ROUTLEDGE STUDIES IN TWENTIETH CENTURY PHILOSOPHY

Hilary Putnam

Pragmatism and Realism

Edited by
James Conant and Ursula Zeglen

Hilary Putnam

> A beautiful statement of almost all the ideas that I take to be of lasting value and vital importance
>
> Hilary Putnam

Hilary Putnam is one of the most famous and influential living philosophers. In *Hilary Putnam: Pragmatism and Realism*, Putnam responds to ten new papers examining his central ideas, written by highly respected Putnam scholars especially for this volume.

Putnam's work touches on almost every area of interest in contemporary Anglo-American philosophy. His ideas have had repercussions in the philosophy of language and the philosophy of mind, as well as countless areas of metaphysics. Many of Putnam's most influential ideas can be traced back to his two key commitments: to pragmatism and to realism. In this book, well-known top scholars examine these two fundamental positions and their place in Putnam's work. In addition to responding to each paper, there is a new essay by Putnam himself on pragmatism and nonscientific knowledge.

The insight into Putnam's work provided by the contributions to his work, combined with Putnam's extensive and detailed responses, make this essential reading for anyone with an interest in the ideas and influence of Hilary Putnam.

Contributors: Ruth Anna Putnam, Hilary Putnam, Richard Warner, Robert Brandom, Nicholas Rescher, John Haldane, Tadeusz Szubka, John Heil, Wolfgang Künne, Gary Ebbs and Charles Travis.

James Conant is Professor of Philosophy at the University of Chicago. He is the editor of Putnam's collected papers. **Urszula M. Żegleń** is Professor of Philosophy at the University of Turoń, Poland. She is the editor of *Donald Davidson: Truth, Meaning and Knowledge* (Routledge, 1999).

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Contributors

Robert Brandom is Distinguished Service Professor of Philosophy at the University of Pittsburgh. He is the author of *Making It Explicit* (1994) and *Articulating Reasons* (2000), and the editor of the Harvard edition of Sellars' *Empiricism and the Philosophy of Mind* (1997), and *Rorty and His Critics* (2000). *Tales of the Mighty Dead*, a collection of his historical essays on Spinoza, Leibniz, Hegel, Frege and Heidegger, is forthcoming from Harvard. He is currently at work on a book about Hegel.

James Conant is Professor of Philosophy at the University of Chicago. His interests include the philosophy of language, questions on ethics and political philosophy, literary forms of philosophical work and the history of philosophy. He has published widely in each of these areas, with a recent focus on Frege and Wittgenstein. He is the editor of Hilary Putnam's collected papers.

Gary Ebbs is Associate Professor of Philosophy at the University of Illinois at Urbana-Champaign. He previously taught at Harvard University and the University of Pennsylvania. He is the author of *Rule-Following and Realism* (1997), and articles on philosophy of language, philosophy of logic, philosophy of mind and the history of the analytic philosophy. A unifying goal of his current research is to describe the methodology of rational inquiry from an engaged, practical point of view.

John Haldane is Professor of Philosophy at the University of St Andrews. Currently he is also Stanton Lecturer in Divinity at Cambridge, and Royden-Davis Professor of Humanities at Georgetown University. He is the co-author (with J. J. C. Smart) of *Atheism and Theism* and editor of several collections including *Philosophy and Public Affairs*. A volume of his essays entitled *Faithful Reason* is due to be published by Routledge in 2002.

John Heil is Professor of Philosophy at Monash University and Paul B. Freeland Professor of Philosophy at Davidson College. His interests lie in metaphysics, philosophy of mind and epistemology. His most recent book is *Philosophy of Mind: A Contemporary Introduction* (Routledge 2000).

Wolfgang Künne is Chair of Philosophy at the University of Hamburg. He is Vice-President of the German Society for Analytic Philosophy and President of the International Bolzano Society. He is the editor of *Direct Reference, Indexicality, and Propositional Attitudes* and of *Bolzano and Analytical Philosophy*. His book *Conceptions of Truth* is forthcoming.

Hilary Putnam is Cogan University Professor Emeritus at Harvard University. His books include *Reason, Truth and History*; *Realism with a Human Face*; *Renewing Philosophy*; *Words and Life*; *Pragmatism* and *The Threefold Cord: Mind, Body and World*.

