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“From Realism Back to Realism”: Putnam’s Long Journey

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In his John Dewey lectures, published in 1999 as *The Threefold Cord*, Hilary Putnam summarizes his philosophical life as a long journey from realism back to realism, but not back to the metaphysical version of realism with which he started.¹ It has become common place to divide this journey into three more or less distinct phases—a division reminiscent of the three phases of the philosophical thinking of one of Putnam’s philosophical heroes, Ludwig Wittgenstein. Early Putnam was a thoroughgoing realist advocating scientific, mathematical, and metaphysical realism. The first and most crucial break in his thinking occurred in 1976 when he repudiated metaphysical realism and embraced in its place what he called “internal realism.” The emergence of the third and most recent Putnam can be dated to the 1990 Gifford lectures in St. Andrews. But compared to the revolutionary break heralding his first philosophical turn, and like the emergence of the Wittgenstein of *On Certainty*, this latest transition is more subtle and gradual. The latest Putnam defends what he variously calls common sense, natural, or pragmatic realism and rejects both his early metaphysical realism and the later epistemic view of truth he held in the internal realist phase. Search for an answer to what Putnam has called “the great question of realism”²—the question, how does language hook on to the world—is the common thread connecting the three Putnams taking him from what he sees as the naïve realism of the early years to a self-conscious “second naïveté.”³ What has changed in the process is his understanding and hence characterization

of this central but obtuse philosophical issue. The most prominent connecting threads running through Putnam's many realisms are an insistence on the essential role of objectivity in characterizing truth and knowledge, preoccupation with questions of intentionality, opposition to a variety of positions arising out of logical positivism, a continuous concern with questions of norms and values, and an aversion to dichotomized thinking in philosophy. What this brief survey of Putnam's journey, despite its merits, tends to neglect or obscure is the central and connecting role of a fourth version of realism, scientific realism, in Putnam's work. This paper explores Putnam's changing views of realism in the three crucial periods of his philosophical development and links them with his ever-present concern with the topic of scientific realism.

I. EARLY PUTNAM

In his earliest writings, for instance in the introduction to the first of his collection of philosophical papers, *Mathematics, Matter and Method*, a collection of articles bringing together his publications from the first fifteen years of his career, Putnam tells us:

The statements of science are in my view either true or false (although it is often the case that we don't know which) and their truth or falsity does not consist in their being highly derived ways of describing regularities in human experience. Reality is not a part of the human mind; rather the human mind is a part—and a small part at that—of reality.⁴

The realism defended in this period is quite broad; Putnam is a realist not only about the "existence of material objects" but also about mathematical objects, as well as purely theoretical entities such as fields and physical magnitudes. Science and mathematics give us a unified story about the world, a story which at least in some cases ends up being a good approximation to truth. Science attempts to capture what is out there and scientific theories are true insofar as they succeed in this goal. Mathematics is a handmaiden of science and equally central in modeling, representing or mapping this mind-independent reality. Crucially, there is no hard and fast distinction between scientific realism and other varieties of realism.

Putnam's defense of realism in science and mathematics ran in parallel lines, where the indispensability argument for mathematical realism acts as a counterpart to the argument to best explanation or "the no miracles argument" for realism in science. The indispensability argument, first outlined by Quine, was given a more explicit formulation by Putnam who argued that "quantification over mathematical entities is indispensable for science, both formal and physical: therefore we should accept such quantification; but this commits us to accepting the existence of mathematical entities in question."⁵ Much of science, the argument goes, is either expressed in mathematical terms or uses mathematics as an indispensable compo-

ment. To the extent that scientific hypotheses are true, or mesh with reality, then so are the mathematical formulations that underpin it.⁶ Realism about mathematics then presupposes scientific realism. The consistency and fertility of classical mathematics is evidence for its truth. Furthermore, the role that mathematics plays in physical theory means that “it is not possible to be a realist with respect to physical theory and a nominalist with respect to mathematical theory.”⁷ Putnam’s mathematical realism should not be confused with Platonism for he was not arguing for the existence of abstract mathematical entities in a platonic realm but against nominalist and verificationist interpretations of mathematics. The underlying rationale was that in mathematics, as in science, there is such a thing as objective truth and we are dealing with facts of the matter when we propose a true mathematical formula.

Putnam’s mathematical realism is underpinned by scientific realism, or the view that scientific theories aim to describe a reality that exists independently of the human mind and are true when they succeed in this goal. Putnam emphasizes three key features of realism about science (1) principle of reference: terms used in mature scientific theories typically refer, (2) principle of truth: mature scientific theories are (approximately) true, and (3) principle of convergence: new theories do not replace old ones but build on them. The principles of reference and truth in effect become subsumed under the principle of convergence when Putnam contends that new theories describe (for the most part) the same objects the old ones did but describe them better because the new theories contain more true sentences than the old ones. This is because theoretical terms retain their reference across theories and that’s how there could be convergence in science.

Putnam’s key argument for realism about science uses the abductive inference schema:

1. A
 2. A is the best explanation for B
- Therefore, B

Specifically, this argument for scientific realism, known as inference to the best explanation, contends:

- (P1) Mature scientific theories come up with successful predictions and give us effective control of our environment.
- (P2) The best explanation for this predictive and technological success of science is the truth or at least the approximate truth of these theories
- (C) Therefore, mature scientific theories are true or at least approximately true.

