natural because normative ("fraught with 'ought'," as Sellars says).

Does this make pragmatism anti-naturalist in any way that ought to concern us? Pragmatists will say that it doesn't. Pragmatism about norms says that norms are instituted by human practices; that standards originate in what human beings count as correct or incorrect, acceptable or unacceptable; and that values exist only because there are practices of evaluation. There is nothing supernatural, or even particularly mysterious, about this. Of course, if we think that meaning must be approached via a representationalist order of explanation, talk about norms is apt to raise placement problems, which will make normatively informed conceptions of meaning seem problematic too. But pragmatists do not agree that meaning has to be approached in this way.

We saw earlier that realists favor causal accounts of reference because such accounts promise to be physicalistically acceptable. Theories that are not physicalistically acceptable are said to be magical. Pragmatists see this charge as conflating the distinction between the normative and the supernatural. It is true that, if one is already committed to a naturalistic in the sense of "non-normative" approach to meaning, it is reasonable to demand that one's theory be physicalistically acceptable. But otherwise, it is not reasonable at all. Meaning is non-natural only in the sense of involving norms ("conventions"); but pragmatism about norms eliminates all suspicion of magic.

Or does it? One advantage of causal-physical approaches to meaning and reference is that they are atomistic. We learn to respond to some situations, then to others. Complex linguistic dispositions are built up out of simpler components, By contrast, the broadly inferentialist approach to meaning favored by pragmatists is holistic. It also involves sensitivity to epistemic and conceptual norms. So there seems to be a question about how we ever got into the linguistic dimension. Sellars states the problem in a particularly dramatic way:

> T]he paradox of man's encounter with himself…supports the last stand of Special Creation. Its central theme is the idea that anything which can properly be called conceptual thinking can occur only within a framework of conceptual thinking in terms of which it can be criticized, supported, refuted, in short, evaluated. To be able to think is to be able to measure one's thoughts by standards of correctness, of relevance, of evidence. In this sense, a diversified conceptual framework is a whole which, however sketchy, is prior to its parts, and cannot be construed as a coming together of parts which are already conceptual in character. The conclusion is difficult to avoid that the transition from

> pre-conceptual patterns of behavior to conceptual thinking was
> a holistic one, a jump to a level of awareness which is irreducibly
> new, a jump which was the coming into being of man.[12]

If this conclusion really is unavoidable, there is a question as to whether pragmatists should think of themselves as naturalists in anything other than the narrowly epistemological sense of being anti-apriorist.

I cannot give a complete answer to this question here. In fact, I cannot give a complete answer at all. But I think that it is clear enough what strategy the pragmatist should follow. To quell any sense of mystery-mongering about meaning, we do not need to explicate semantic notions in causal-physical terms. We do not need to abandon the normative functionalism, characteristic of contemporary pragmatism. All we need to be able to do is tell an evolutionary story of the unplanned emergence of behavior sufficiently complex as to be describable in intentional vocabulary. No doubt an important part of the story will concern the development of linguistic responses, including "punitive" or "sanctioning" responses" to linguistic signals. A particularly important development will be the emergence of "internal" sanctions: i.e. sanctions that consist in resisting further linguistic moves. A complete story along these lines is not yet in sight. But Daniel Dennett, building on suggestions by Sellars himself, has sketched the outlines of one. There seems no reason to suppose that the details cannot eventually be filled in. There is nothing problematic in the idea of the evolution of norms (as conventions): initially implicit in practice, but eventually themselves things that are talked about. (Remember the expressive function of truth-talk.) Indeed, such an evolutionary story seems a more likely prospect than a satisfactory causal-physical theory of reference.[13]

Some realists will object that pragmatists cannot avail themselves of the distinction between nature and convention in the way that I have suggested. By adopting a pragmatist attitude towards all norms, epistemic norms included, while discarding truth as a non-conventional guiding norm, pragmatists make all "factual" inquiry a matter of convention. Thus pragmatism encourages (or is a version of) post-modernism, social constructivism, or some other contemporary form of anti-rationalism. Pragmatists reject such charges. For them, scientific knowledge is objective because constrained both theoretically and observationally. Theoretically, by our current body of entrenched theory and by various canons of theory-choice; observationally, by the demand that theories fit data. Talk of "correspondence to reality" adds nothing significant.