Ruth Anna Putnam is Professor Emerita of Philosophy at Wellesley College, where she taught for 35 years. She is the editor of *The Cambridge Companion to William James*. She has written and continues to write on William James, John Dewey, ethics and political philosophy.

Nicholas Rescher is University Professor of Philosophy at the University of Pittsburgh, where he served for many years as Director of the Center for Philosophy of Science. A former president of the American Philosophical Association, he is an honorary member of Corpus Christi College, Oxford. Author of more than eighty works ranging over many areas of philosophy, he was awarded the Alexander von Humboldt Prize for Humanistic Scholarship in 1984.

Tadeusz Szubka is Associate Professor of Philosophy, Catholic University of Lublin, Poland. He held various visiting fellowships at British, American and Australian universities. He is the author of *Metafizyka analityczna P. F. Strawsona* (1995) and co-editor of *The Mind–Body Problem* (1994). He is currently completing a book on the semantic antirealism of Michael Dummett.

Charles Travis is Professor of Philosophy at the Northwestern University in Evanston, Illinois. He was formerly Professor at the University of Stirling. He is the author of *The Uses of Sense*, a study of Wittgenstein's philosophy of language and thought, and of *Unshadowed Thought*, a study of some problems of representation in language and thought. He is currently working on a book about the bearing of special psychological design on forms of thought, and about the nature of logical necessity.

Richard Warner is Associate Professor of Law at the Chicago-Kent College of Law. He was a professor of philosophy from 1976, first at the University of Pennsylvania and then at the University of California, until he began teaching at Chicago-Kent in 1990, where he teaches contracts, remedies, jurisprudence, Internet Law and E-commerce Law. He has published several articles and books on philosophical and

legal topics. He is currently the Director of Project Poland and Faculty Director of Chicago-Kent's Center for Law and Computers. His current research concerns the regulation of business competition on the Internet as well as the nature of human rights and their grounding in personal freedom.

Urszula M. Żegleń is Professor of Philosophy and the chair of Theory of Knowledge and Methodology of Sciences at the Nicholas Copernicus University in Toruń, Poland. She is the editor of *Donald Davidson: Truth, Meaning and Knowledge* (Routledge 1999).

Preface

The most vivid form of philosophizing is discussion – an indirect exchange of views allows for their better understanding, and for their deeper examination by advocates on the one hand and adversaries on the other. Our book is just such a vivid discussion, a debate with Hilary Putnam, whose views are very influential in various areas of present-day philosophy.

The contributors, who, like Putnam, are also eminent philosophers, concentrate mainly on the two major facets of Putnam's philosophy: pragmatism and realism. Both of these topics allow them to discuss various questions that are important in the philosophy of science and culture, epistemology and ontology, the philosophy of mind and language, and the philosophy of logic.

The philosophers examine Putnam's position, while he comments on each of their papers and contributes further to the discussion with an original essay of his own. Thus, the reader will have fresh and challenging replies to the key philosophical questions raised by Putnam's lifetime of intellectual searching, not the least of which is 'how do we do philosophy?', which means for him, as for the classical pragmatists, 'how do we deal with the real problems of real beings in the real world?'

We hope that, in reading our book, you may find some answers to questions that occupy the minds of everyone, not just professional philosophers.

James Conant and Urszula Żegleń

Acknowledgements

Hilary Putnam is a philosopher who for decades has put forward views which have never failed to be fascinating, inspiring, influential and controversial. Each new work and elaboration of his views is met with great interest all over the world.

The present volume contains both a new essay by Hilary Putnam and a collection of papers discussing his ideas. The papers focus mainly on two subjects which are especially important in Putnam's philosophy, namely pragmatism and realism.

The preparation of this book was directly inspired by the conference on American Neopragmatism organized in 1998 at the Nicholas Copernicus University in Toruń (Poland) and devoted to Hilary Putnam who, as the keynote speaker, gave the opening paper (published in this volume).

Hilary Putnam deserves our special thanks and appreciation. We would also like to thank all our outstanding contributors who wrote their papers especially for this volume. Our thanks are due to all who, in different ways, helped in preparation of this publication, especially to the philosophy editors from Routledge, Tony Bruce and Siobhan Pattinson, the editorial staff at Florence Production Ltd, Sarah Moore and Vicky Squires, and the anonymous referees, as well as to Gary Ebbs, Tadeusz Szubka, Slawek Konkel and John Kearns.