J. J. C. Smart was possibly the first to use this form of argument in defense of scientific realism. He argued:

If the phenomenalist about theoretical entities is correct, we must believe in a cosmic coincidence. That is, if this is so, statements about electrons, etc., are of only instrumental value: they simply enable us to

predict phenomena on the level of galvanometers and cloud chambers. They do nothing to remove the surprising character of these phenomena. [. . .] On the other hand, if we interpret a theory in a realistic way, then we have no need for such a cosmic coincidence: it is not surprising that galvanometers and cloud chambers behave in the sort of way they do, for if there *really* are electrons, etc, this is just what we should expect. A lot of surprising facts no longer seem surprising.⁸

Putnam's own version, which appeared somewhat later, makes a similar point:

The positive argument for realism is that it is the only philosophy that does not make the success of science a miracle. That terms in mature science typically refer [. . .], that the theories accepted in mature science are typically approximately true, that the same terms can refer to the same things even when it occurs in different theories—these statements are viewed by the scientific realist not as necessary truths but as part of the only scientific explanation of the success of science and hence as part of any adequate scientific description of science and its relation to its objects.⁹

So, the best explanation for both the predictive and explanatory success of a given scientific theory is that the theory is true (or approximately true). “For if the theory was not true, then it would be a miracle that it was capable of generating successful predictions and enabling us to gain control over our environment.”¹⁰ Another feature of success in science that is in need of explanation is “the fact the scientific theories tend to ‘converge’ in the sense that earlier theories are, very often, limiting cases of later theories (which is why it is possible to regard theoretical terms as preserving their reference across most changes of theory).”¹¹ The no-miracle argument, *inter alia*, also explains convergence. Theories are true or approximately true if they manage to refer successfully to what is out there. Such success in turn helps to preserve continuity and convergence between succeeding scientific theories. We therefore have found a reasonable justification for holding to the three principles—reference, truth, convergence—underlying scientific realism.

The issue of convergence comes to prominence in face of a prominent strain of criticism leveled against realism and the no-miracle argument. Larry Laudan, for instance, has argued that throughout history scientific theories that were considered successful for a time have proven to be false and have been abandoned. The so-called pessimistic induction, based on the available evidence from the history of science, forces us to conclude that currently successful theories in time will also be abandoned. In face of this bleak prognosis, inference to the best explanation seems a naively hopeful but ineffectual move.¹² Putnam's groundbreaking move against this criticism, and against Kuhn and Feyerabend's relativistic view of science, was to propose a theory of meaning that would allow for continuity of reference in the face of change in theoretical frameworks. The idea is that theory change, the abandonment of old theories in favor of new ones, is not as radical or damaging to the realist cause as it may first appear. Underlying scientific change there is continuity in reference and meaning because old and new theories talk about the same natu-

ral kinds. Science succeeds in getting us closer to truth but this success is more piecemeal than the paired-down no-miracle argument may have suggested. New theories build on the successes of the old ones and also improve by learning from their failures. What is crucial in ensuring the fruitfulness of this process is continuity in reference. Scientists can build on the successes and failures of old theories provided that the subject matter of their theorizing is kept constant. The theory of reference and meaning underlying Putnam's scientific realism is semantic externalism, famously supported by his twin earth argument. It is important to point out that since its first articulation in "The Meaning of 'Meaning'" in 1974, despite several changes of view on the correct characterization of realism, Putnam did not waver from the main outlines of this view of language and meaning.

Putnam also offers a negative argument in support of scientific realism to the effect that nonrealist approaches to science, such as instrumentalism, constructive empiricism, and verificationism, do not have a compelling explanation for the success of science nor can they account for convergence in science.

Scientific realism, according to Putnam, should be seen as an empirical theory explanatory of scientific practice. Scientific realism then is in line with other theoretical explanations in science and, unlike metaphysical realism, it is not a philosophical abstraction or a model. He says: "That science succeeds in making many true predictions, devising better ways of controlling nature, etc., is an undoubted empirical fact. If realism is an explanation of this fact, realism must itself be an overarching empirical hypothesis."¹³ But this is a rather surprising claim for there seems to be some notable difference between individual theories of a given scientific domain, chemistry, biology, physics, etc., and realism as a philosophical position about the entirety of science. Scientific theories aim to have empirical content; they are about objects and events in the world. Realism, however, purports to be a correct characterization of the aims and procedures of science as a whole. What is the specific empirical content of realism? Does it, like other scientific theories, make specific predictions subject to further verification or falsification?¹⁴ As Stathis Psillos, among others, has pointed out, scientific realism is *not* a theory; it's a framework that makes possible certain ways of viewing scientific theories. Scientific realism lacks all the important features of a scientific theory.¹⁵ Putnam, however, in line with his attempts to by-pass and overcome dichotomous thinking in a variety of areas in philosophy, would be reluctant to draw a very sharp dividing line between an empirical *aposteriori* and a philosophical *apriori* framework. He is explicit that the no-miracle argument applies to all modes of inquiry, be it in science, our day-to-day affairs, or philosophy. Successful theories and explanations capture something fundamentally true about the world. Success in every type of enquiry, be it in hard sciences or folk psychological models we use to explain and facilitate our day-to-day encounters, can plausibly be explained only by assuming that our theories and explanations are true.