With regard to empirical constraint, contemporary pragmatists see externalist-reliabilism as offering a valuable insight. While discriminative responsiveness is not *sufficient* for observational knowledge, because not sufficient for a report's involving an exercise of conceptual capacities, reliable discriminative responsiveness is a *necessary* component in such knowledge. For pragmatists, we can have

non-inferential observational knowledge of whatever aspects of our surrounding we can be trained to respond reliably to. Thus empirical knowledge, indeed empirical content, *involves* causal relatedness to the world, without being *reducible* to it.

In playing the game of giving and asking for reasons, then, we are responsible for the rules. We make them and can in principle revise them (as we can in principle revise anything). As Brandom has emphasized, logical and semantic terms, such as "true," aid in the process of revision precisely because they allow us to formulate rules implicit in practice explicitly in claims, thus making them available for critical examination. But although we make the rules, observational constraint ensures that we don't fully control the results of playing by them. The world takes a hand.

Pragmatists do not suppose that "Anything goes." All they deny is that objectivity is illuminated by the sort of truth-talk that goes beyond all accounts of methodological, theoretical and observational constraint. They need not avoid talk of "getting at the facts" as a way of reporting the *results* of serious and sustained inquiry. However, they will not suppose that such talk *explains* what makes inquiry serious. For them, fact-talk is just a stylistic variant of truth-talk.

What does or should matter about the naturalistic spirit? Two things: anti-apriorism and the avoidance of the supernatural. On this score, pragmatism has as much claim to be naturalistic as contemporary versions of realism. Pragmatists and realists part company over the prospects of giving reductive accounts of knowledge and meaning. But since pragmatists see norms as instituted by attitudes, their view of knowledge and meaning as essentially subject to normative constraint, and so in *that* sense not "naturalistically" intelligible, does not make a mystery of either.

The pragmatist approach to meaning and truth makes metaphysical worries about the place of meaning or value in a world of fact hard to raise. Pragmatists thus think of hard-core realists as trying to see through what Locke called "the smoke of their own chimneys." Better not to light the fire than to worry about how to put it out.

5. *Truth Again*

I take my argument so far to show that there is nothing obviously unacceptable about pragmatic naturalism. In any ways that ought to matter, pragmatists can be naturalists. The reasons for doubting this turn on metaphysical worries that pragmatists regard as artificial and thus better circumvented than addressed theoretically. But in conclusion, I want to suggest that pragmatic naturalism is not just *as* thoroughly naturalistic than its realist rival but *more* so.

From the very beginning, the religiously-minded were disturbed by modern

science's anti-supernaturalism. Since (especially after Newton) no one wanted to say that modern physics was false, the only option was to look for features of the entire system of natural law that demanded explanation by appeal to something outside that system. Two strategies suggested themselves, one epistemological, the other metaphysical. The epistemological argument originates with Descartes: God guarantees the truthfulness of our clear and distinct ideas (although, so far as the physics of motion are concerned, He didn't guarantee the truth of Descartes's ideas, which are almost entirely false.) The metaphysical strategy is the Argument from Design: the very law-governed character of the physical world bespeaks an origin in Divine intelligence. Divine intelligence is the best explanation of the order we find in the world.[14] It is possible to combine these strategies. The argument goes like this: We have a preference for simple theories; but we also want true theories. We are thus committed to simplicity's being indicative of truth. However, there is no naturalistic reason why it should be. The best explanation for simplicity's being truth-indicative is supernatural: God arranges the Universe so as to be intelligible to creatures like us.[15]

Pragmatists are unmoved by this argument. Certainly, we take simplicity as a reason for accepting--we might as well say believing--a theory; and from a deflationary perspective, there is no difference between believing a theory and believing that it is true. However, this is not to say that we take simplicity itself to be an indicator of truth, for we evidently do not. Rutherford's conception of the atom is much simpler than the modern conception. But no one thinks that is more likely to be true. Rather, we prefer simpler theories to more complicated ones because of what we want from an explanation. Good explanations are easy to work with, bring unity to a wide range of phenomena, avoid *ad hoc* complications, and so on. Other things being equal, simpler explanations are rationally preferable because better as explanations. But this rational preferability entails no unqualified commitment to simplicity's being an indicator of truth.

Of course, realistic naturalists have no truck with theological arguments, However, it seems to me that they are less well-placed than pragmatists to resist arguments like that from the truth-conduciveness of simplicity. Their realism pushes them towards some kind of teleological conception of inquiry: inquiry as a process with Truth, understood in some non-deflationary way, as its goal. In consequence, for them there really is a problem about saying how our epistemic criteria--if not simplicity, then other criteria--are helping us get closer to this goal.