Part I

Putnam and pragmatism

Introduction

Urszula M. Żegleń

While Hilary Putnam does not identify himself as a pragmatist, pragmatism is an important theme in his recent work. He discussed pragmatism in his Italian lectures, which he delivered in 1992 and published three years later (Putnam 1995b). He has also discussed pragmatism in numerous articles, some of which have been reprinted in *Words and Life* (1994a), *The Threefold Cord: Mind, Body and World* (1999). He sees pragmatism as a valuable source of insights into fundamental philosophical questions, such as 'How can we know anything about the world?' and 'What are our obligations?' Like the pragmatists, he considers such questions both from a theoretical point of view and from the point of view of our moral, political, social and (even) religious practices.

The 'interpenetration' of facts and values

According to Putnam the pragmatists' great achievement was to recognize and highlight the connection between theoretical and practical discourse, thereby laying the groundwork for further and deeper studies. In a paper with the provocative title 'Why is a Philosopher?' (in Putnam 1990b: 105–19) he claims that just as there are no obligations without facts, there are no facts without obligations. Our cognitive obligations are determined by facts in the sense that, given certain facts, and the appropriate cognitive conditions, we are obliged to make, or to provide justifications for, various judgements. This normative relationship between facts and judgements holds not only for the judgements we express in ordinary language, but also for those we express in the language of physics, the paradigmatic discipline of contemporary philosophy of science. Putnam's view is directed here against the assumption, embodied in the positivists' famous principle of demarcation, that a boundary between factual (scientific) and normative (nonscientific) statements can be defined.

Like the pragmatists, he rejects the fact/value dichotomy, and argues that facts and values are connected. He describes this connection metaphorically, saying that 'facts' dissolve into 'values' (ibid.: 115). Features such as coherence and simplicity, which are important from the point of view

of the logical characterization of a theory, are treated as values without which there would be no facts and no world (H. Putnam, 'Beyond the Fact/Value Dichotomy', in Putnam 1990b: 135–41; 141). Putnam's rejection of the fact/value dichotomy amounts to the strong and controversial thesis that there is no methodological difference between science and ethics.

The rejection of the fact/value dichotomy is connected with Putnam's rejection of metaphysical realism, and especially of the claim that the world exists independently of our minds. The rejection of this dichotomy also implies the rejection of other dichotomies that have not been accepted by pragmatists, dichotomies such as fact/interpretation, fact/convention (or /theory) and objective/subjective. Despite his rejection of a sharp divide between the objective and the subjective points of view, however, Putnam is very interested in understanding how objectivity about values (including epistemic and moral values) can be achieved. Guided by pragmatism, Putnam seeks to expose the problems that would arise for any real application of the idea that there is a relativism of values.

The rejection of traditional dichotomies goes hand-in-hand with the kind of holism espoused by the pragmatists, especially William James, whose views Putnam has carefully studied (Putnam 1990b, 1994a, 1995b). For James, according to Putnam, there is an 'interpenetration' of facts and values. In Putnam's view James's pragmatic picture of the relationship between facts and values is much more realistic than the traditional picture, according to which there is a fundamental divide between facts and values.

Pluralities without relativism, fallibilism without scepticism

Like James, and neopragmatists such as W. V. Quine and Richard Rorty, Putnam rejects the traditional conception of philosophy as a Master Science that supplies all other sciences with ontological and epistemological foundations. Unlike James, Quine and Rorty, however, Putnam blends his pragmatism with lessons he learned from Kant and the later Wittgenstein. Putnam's debt to Kant is especially evident in his early 'constructivist' formulations of his internal realism.

Putnam follows classical pragmatists (Charles Sanders Peirce, James, John Dewey) in their demands for a continuous review of our scientific and philosophical beliefs and theories, guided by a notion of 'goodness' appropriate to those beliefs and theories. 'Goodness' as a pragmatic guiding value must always reflect present knowledge and the rich cultural, social and historical context in which scientists and philosophers act. This does not mean, however, that values are culture-bound, relativized to particular times and localities (in the way that Rorty and various cultural relativists suggest). Putnam's view is that there are norms that govern all rational activity; these norms are embodied in particular cultures in different ways, depending on historical conditions. This standpoint, which Putnam shares

with the pragmatists, is sometimes misread as a kind of relativism. But Putnam argues that neither he nor the classical pragmatists are relativists about value (H. Putnam, 'Pragmatism and Relativism: Universal Values and Traditional Ways of Life', in Putnam 1994a: 182–97).[1]

Pragmatists reject the assumption that there is only one true and complete scientific theory, one true and complete set of beliefs about the world. Instead they recommend that we remain open to a plurality of theories or conceptual schemes, a plurality of descriptions of the world. How then should we understand the concept of truth? On this point, as on many others, pragmatists disagree. Putnam agrees with the classical pragmatists that truth is a normative notion, but he stresses that normativity cannot be naturalized or relativized to any particular culture or practice.