In his early work Putnam seems to think that scientific realism is coextensive with what he later calls "metaphysical realism," at least insofar as they both rely on

correspondence theory of truth. As we'll see, in later years he came to regret this move and bemoans the confusion between realism and correspondence theory of truth for he comes to believe that scientific realism is not in need of a theory of truth. In this period, however, Putnam characterizes truth in terms of correspondence to a mind-independent reality. A theory, an explanation, or an assertoric sentence is made true by the existence of states of affairs to which sentences from any theory correspond. He also seems to believe that correspondence theory is a defining feature of realism, and claims: "Whatever else realists say they typically say that they believe in a correspondence theory of truth."¹⁶ He believed that there exists a unique *natural* mapping of sentences onto sets of possible worlds and that the set corresponding to a true sentence always contains, and the set corresponding to a false sentence never contains, the actual world. He adds: "the success of the language using program may well depend on the existence of a suitable correspondence between the sentences of the language and states of affairs. It is *essential* to view theories as a kind of map of the world, [. . .], if we are to explain how they help us to guide our conduct as they do."¹⁷

However, it would be a mistake to think of Putnam, even in this early period, as a scientific realist in the tradition of Quine or Smart, who as we saw, were early influences on Putnam's defense of realism about science and mathematics. Quine and Smart's brand of realism led to a naturalism that confines their preferred ontology to physical entities only and showed no real interest in ethical, social, and political issues. As early as in the introduction to *Mathematics, Matter and Method* (1974) Putnam unequivocally signals the differences between his realism and that of his contemporaries. The passage is worth quoting at length.

It will be obvious that I take science seriously and that I regard science as an important part of man's knowledge of reality; but there is a tradition with which I would not wish to be identified, which would say that scientific knowledge is all of man's knowledge. I do not believe that ethical statements are expressions of scientific knowledge; but neither do I agree that they are not knowledge at all. The idea that the concepts of truth, falsity, explanation, and even understanding are all concepts which belong exclusively to science seems to me to be a perversion. That Adolf Hitler was a monster seems to me to be a true statement (and even a "description" in any ordinary sense of "description"), but the term "monster" is neither reducible to nor eliminable in favor of "scientific" vocabulary. . . . If the importance of science does not lie in its constituting the *whole* of human knowledge, even less does it lie, in my view, in its technological applications. Science at its best is a way of coming to know, and hopefully a way of acquiring some reverence for, the wonders of nature. The philosophical study of science, at the best, has always been a way of coming to understand both some of the nature and some of the limitations of human reason. These seem to me to be sufficient grounds for taking science and philosophy of science seriously; they do not justify science worship.¹⁸

The passage, I believe, heralds the philosophical soul searching that became a hallmark of Putnam's writing in three decades after the publication of this first of his

many books. Putnam's search for an answer to "the great question of realism" has, to a large extent, been motivated by a desire to accommodate values and norms in the overall story he tells about the ways in which language hooks on to the world. Over the subsequent decades, the story will take two more distinctive turns.

II. MIDDLE PUTNAM AND INTERNAL REALISM

In 1976, in the course of a presidential address to the American Philosophical Association, and to the dismay of many of his colleagues and former students present at the occasion, Putnam announced a radical shift in his philosophical thinking. The address, later published as "Realism and Reason," outlines several lines of attack against metaphysical realism. Chief among these is the repudiation of the claim that a theory ideal with respect to "operational utility, inner beauty and elegance, 'plausibility,' simplicity, 'conservatism,' etc" might still be false.¹⁹ In other words, contrary to the claims by traditional realists, it does not make sense to suggest that an epistemically ideal theory could be false because ultimately only epistemic notions involved in operational and theoretical constraints on theories could single out the right reference relations.

Putnam's central attack on metaphysical realism at this point comes from his famed model-theoretic argument according to which there is never just one but many ways of mapping linguistic terms into objects and therefore the very idea of a unique correspondence relation between statements and states of affair does not make sense. The metaphysical realist clings to the idea that we could conceive of a world independent of any particular representation of it. Putnam finds the idea of a world beyond the grasp of any knower, with the possible exception of God, unintelligible. Furthermore, the metaphysical realist vision of mind/world relation creates a potentially unbridgeable chasm between the knower and the known and entails that we may be unable to represent the world correctly at all. The metaphysical realist clings to the illusion that we can think and talk about things as they are, independently of our minds, and that we can do this by virtue of a correspondence relation between the terms in our language and some class of mind-independent entities. This is the picture of mind/reality relationship that Putnam now wishes to avoid. The picture is based on a number of assumption or "companions in guilt." They include

- (a) That the world consists of some fixed totality of mind-independent objects.
- (b) That there is exactly one true and complete description of "the way the world is."
- (c) Truth involves some sort of correspondence relation between words or thought-signs and external things and sets of things.²⁰
- (d) It prioritizes an externalist or what may be called a God's Eye point of view.²¹

- (e) It assumes that there is a clear distinction between the properties things have “in themselves” and the properties which are “projected by us.”
- (f) It resorts to “scientism” or the assumption that physics, as the fundamental science, can tell us what properties things have “in themselves.”²²
- (g) It adheres to a strong distinction between factual and evaluative statements.

What is wrong with these tenets of metaphysical realism is not so much that they are false, but that they are incoherent or philosophically unintelligible. For instance, Putnam asks:

What does it mean, . . . , to speak of mind independency? Human minds did not create the stars or the mountains, but this “flat” remark is hardly enough to settle the philosophical question of realism versus anti-realism. What does it mean to speak of a unique “true and complete description of the world?”²³

“Internal realism” is Putnam’s label for his favored account of the relationship between the mind and the world in this period. Under the influence of Michael Dumett, the internal realist Putnam adopted an epistemic view of truth, where truth is identified with “idealized rational acceptability,” or verification under ideal conditions.