I suggested earlier that pragmatists are suspicious of truth as the goal of inquiry. As I said, they agree that truth is *one* of our goals, in the sense that we generally prefer true beliefs to false. Pragmatists would add that we have no interest in truth *as such*. What we want are interesting truths: truths that respond to questions in which we have some interest, theoretical or practical. But the important

point is that our preference for truths over falsehoods can be expressed using no more than a deflationary notion of truth. Truth as the goal of science needs to be something grander: the body of truths articulated by some ideal theory of everything; the Truth with a capital "T."

Realists move towards this more seriously teleological conception of inquiry when they suggest that pragmatists cannot really make sense of progress. Naturally, pragmatists demur. We no more need--and no more understand--the idea of Truth in science than we need or understand the idea of Utopia in politics. We measure progress by our distance from where we have been, not to where we are going: by the ways in which current theories improve over their predecessors, not by their proximity to the end of inquiry. By dispensing with a teleological conception of inquiry, pragmatism helps not only to disenchant Nature but to disenchant science as well.

Again, pragmatic naturalism removes unnecessary problems, which is why we should prefer it.

Johns Hopkins University

Endnotes

[1] An earlier version of this paper was given at a conference on The Nature of Nature, Baylor 2000. The conference brought together secularists and theists, including some sympathizers with so-called Intelligent Design, which is why theological issues occasionally hover in the background.

[2] P. F. Strawson, *Skepticism and Naturalism: Some Varieties* (Columbia University Press: New York 1985). See especially Chapter 1.

[3] Causal approaches to meaning face the difficulty of articulating a principled way of determining what stage of the causal chain leading to a signaling response should count as the intentional object. Many theorists bring evolution in at this point: a response means what it was *selected* to indicate. See Ruth Millikan, *Varieties of Meaning* (Cambridge MA: MIT Press 2004).

[4] Frank Jackson, *From Metaphysics to Ethics* (Oxford: Oxford University Press 1998), Chapter 1.

70 *Michael Williams*

[5] These two aspects of contemporary realism are well distinguished by Philip Kitcher in "Real Realism," *Philosophical Review* (2001). I examine Kitcher's attempt to show that scientific realism demands a "realistic" theory of truth in "Realism: What's Left," in *Truth and Realism*, edited by Patrick Greenough and Michael Lynch (Oxford: Oxford University Press 2006).

[6] Huw Price, "One Cheer for Representationalism" in *Library of Living Philosophers: The Philosophy of Richard Rorty* (Lasalle Illinois: Open Court forthcoming).

[7] Robert Brandom, *Making It Explicit* (Cambridge MA: Harvard University Press 1994). Chapter 5.

[8] See W. V. Quine, *Pursuit of Truth*, revised edition (Cambridge MA: Harvard University Press 2004); Paul Horwich, *Truth* (New York: Oxford Univerrsity Press 1999); Brandom, loc. cit.

[9] Contrary to claims by Paul Boghossian in "The Status of Content," *Philosophical Review* (1990). For more on this point, see my "On Some Critics of Deflationism," in *Essays on Truth*, edited by Richard Schantz (Amsterdam: De Gruyter 2002).

[10] See e.g. Richard Rorty, "Science as Solidarity" in *Objectivity, Relativism and Truth: Philosophical Papers Volume 1* (Cambridge: Cambridge University Press 1991).

[11] Wilfrid Sellars, *Empiricism and the Philosophy of Mind*, with a Study Guide by Robert Brandom and Introduction by Richard Rorty (Cambridge MA: Harvard University Press 1997).

[12] Wilfrid Sellars, "Philosophy and the Scientific Image of Man," reprinted in Wilfrid Sellars, *In the Space of Reasons*, edited by Robert Brandom and Kevin Scharp (Cambridge MA: Harvard University Press 2006). Quotation p. 374.

[13] On the emergence of normativity, linguistic and otherwise, see Daniel Dennett, *Freedom Evolves* (New York: Viking 2003). Sellars's pioneering ideas can be found in "Some Reflections on Language Games," reprinted in *In the Space of Reasons*. See especially Sellars's discussion of pattern-governed behavior, pp. 28-35.

[14] In passing, whatever its merits, this argument doesn't help those who hanker for Providence. The Divine Watchmaker is a *deus absconditus*. One could find

the Argument from Design totally compelling and accept no more than a milk-and-water Deism, as indeed many Enlightenment thinkers did.

[15] We might even think of this as rescuing an element of Providence. While perhaps not as hands on as we used to think, God is still nice to us in a general way.