Putnam endorses a pragmatic blend of fallibilism and antiscepticism that is central to James's conception of truth and Peirce's early writings (Putnam 1995b: 20f). Although fallibilism holds that no belief or theory is immune to revision, it does not require that we doubt all our beliefs or theories at once. It does not even take for granted that such radical Cartesian doubt makes sense. Instead, it requires that we doubt our beliefs or theories only when we have good reasons to doubt them (ibid.: 21). Putnam has recently declared his support for James's theory of perception, according to which we can perceive ordinary, medium-sized features of our environment directly (Putnam 1994b). He sees no reason to doubt whether there are tables and chairs, houses, trees and rivers in our environment because he believes that we perceive them directly. In this way Putnam rejects Cartesian epistemology, but remains committed to a form of realism.

The content of Part I

The papers and comments collected in this section examine Putnam's views on pragmatism and present a variety of opinions on this important aspect of his work.

The section opens with 'Taking pragmatism seriously' by Ruth Anna Putnam, who stresses that to take pragmatism seriously is to philosophize in a way that is relevant to real problems of real human beings. In any adequate examination and treatment of these problems, facts and values are inextricably linked.

In the essay 'Pragmatism and nonscientific knowledge', Hilary Putnam presents his views on pragmatism. The paper explores the importance of nonscientific knowledge, especially the knowledge of values. Putnam points out how science depends on judgements which are not themselves scientific, in particular judgements of value. The focus of the paper revolves around the problem of the objectivity of value claims. Following the lead of the classical pragmatists (especially Dewey), he argues for the objectivity of judgements of reasonableness (coherence, plausibility, simplicity and the like) which are presupposed by science. He also attempts to reply to the

basic question of the paper, how is it possible for value to be objective, and how is it possible to be objective in making ethical statements? His approach to normativity and rationality blurs the neopositivistic demarcation line between factual and normative statements.

The next paper 'Pragmatism and legal reasoning' by Richard Warner refers to Putnam's concept of rationality. As a theorist of law and a philosopher Warner deals with the question of rationality in the context of connections between pragmatism as an important contemporary philosophical trend, and legal reasoning as it appears to a lawyer concerned with the practical use of the law.

A wide spectrum of topics to which pragmatists have turned their attention has been shown by Robert B. Brandom in his essay 'Pragmatics and pragmatisms'. Brandom considers pragmatism as a certain family of views, within which an important element is the relationship between pragmatics and semantics. The author distinguishes historically between two kinds of pragmatisms: pragmatism in the narrow sense – to which classical American pragmatists, like: Peirce, James and Dewey belong – and pragmatism in the broad sense, as initiated by Kant, and including not only the above classical pragmatists, but also early Heidegger, later Wittgenstein, and Quine, Wilfrid Sellars, Donald Davidson, Rorty among others.

Finally, Nicholas Rescher in his essay 'Knowledge of the truth in pragmatic perspective' examines pragmatic conceptions of truth in relation to Putnam's definitions of truth given from his realistic positions. Among various pragmatic approaches to truth – in Rescher's view – the most promising position is methodological pragmatism in which the assertability thesis is assessed in regard with the practice of scientific investigations. In consideration of this view he combines pragmatism with scientific realism.

Each of these papers is commented on by Hilary Putnam.

Note

1 Putnam does not defend Rorty's ethnocentrism from the charge of relativism, however, he agrees with many of Rorty's critics that Rorty is committed to cultural relativism (H. Putnam, 'Pragmatism and the contemporary debate', in Putnam 1995b: 57–81; 74f). It seems, however, that Putnam and Rorty each understand cultural relativism in a slightly different way. Even if Rorty is able to reply to some of Putnam's objections (as he does in Rorty 1993), it is rather difficult for him to reject cultural relativism altogether.