“Truth,” in an internalist view, is some sort of (idealized) rational acceptability—some sort of ideal coherence of our beliefs with each other and with our experiences as those experiences are themselves represented in our belief system—and not correspondence with mind-independent of discourse-independent “states of affairs.”²⁴

Truth is not independent from knowledge, but at the same time, it is not identified with contingent and changeable epistemic achievements of a single time and a place, rather, it is coextensive with what we can know and justify under ideal epistemic conditions. “A statement is true of a situation just in case it would be correct to use the words of which the statement consists in that way in describing the situation, . . . a sufficiently well placed speaker who used the words in that way would be fully warranted in *counting* the statement as true of that situation.”²⁵

Two key ideas of this idealized epistemic conception of truth are

- (1) Truth is independent of justification here and now, but not independent of all justification.
- (2) Truth is expected to be stable or “convergent,” if both a statement and its negation could be “justified,” even if conditions were as ideal as one could make them, there is no sense to thinking of the statement as *having* a truth-value.²⁶

The theory is based on the assumption that if there were such things as epistemically ideal conditions, then statements that were justified under such conditions would be true. This is because truth as a property of a statement cannot be lost,

whereas justification can be lost. For instance, the statement “The earth is flat” was, deemed rationally acceptable, 3,000 years ago; but it is not rationally acceptable now. “Yet it would be wrong to say that ‘the earth is flat’ was *true* 3,000 years ago; for that would mean that the earth has changed its shape.”²⁷ What makes a statement, or a whole system of statements rationally acceptable is, in large part, its coherence and fit; coherence of “theoretical” or less experiential beliefs with one another and with more experiential beliefs, and also coherence of experiential beliefs with theoretical beliefs.²⁸

Conceptual relativity is another key feature of internal realism. Crucial to internal realism, Putnam contends, is the belief that there could be equivalent descriptions of one and the same situation and therefore there is no such thing as a fixed ontology. Metaphysical realism, on the contrary, denies this conceptual relativity and clings to the fantasy that “there is a totality of Forms, or Universals, or ‘properties,’ fixed once and for all.”²⁹ Putnam explains the doctrine of conceptual relativity in terms of the denial of a strict division between the factual and the conventional. There is an aspect of conventionality and an aspect of fact in every truth-claim and

we fall into hopeless philosophical error if we commit a “fallacy of division” and conclude that there must be a part of the truth that is the “conventional part” and a part that is the “factual part.” A corollary of my conceptual relativity—and a controversial one—is the doctrine that two statements which are incompatible at face value can sometimes both be true (and the incompatibility cannot be explained away by saying that the statements have “different meaning” in the schemes to which they respectively belong).³⁰

Interestingly, conceptual relativity allowed Putnam to accommodate the idea of correspondence to fact. He argues: “A sign that is actually employed in a particular way by a particular community of users can correspond to particular objects *within the conceptual scheme of those users*. . . . We cut the world into objects when we introduce one or another conceptual scheme of description. Since the objects and the signs are alike internal to the scheme of description, it is possible to say what matches what.”³¹ Key metaphysical idea of truth, reference, and representation acquire a new lease of life in this approach by losing any vestiges of mind-independence, by being treated internally or within the confines of a conceptual scheme.

By the early 1990s Putnam came to realize that the epistemic view of truth was beset with problems very similar to the ones he had attributed to the correspondence theory of truth. A major problem the metaphysical realist faces, a problem already recognized by Kant, is to find an explanation of our access to the external world without postulating “noetic rays” or some such mysterious bridging agent. How could the human mind reach out and epistemically touch the world as it is in itself. Putnam came to believe that there was a similar problem in explaining our “referential access to ‘sufficiently good epistemic conditions.’”³² In Putnam’s earlier thinking “the world was allowed to determine whether I am in a sufficiently good

epistemic situation or only seem to myself to be in one—thus retaining an essential idea from commonsense realism—but the conception of our epistemic situation was the traditional ‘Cartesian’ one, on which our sensations are an interface ‘between’ us and the ‘external objects.’”³³ By the early 1990s, Putnam had found this option unworkable, a realization that set the scene for the gradual emergence of the third stage in Putnam’s journey. But it is important to note that just as the repudiation of metaphysical realism did not lead to Putnam’s abandonment of some key features of his early philosophical views, the repudiation of an epistemic view of truth did not lead to a complete rejection of all aspects of internal realism. Putnam has continued to defend at least one core component of internal realism: conceptual relativity.

But what of scientific realism, the fourth and frequently neglected or misunderstood face of Putnam’s realisms? In the 1976 presidential address Putnam seems to identify metaphysical realism with scientific realism and reject them both. Or at least this is the way he is understood by commentators.³⁴ Some passages from that address support such an interpretation. For instance,

The realist explanation, in a nutshell, is not that language mirrors the world but that *speakers* mirror the world—i.e. their environment—in the sense of *constructing a symbolic representation* of their environment. . . . let me refer to realism in this sense—acceptance of this sort of scientific picture of the relation of speakers to their environment, and of the role of language—as *internal* realism.