1 Taking pragmatism seriously

Ruth Anna Putnam

Let me say, right off the bat, that I don't know what it means today to be a pragmatist. Richard Rorty calls himself a pragmatist, but I am inclined to think that his pragmatism is profoundly different from that of, say, John Dewey. The key words in Dewey's philosophy as I understand it are 'interaction' and 'inquiry', the key words in Rorty's recent philosophy are 'conversation' and 'solidarity'. Not that Dewey would not approve of conversation and solidarity – both are essential to inquiry – but he would insist that what prompts the inquiry and what must be its ultimate upshot is experience, that is, interactions between a human organism and its environment. I have been puzzled for years why Rorty fails to note the role of experience in Dewey's thinking, the word 'experience' occurs in the titles of several of Dewey's most important later books. Nor is this emphasis on experience unique to Dewey; we find it as well in the philosophies of Peirce and of James.

So, perhaps I ought to consider another contemporary philosopher, say, Hilary Putnam. He certainly does not ignore inquiry, and while I don't recall frequent occurrences of the word 'interaction' in his writings, he has been emphasizing the importance of practice, or the agent's point of view. And like Rorty, he frequently refers to the works of one or the other of the great pragmatists. But Hilary Putnam has said in recent lectures, 'I am not a Pragmatist'. He is not a pragmatist, he says, because he rejects the pragmatist theory of truth.

So I cannot answer the question, 'What does it mean today to be a pragmatist?' I am not sure whether I am a pragmatist or what it would mean to say that I am one. So, I want to change the question. Let me try to say what it means to me to take pragmatism seriously.

Dewey wrote, in the introduction to *Reconstruction in Philosophy*. 'Philosophy will recover itself when it ceases to deal with the problems of philosophers and addresses the problems of men', where, of course, he meant by 'men' human beings. Taking pragmatism seriously means to me developing a philosophy that will enable us to deal more effectively with the great problems that confront humanity. I said, 'a philosophy that will enable us . . .' who are we? We are not merely philosophers but anyone whose thinking

may be affected directly or indirectly by what philosophers are writing and saying. The two early articles of Charles S. Peirce that everyone remembers when they think of the founding of pragmatism were part of a series of five articles published in a journal called *Popular Science Monthly*. Many of James' famous papers, for example, the notorious 'The Will to Believe', were addressed to general student audiences. His lectures on pragmatism were addressed to educated ladies and gentlemen, and his most widely read and most frequently reissued book, *Varieties of Religious Experience* is clearly accessible to a large segment of the literate public. Similarly, many of Dewey's books are accessible to a wide audience. The first copy I owened of his *Human Nature and Conduct*, a book on social philosophy, was issued on thin paper and in thin paper covers for the use of members of the United States Armed Forces in World War II.

And what are the problems that pragmatism wants us to confront more effectively? Well, whatever problems we actually have. William James testified before the Massachusetts legislature when that body considered what to do about what we now call 'alternative medicine'. James suggested that, on the one hand, the practice of alternative medicines should be permitted – not to do so would be to block the path of inquiry – but on the other hand the practitioners of those forms of healing should not be permitted to call themselves 'doctor' – because the patients needed to know whether they were consulting a graduate of a medical school or a healer belonging to some alternative tradition. Dewey comes to mind as someone who frequently entered the public arena both as an author and as an active participant. What is, of course, particularly dear to American academics is his role in founding the American Association of University Professors in order to protect academic freedom.

So, what does it mean to turn away from the problems of the philosophers? It means to me – and here I am using a phrase from David Hume rather than the pragmatists – that I seek a philosophy that I don't have to leave behind in the study. It means, first of all, what Cornel West has called 'the American Evasion of Philosophy', by which he meant the evasion by American philosophers of the problematique of Cartesian scepticism.

Peirce rejected Cartesian doubts as paper doubts that could not possibly stimulate anyone to real inquiry – where real inquiry, scientific inquiry, presupposes, for Peirce, that there are real things, things that are what they are regardless of what anyone thinks they are. James pointed out that out of a multitude of private worlds not even a God could construct a public common world. And Dewey noted that the question, 'How can we infer or construct the external world from our private and fleeting sense data?' presupposes the very world it presumes to call into question. So, to take pragmatism seriously means to me, first of all, that I don't question that I live in the same world with you. It means also that there is no interface, no iron curtain between me and the commonsense world of what John Austin called middle-sized dry goods. To take your problems – where you

stand as a representative of humanity – seriously, I must take it for granted that the toe I would step on were I not to take care is the toe in which you would feel pain.

What I just said suggests already the second problem of the philosophers that one evades if one takes pragmatism seriously, the problem of other minds. Here I need to interrupt myself, lest I be seriously misunderstood. When I say that pragmatists evade the Cartesian problem of our knowledge of the external world, I am not saying that they have no philosophy of perception, I am saying that their philosophy of perception is not meant to be a response to scepticism. Similarly, I am not saying that if one takes pragmatism seriously one does not work in philosophy of mind or in philosophy of language, but, once again, one does it neither as a metaphysical realist nor as a sceptic. One does it taking our commonsense beliefs for granted; taking it for granted, for example, that we sometimes think of the same building, and that we can sometimes communicate this fact to each other, and so we sometimes succeed to meet at an appointed time in a certain place.

But this is not the place to elaborate on pragmatist epistemology or pragmatist philosophy of language or of mind. For the way in which pragmatists take the existence of other people seriously – and it is, of course, significant that I say 'other people' rather than 'other minds' – is more basic. I mentioned above that Peirce rejects Cartesian doubt. The other thing Peirce does in his seminal paper 'The Fixation of Belief' is to examine what he calls 'methods of inquiry' and to reject three of them before he comes to the scientific method.

What interests me here about Peirce's comments on these other methods, methods that do not fix belief as a result of experience, is that he says that they succumb to the social impulse rather than that they succumb to experience. Why does he say that? Well, to the extent that one's beliefs are altered in the light of contrary experience one is following the scientific method. So, what Peirce is asking is, what will move someone from a dogmatically held belief, a belief which one claims to be immune to falsification, if one is not willing to count any sense experience as contrary evidence, or if the belief is such that no sense experience could count as contrary evidence. And his answer is that it will be one's coming to see that these beliefs are not shared by others. Thus, one may have accepted the religious beliefs of one's community until one discovers that other people have different religious beliefs, or none at all, and that will cause one to rethink these matters. Or one may have been persuaded by Descartes until one discovers other philosophers who question Cartesian assumptions.

But this is not just a piece of clever psychology, for two quite distinct reasons. On the one hand Peirce holds that we cannot defend using the scientific method to fix beliefs and using the probabilities so established to guide our conduct unless we are interested not in our own success but in the success of humanity as a whole, or as Peirce would say, the community of inquirers indefinitely prolonged. On the other hand, and this holds

whether or not one accepts Peirce's theory of truth, all pragmatists insist on the social character of inquiry. What is wrong with the Cartesian question, 'How do I know that there is an external world?' is not only that it reflects an unreal doubt but that it assumes that this doubt can be laid to rest by a single individual. Of course, if one takes the Cartesian doubt seriously one would have to take the solipsism seriously as well. But even if one does not take Cartesian doubt seriously, there are times when one doubts one's own objectivity, and only others (and thus one's trust in these others) can lay such doubts to rest. Finally, and commonsensically, all our knowledge is built upon foundations laid by our predecessors, and most of our new knowledge depends on the work of communities of inquirers.

So, to take pragmatism seriously is to take oneself to be living in a world that one shares with others, others with whom one cooperates in inquiry, other with whom one may compete for scarce resources or with whom one may cooperate in seeking to achieve common goals. It is to see oneself not as a spectator of but as an agent in the world. And that means that one confronts often the question, 'What is to be done?' In other words, I have finally come to the problems of human beings. What then does it mean to take pragmatism seriously when one confronts moral and social problems. First of all, it means that one does not see a sharp distinction between moral problems on one side and social or political problems on the other; every social or political problem is a moral problem. Second, it means that one does not see a sharp distinction between moral problems and other problems, or between moral inquiry and other inquiry. A moral problem is a problem, the same methods of inquiry apply here as in the case of, say, an engineering problem or a physics problem. In Dewey's language it is to reject the distinction between means and ends, to replace it by a means/ends continuum. Dewey speaks of ends-in-view rather than ends *simpliciter*, for we may discover as we seek to realize our ends-in-view that the price we would have to pay is too high, that we must modify or even abandon our cherished goal. Or we may discover, having achieved our goal, that we now confront worse problems than before. Think, for example, of the environmental problems we have created in the process of raising our standards of living.