Metaphysical realism, on the other hand, is less an empirical theory than a model. . . . It is, or purports to be, a model of the relations of *any* correct theory to all or parts of THE WORLD. I have come to the conclusion that this model is incoherent.³⁵

The impression left was that scientific realism shared the misguided ambitions of metaphysical realism of attempting to provide a unique model of reality. But that initial impression is misleading, for even in this period Putnam’s views of science, as well as key elements of his internal realism, strongly bore the marks of scientific realism as traditionally construed. For instance, in his *Reason, Truth, and History* (1981), where he offers some of his most trenchant defenses of internal realism, Putnam still maintains that we can intelligibly claim that there are electrons, just as one can intelligibly claim that there are rabbits.³⁶ And somewhat later, and even more emphatically, he asserts:

Given the right setting . . . the statement that there are electrons flowing through a wire may be as objectively true as the statement that there is a chair in this room or the statement that I have a headache. Electrons exist in every sense in which chairs (or sensations) exist; electrons talk is no more derived talk about sensations or “observable things” than talk *about* sensations or chairs is derived talk about electrons. Here I *am* a “scientific realist.”³⁷

By the early 1980s, however, Putnam begins a more careful delineation of the various strands of realism. The problem with discussions of scientific realism, as con-

ceived by the very early Putnam, is that he did not always distinguish between a scientific realism that mimics the aspirations of metaphysical realism and scientific realism as an empirical theory. The first brand of scientific realism not only clings to the correspondence theory of truth but “also follows the ontological illusion perpetuated by metaphysical realism by claiming that physics is an approximation to a sketch of the one true theory, the true and complete description of the furniture of the world.”³⁸ Scientific realism, in the version supported in the no-miracle argument should be taken as an empirical hypothesis without metaphysical import. Once scientific realism is conceived as an empirical hypothesis then the need for a correspondence theory disappears:

the realist’s argument turns on the success of science, or, in an earlier day, the success of common sense material object theory. But what does the success of science have to do with the Correspondence Theory of Truth?—or any theory of truth, for that matter? That science succeeds in making many true predictions, devising better ways of controlling nature, etc., is an un-doubted empirical fact. If realism is an explanation of this fact, realism must itself be an over-arching scientific hypothesis. And realists have often embraced this idea, and proclaimed that realism is an empirical hypothesis. But then it is left obscure what realism has to do with theory of truth.³⁹

There is a third usage of the term “scientific realism,” Putnam tells us, one which has an “ideological tone—a tone faintly reminiscent of eighteenth century materialism, or, to be blunt about it, village atheism.”⁴⁰ The “scientific realist” of this kind, represented best by Smart, Armstrong, the eliminative materialists, etc., believe that all knowledge worthy of the name is part of “science.” This variety of scientific realism leads to scientism of the worst kind. And this is yet another version of scientific realism that he unequivocally rejects. One prominent and unwelcome feature of this “scientism” is physicalism, or Quinean naturalism, where not-yet-well-defined physical particles and laws of physics are supposed to fix our ontology or the totality of what there is. Physicalism banishes all intentional idioms as well as discussions of values and norms from the language of nature, or the vocabulary scientists can legitimately use to describe reality or what there is. Putnam, however, insists that many concepts indispensable to doing science—reference, causation, justification, to take just a few examples—are simply irreducible to physical notions. Eliminative materialism, with its insistence to abandon all intentional descriptions of the world in favor of a purely extensional language, is the ultimate example of such scientism. For the eliminative materialists the science of the brain will ultimately be able to delineate correctly the essential features of what we are all about and there will be no need for folk psychological superstitions, such as beliefs and other propositional attitudes and mental states, phenomenological consciousness, the qualitative features of experiences, etc. Similarly, physics will be able to cut nature at its joints and give us a unique, true, and ultimate picture of the universe. Scientific realism, when understood in this sense, adheres to a strict division

between facts and values and maintains that scientific language has no room for evaluative judgments. This is the scientific realism that Putnam had started to criticize in his earliest writings and came to fully reject in this “interim” period.

Early Putnam defended realism about science in the first and second sense outlined here. His allegiance to third type of scientific realism, or scientism, has been more mixed. Putnam now thinks that the functionalist view of mind he defended in his early period was in the service of this type of scientism⁴¹ but as the above passage from Putnam in 1974 indicates he had never given full allegiance to the naturalist version of scientific realism. Middle Putnam, as it has been indicated, embraces the nonmetaphysical version of scientific realism only.

III. NATURAL (DIRECT) REALISM

The latest Putnam steers a middle course between the philosophical “phantasies of metaphysical realism” and the idealist tendencies of internal realism. He now distances himself both from the ontologically top-loaded correspondence theory of truth, with its demands for obscure entities such as facts, as well as the epistemic conceptions of truth with its equally unwelcome demand for ideal conditions on enquiry. In his earlier emphatic rebound from metaphysical realism Putnam had univocally stated that “In my view, truth, insofar as we have the notion, does not go beyond correct assertibility (under the right conditions).”⁴² The most recent Putnam, however, repeatedly clarifies that he does not “believe that truth can be *defined* in terms of verification”⁴³ and that he refuses to take the pragmatists route of identifying the true with what is (or would be) discoverable in the long run. Like the realists, he is willing to admit that truth can outrun knowability. Language, on occasion, describes reality, he now believes, but does not copy it. Realists, he believes, should discard the metaphor of language mirroring or mapping reality and substitute it for the idea of our beliefs, and the sentences we employ to express them, “being responsible to reality.” Our cognitive encounters with each other and the world are governed by and hence should be understood in terms of the requirement of our answerability to the world and to each other. Without this requirement, Putnam, in one voice with McDowell, claims that inquiry would be “frictionless” and would lead to an irreversible slide into idealism.