Dewey says, more than once, morality is social. That seems obvious – how could there be morality unless there were people interacting, having to do with each other, taking an interest, not necessarily benevolent, in each other? But consider how philosophers have approached morality since the Enlightenment, since they understood that morality is a human enterprise. In morality more than anywhere else, we have taken seriously Kant's injunction, 'Für sich selber denken' – think for yourself. Of course, taking pragmatism seriously does not mean giving up on thinking for oneself, on rejecting blind faith in an authority. But thinking *for* oneself does not mean 'thinking by oneself'. In morality as in science inquiry is a cooperative enterprise. Subjectivity in the sense of giving too much weight to one's own

interests, or in the sense of taking one's own perspective as the only perspective, can be avoided only by engaging with others, with all relevant others.

Finally, and I have hinted at this already, taking pragmatism seriously is to reject the fact/value distinction, that is, to deny that that distinction will bear any ontological or epistemological weight. I have already indicated that value inquiry is like scientific inquiry; I need only to add that there is no scientific inquiry that does not involve the making of value judgments, not only judgments of relevance and reliability, but judgments that something is interesting, is worth one's while pursuing, etc. To gesture at just one way in which the fact/value distinction does not bear ontological weight, I might just suggest that our moral codes (or the implicit norms that guide our conduct) like our scientific theories are means by which we find our way in this complex world so full of opportunities and of dangers; they are, each in its own way, products of human ingenuity, as are our tools, from stone age choppers to the latest automated machine. We don't question the reality of the latter, why should we question the reality (call it objectivity) of the former?

That's what taking pragmatism seriously means to me: to try to philosophize in ways that are relevant to the real problems of real human beings.

Comment on Ruth Anna Putnam's paper

Hilary Putnam

Ruth Anna Putnam's 'Taking pragmatism seriously' is a beautiful statement of almost all the ideas that I take to be of lasting value and vital importance in the legacy of American pragmatism. I am thrilled that she has put all this together so persuasively and yet so tersely. It could serve as a manifesto for what the two of us would like philosophy to look like in the twenty-first century and beyond.

If I agree completely with the ideas in question today, this was not always the case, and Ruth Anna herself had a great deal to do with my 'conversion'. Since I have no disagreements or criticisms to voice in this 'reply', I shall instead devote it to acknowledging her influence on my thought. But first a brief history of my involvement with pragmatism.

One of my principal teachers when I was an undergraduate at the University of Pennsylvania was C. West Churchman (who later edited the journal *Philosophy of Science* for a number of years). Churchman was an atypical pragmatist – atypical in that he knew a good deal about the logic of statistical testing and interwove this knowledge with a pragmatist rejection of the fact/value dichotomy.[1]

I remember Churchman writing on the blackboard the following propositions, which he attributed to E. A. Singer, Jr (who had been a student of William James, and who was an *emeritus* professor at 'Penn').

1 *Knowledge of facts presupposes knowledge of theories* [under which term Singer included all generalizations]. For example, to know that something is an oak tree is to know that it belongs to a kind of tree, which generally has leaves with a certain shape, which usually produces acorns, etc. Here Singer was attacking the idea that science can 'start' with bare particular data and build up to generalizations by induction and abduction. We always already presuppose a stock of generalizations when we observe.
2 *Knowledge of theories* (in the wide sense described) *presupposes knowledge of [particular] facts*. (There are no generalizations about the world we can know a priori).

3 *Knowledge of facts presupposes knowledge of values*. This is the position I defend. It can be broken into two separate claims: (i) that the activity of justifying factual *claims* presupposes value judgments; and (ii) we must regard those value judgments as capable of being *right* (as 'objective' in philosophical jargon) if we are not to fall into subjectivism with respect to the factual claims themselves.
4 *Knowledge of values presupposes knowledge of facts*. (Against all philosophers who believe that [some part of] ethics is a priori.)