Putnam’s most recent criticism of metaphysical realism differs from his earlier ones in that he now provides a diagnosis for the root causes of its difficulties. He still believes that correspondence theory of truth is mysterious, if not unintelligible, because it fails to provide entities to which sentences or statements would correspond. But the more general problem with metaphysical realism, he now thinks, lies in what he calls “the interface conception” of the mind, a conception that treats the mind as primarily engaged with sense data, impressions, and the like. The conception is explanatorily empty for it creates the philosophical myth of the qualia to

explain what really did not need an explanation. He now contends that the interface conception was at the root of the very problems he diagnosed in his recoil from traditional metaphysical realism when he had said, “internalism does not deny that there are experiential *inputs* to knowledge; knowledge is not a story with no constraints except *internal* coherence; but it does deny that there are any inputs *which are not themselves to some extent shaped by our concepts*, by the vocabulary we use to report and describe them, or any inputs which admit of only one description, *independent of all conceptual choices*.”⁴⁴ But he had not addressed this important insight fully or adequately in the internal realist period.

This latest version of realism, variously called “natural realism,” “common sense realism,” and “direct realism” is influenced by the classical Pragmatism of James and Dewey and also emulates Wittgenstein and Austin’s aspiration to allow philosophy reflect the “common sense” of the ordinary man.⁴⁵ The label “natural realism”⁴⁶ itself is borrowed from William James, and it intends to encapsulate an approach to the philosophical problems of perception that respects and reflects the “natural realism of the common man.”⁴⁷ The motivation for the commonsense element of this third realism, urged on us by Austin and Wittgenstein, is to ensure that realism would not be constructed as an alternative metaphysical account. Commonsense realism alerts us to “the needlessness and the unintelligibility of a picture that imposes an interface between ourselves and the world. It is a way of completing the task of philosophy, the task that John Wisdom once called a ‘journey from the familiar to the familiar.’”⁴⁸

The key to Putnam’s natural realism is his attempt “to do justice to our sense that knowledge claims are responsible to reality without recoiling into metaphysical fantasy.”⁴⁹ Metaphysical realism ensures objectivity and answerability to reality by assuming a representational view of the mind, where propositions, as the content of our intentional attitudes such as belief and knowledge, picture or mirror the world. But representationalism comes at a cost or two, not least of which is the introduction of a seemingly unbridgeable gap between the knowing (and perceiving) mind on the one hand and its objects of knowledge (and perception) on the other. As the history of modern philosophy shows, the alleged threat and hence preoccupation with skepticism are the unwelcome consequences of gappy or indirect realism. Putnam, like many others before him, finds this cost unnecessarily high. Being responsible to reality, he emphasizes, should not be equated with representational theories of mind/world relationship. The picture provided by metaphysical realism fails because of the boundary it creates between the mind and the world, the inner and the outer and poses the superfluous and unanswerable question of how the mind could have access to reality or the thing in itself. The indirect realists postulate mysterious entities, such as sense data, to bridge the gap they had created in the first place, but in the process they distance us even further from a perceptual and conceptual link with the world. Starting with the early empiricists, there has been a temptation to think of ideas, sense-impressions, or sense data as the vehicles for our contact with the external world. The table I see, the claim goes, is a construction out of the impressions or data of colors, texture, shape, etc., that my senses receive

directly. The sense data are the what we know directly while our perceptual acquaintance with tables and chairs are secondary or derived. Such a move, however, turns these putatively direct impressions of our senses into intermediaries between us and the world, and hence prevent us from having an unmediated touch with the world.⁵⁰ Conversely, Putnam shares McDowell's belief that the very idea of purely nonconceptualized content to our experience is an unnecessary philosophical hindrance that leads to the unfortunate myth of the Given. Experience places a rational constraint on thinking, but experience should not be identified with raw qualia as they are invariably imbued with conceptual content.

The main point of Putnam's natural realism can be summed up as the following:

The objects of (normal "veridical") perception are "external" things" and more generally, aspects of "external" reality and our cognitive powers can reach all the way to these objects.⁵¹

In other words we perceive the world itself, and not the sense data caused by that world. Furthermore, all our perceptions are already richly imbued with conceptual content. To use a Wittgensteinian idiom, seeing is always seeing as and it is the interface between the world and the rich fabric of our concepts that jointly determines what we see. Natural realism, Putnam claims, reflects the insistence of common sense realism "that 'external' things, cabbages and kings, can be *experienced*. (And not just in the Pickwickian sense of causing 'experiences,' conceived as affectations of our subjectivity)."⁵²

This brings Putnam to a "cultivated" or "second naïveté," where in one voice with the philosophically unsophisticated we can confirm that to sense a table is "to see that it is a [. . .] table that is in front of me."⁵³

The *second naïveté* means (among other things) that for us to understand the word "coffee table" is for us to use the phrase "coffee table" by moving successfully within our language game. "Moving around in the language game makes it possible for me to say that there is a coffee table in front of me."⁵⁴

We use language for a variety of goals, including the goal of describing reality. To that extent representationalists were correct. However, "description is never a mere copying and [. . .] we constantly add to the ways in which language can be responsible to reality."⁵⁵

Another element in Putnam's new realism that brings into relief the extent of his departure from the internal realist period and the return to earlier realism is his renewed acceptance "that the world is as it is independently of the interests of describers" and his insistence that the Jamesian view where "the world we know is to an indeterminate extent the product of our own minds is one I deplore."⁵⁶ An example of this deplorable Jamesian doctrine is the claim that "we create the subjects of our true as well as of our false propositions," a claim that sounds very close in spirits to Kantian period of internal realism when Putnam proclaimed that "the mind and the world make up the mind and the world."⁵⁷ The emphasis now is on the strongly realist sounding point that "our words and life are constrained by a reality not of our own invention"⁵⁸ and that these constrains force us to be "answerable to the world and emphasise the core philosophical idea of objectivity."

However, Putnam does not depart very far from his internal realist rejection of what he had called a core commitment of metaphysical realism. He still believes that the assumption that “there is one definite totality of objects that can be classified and one definite totality of all properties”⁵⁹ is incoherent. It is a mistake to think that there is a totality of all things or a “superthing” and he is weary of “the common philosophical error of supposing that the term ‘reality’ must refer to a single superthing instead of looking at the ways in which we endlessly renegotiate—and are forced to renegotiate—our notion of reality as our language and our life develop.”⁶⁰ His natural realism still embraces conceptual relativity and pluralism and deplores the “phantasy” that there could be a unique true description the way the world is.

Natural realism retains another important strand of internal realism. Putnam continues the philosophical strategy of dismissing a variety of long cherished dichotomies, most notably the duality of fact and value, or description and evaluation for “*all* description presupposes evaluation (although not necessarily *moral* evaluation) and *all* evaluation presupposes description.” He also extends the list of incoherent and unwelcome dichotomies by adding the separation between the knower and “everything outside” or its modern version, the dualism of brain states and everything outside the head, the duality of primary and secondary qualities. In his pursuit of nondichotomous thinking Putnam remains true to his allegiance to classical Pragmatism of James and Dewey. But the extent of his allegiance to Pragmatism should not be exaggerated as Putnam strongly rejects the instrumentalism of the early Pragmatists and the relativist tendencies of the neopragmatists such as Richard Rorty.⁶¹

What about the links between direct realism and realism about science? Putnam thinks there is no conflict between scientific realism and natural realism and no conflict between a “suitably commonsensical realism and science,” but we can realize that these forms of realism are compatible only when we accept that “the form of all knowledge claims and the ways in which they are responsible to reality are [not] fixed once and for all in advance.”⁶² This is scientific realism without absolutes, a scientific realism that bears the marks of conceptual relativism. We can refer to a cat by its name “because we can see the cat, and pet her, and many other things.”⁶³ This is how our conceptual scheme of medium-size objects works. When it comes to unobservable entities postulated in theoretical physics realism is saved because of the resources available to us within that particular conceptual scheme. He explains: “I do not, of course, wish to say that positrons aren’t real. But believing that positrons are real has conceptual content only because we have a conceptual scheme, a very strange one, one which we don’t fully ‘understand,’ but a successful one nonetheless which enables us to know what to say when about positrons, when we can picture them as objects we can spray and when we can’t.”⁶⁴ This approach encourages us to embrace the scientific image of the world while *simultaneously* accepting “the natural realism of the common man.”

IV. JOURNEY'S END?

Is natural realism the end point of Putnam's long journey? Is he home now? The latest Putnam incorporates and settles many of his perennial philosophical concerns and questions. Most crucially, the connection between mind and the world is established directly unencumbered by intermediaries, such as sense data. And by establishing a firm friction with the world he ensures the objectivity of knowledge claims and alleviates the threat of skepticism. He also keeps his allegiance to scientific realism, a view he has always espoused, by finding a way to establish that scientific claims are about the world and of the world and not mere instruments of predictions or mere projections from our observations. Direct realism underwrites scientific realism. The cleavage between the factual and evaluative, however, is denied, for the language of science is not restricted to the vocabulary of materialism or physicalism—normativity is as much a part of the language of science as part of the language of the common man on the street. But what of the gap, or indeed the chasm, between the common sense of the man on the street and contemporary science, in particular the scientific reasoning underpinning much of quantum mechanics? How could “commonsense realism” lead us to scientific realism about the bizarre theoretical entities physicists postulate? The answer is not clear to me.

As we have seen, Putnam thinks that the idea of conceptual schemes, or Wittgensteinian language games, could explain the divergences between differing, but equally correct accounts of what there is. The language of the man in the street and the theoretical framework of the quantum physicist are two equally good ways of talking about the world. But Putnam's conceptual relativity arguably manages to deliver a nonrobust version of scientific realism only, a version that may have more in common with the antirealist views that Donald Davidson had famously attacked in his “On the Very Idea of a Conceptual Scheme” than Putnam is willing to admit. The charge becomes more plausible once we realize that Putnam has not yet finalized his position on the role of truth in this renewed realism. As we have seen, the latest Putnam rejects both the classical realist conception of truth as correspondence and the epistemic view of truth he embraced for a short time in the internal realist period. But is he successful in defending a robust conception of truth, where truth is not simply a compliment we pay to our most cherished beliefs? The natural realist Putnam defends a Wittgensteinian approach to truth. Truth and falsity, which are linked to the cognate ideas of being right or wrong, are decided in the context of particular discourse or language game. Knowledge claims are responsible to reality in a multiplicity of ways and similarly truth and falsity are established in a plurality of ways depending on the mode of discourse in case. He argues that “true,” like “exists,” does not have a univocal meaning. Rather, our understanding of what truth comes to, in any particular case, would depend on the language game we are engaged in and the role truth-bearing propositions play in that game. For

instance, statements with strong evaluative goals are as much bearers of truth and falsity as descriptive statements used in a starkly empirical domain. The mistake is not to pay attention to their aims and roles in the particular language games that envelope them and give them context. This Wittgensteinian approach is then wedded to a low-cost disquotational view according to which to say *P* is true is equivalent to asserting *P*. But this minimalist move should not blind us to point that assertions come in a great variety and take place in many different language games.

The difficulty Putnam faces now is two-fold: First, to justify his claim that this disquotational view of truth, unlike Rorty's deflationist version, would enable him to hold to a robust view of truth and simultaneously avoid becoming a version of the discarded correspondence theory. Second, to show us that commonsense realism, conjoined with conceptual relativity, can deliver not only a robust realism about middle-sized observable objects, but also realism about the nonobservable theoretical entities postulated by scientists. But this is a task for another day.

NOTES

1. *The Threefold Cord*, 49.
2. H. Putnam, "The Question of Realism," in *Words and Life*, 295.
3. *The Threefold Cord*.
4. *Mathematics, Matter, and Method*, vii.
5. H. Putnam, *Philosophy of Logic* (New York: Harper Torchbooks, date), 57.
6. See David Liggins, "Quine, Putnam, and the 'Quine-Putnam' Indispensability Argument," *Erkenntnis* 68, no. 1 (January 2008): 113–27.
7. "What Is Mathematical Truth?" *Meaning and the Moral Sciences*, 73.
8. J. J. C. Smart, *Philosophy and Scientific Realism* (London: Routledge, 1963), 30.
9. *Ibid.*, 69.
10. *Meaning and the Moral Sciences*, 18–22.
11. *Ibid.*, 123.
12. Larry Laudan, *Science and Values* (Berkeley and Los Angeles: University of California Press, 1984).
13. *Meaning and the Moral Sciences*, 19.
14. Another common objection to the no-miracle argument is that there could be other good explanations for the predictive success of scientific theories. Using arguments from underdetermination of theory by data, we can argue that many incompatible theories can lead to the same successful empirical predictions, and hence predictive success cannot be seen as a sign of truth.
15. See for instance, Stathis Psillos, *Scientific Realism: How Science Tracks Truth* (London: Routledge, 1999).
16. *Meaning and the Moral Sciences*, 19–20.
17. *Ibid.*, 100.
18. *Mathematics, Matter, and Method*, xiii–xiv.
19. "Realism and Reason," 426.
20. *Realism with a Human Face*, 30.
21. *Reason, Truth, and History*, 49.
22. H. Putnam, *The Many Faces of Realism* (La Salle, Ill.: Open Court, 1987), 13.
23. *Realism with a Human Face*, 31.

24. *Reason, Truth, and History*, 49 and 50.
25. *Ibid.*, 55, and “Realism and Reason,” 115.
26. *Reason, Truth, and History*, 55. But this did not entail the adoption of the Peircean view that such conditions involve infinitely prolonged scientific inquiry, or the corollary that truth about the past is determined by what we can or will find out in the future.
27. *Ibid.*, 55.
28. *Ibid.*, 54–55.
29. See particularly, “A Defense of Internal Realism,” in *Realism with a Human Face*, 30–42.
30. *Ibid.*, x.
31. *Reason, Truth, and History*, 52.
32. Putnam discusses this point in some detail in “Between Scylla and Charybdis: Does Dummett Have a Way Through?” in *The Philosophy of Michael Dummett*, ed. Randall E. Auxier and Lewis Edwin Hahn (Chicago and LaSalle, Ill.: Open Court, 2007), 155–67.
33. H. Putnam, in M. Baghramian (ed.), *Permutations: Essays on Hilary Putnam* (Oxford University Press, forthcoming).
34. See, for instance, Maximilian de Gaynesford, *Hilary Putnam* (Chesham: Acumen, 2006).
35. “Realism and Reason,” 484.
36. *Reason, Truth, and History*, 52.
37. “Three Kinds of Scientific Realism,” 198.
38. H. Putnam, *Realism and Reason*, 208.
39. H. Putnam, “What Is ‘Realism?’” *Proceedings of the Aristotelian Society*, New Series, Vol. 76 (1975–1976), 177–94, 178.
40. *Ibid.*, 178.
41. See, for instance, *The Threefold Cord*. I actually disagree with Putnam’s self-diagnosis. Putnam’s functionalism was developed against the dominant materialist theory of the time, mind-brain identity theory and the pseudo-scientism of logical behaviorists. Functionalism, in many ways, separated Putnam’s realism from the science worship he now condemns.
42. H. Putnam, “Three Kinds of Scientific Realism,” *Philosophical Quarterly* 32 (date): 195–200, 198.
43. *Pragmatism: An Open Question*, 11.
44. *Reason, Truth, and History*, 54.
45. *The Threefold Cord*, 5, 10, 24, 41.
46. See “A World of Pure Experience,” in *The Works of William James: Essays in Radical Empiricism*, ed. Frederick Burkhardt and Fredson Bowers (Cambridge, Mass.: Harvard University Press, 1976), for James’s explanation of “natural realism.”
47. *The Threefold Cord*, 10.
48. *Ibid.*, 41.
49. *Ibid.*, 4.
50. McDowell, whose views have influenced Putnam’s recent thinking, puts the point this way: “even as it tries to make out that sensory impressions are our avenue of access to the empirical world, empiricism conceives impressions in such a way that they could only close us off from the world, disrupting our ‘unmediated touch’ with ordinary objects”; John McDowell, *Mind and World* (Cambridge, Mass.: Harvard University Press, 1993), 155.
51. *The Threefold Cord*, 10.
52. *Ibid.*, 20.
53. *Ibid.*, 14.
54. *Ibid.*, 15.
55. *Ibid.*, 9.
56. *Ibid.*, 6.
57. *Ibid.*, 178.

- 58. Ibid., 9.
- 59. Ibid., 7.
- 60. Ibid., 9.
- 61. See *Pragmatism: An Open Question* for an earlier statement of Putnam's allegiance to classical Pragmatism.
- 62. *The Threefold Cord*, 20.
- 63. "Realism without Absolutes," 284.
- 64. *Pragmatism: An Open Question*, 60.

TEXTS BY PUTNAM

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