Although this sounds as if I was well launched as a 'pragmatist' already as an undergraduate, in fact I paid little attention to this at the time (I was much more interested in Freud, Kierkegaard, Marx – until I read A. J. Ayer's *Language, Truth and Logic*, and became briefly 'converted' to Ayer's view). The truth is that, like many undergraduates, I was more interested in discovering what various very different thinkers had said and what they had regarded as important issues, than in formulating a 'position' of my own at such an early stage. And when I went first to Harvard for a year and then to UCLA to do my graduate work, I fell under the spell first of Quine and then of Reichenbach. True, I did have one excellent seminar on Dewey's *Logic* from Donald Piatt, but I resisted very strongly the idea that fact and value could be interdependent at that time – in spite of what Churchman had tried to teach me! (Nevertheless, what I learned in Piatt's seminar proved valuable decades later.)

Ruth Anna, however, already had a very high regard for Dewey when we married in 1962, and over the years her gentle advocacy gradually persuaded me to take a second look. I had already begun to think that the evaluation of 'facts' depends (as the word 'evaluation' already suggests!) on value judgments, as a result of arguments by philosophers of language, including John McDowell (whom I met in 1976), Iris Murdoch and Paul Ziff, and in 1980 I began to seriously study and teach the philosophy of William James, but it was both conversations with Ruth Anna and reading and discussing her papers on the 'Seamless Web' of fact and value that brought both the idea of fact-value interpenetration and the contribution of John Dewey to the center of my attention.[2] Eventually we wrote papers together on both Dewey and James, and I know that my next book (which is tentatively titled *The Collapse of the Fact/Value Dichotomy*) strongly reflects her influence and her example. This 'reply' is a very inadequate attempt to express my gratitude for both.[3]

2 Pragmatism and nonscientific knowledge

Hilary Putnam

Today I wish to speak about a question which has been a focus for my philosophical interests for the past twenty years: the existence of and the importance of knowledge outside of the exact sciences, 'nonscientific' knowledge, and, in particular the existence and importance of knowledge of values in the widest sense (what is it to know that something is *better* or *worse* than something else: a better way of life, or a better course of action, or a better theory (in science), or a better interpretation (of a text, etc.). This focus has naturally led me to point out how 'paradigmatic' science (physics) itself depends on judgments which are 'nonscientific'. It has also led me into the controversial question of how it is possible for value claims to be objective, and it has led me to a close reading of the American pragmatists, who were my predecessors in the study of all of these problems. What I would like to do today is to give an account of the general conclusions to which I have come, and to do so in as nontechnical a way as possible. This is not something that philosophers do very often nowadays; usually we read a paper to one another on some fairly well defined topic. But if philosophy is to retain its connection to the wide human concerns which have always been its reason for existence, from time to time a philosopher must speak not as a channel for a particular argument or thesis but as an individual who embodies a point of view – a point of view whose formulation is necessarily idiosyncratic, but which, the philosopher hopes, embodies insights that are something more than idiosyncratic at the end. For this reason, I shall allow myself not only to sketch a point of view rather than argue for it in detail, but I shall allow myself to explain why I hold it by describing the particular way in which it developed in the course of my writing and teaching.

Science presupposes nonscientific knowledge

It was Rudolf Carnap's dream for the last three decades of his life to show that science proceeds by a formal syntactic method; today no one to my knowledge holds out any hope for that project.[1] Karl Popper rejected Carnap's inductive logic, but he too hoped to reduce the scientific method to a simple rule: test all strongly falsifiable theories, and retain the ones that

survive. But that works no better than does Carnap's 'inductive logic'; for when a theory conflicts with what has previously been supposed to be fact, we sometimes give up the theory and we sometimes give up the supposed fact, and as Quine famously put it the decision is a matter of trade-offs that are 'where rational, pragmatic',[2] i.e. a matter of informal judgments of plausibility, simplicity, and the like. Nor is it the case that when two theories conflict, scientists wait until the observational data decide between them, as Popperian philosophy of science demands they should.

An example I have often used in this connection[3] is the following: *both* Einstein's theory of gravitation and Alfred North Whitehead's 1922 theory (of which very few people have ever heard!) agreed with Special Relativity, and both predicted the familiar phenomena of the deflection of light by gravitation, the non-Newtonian character of the orbit of Mercury, the exact orbit of the Moon, etc. Yet Einstein's theory was accepted and Whitehead's theory was rejected *fifty years before anyone thought of an observation that would decide between the two*. Indeed, a great number of theories *must* be rejected on non-observational grounds, for the rule 'Test every theory that occurs to anyone' is impossible to follow. As Bronowski once wrote to his friend Popper, 'You would not claim that scientists test every falsifiable theory if as many crazy theories crossed your desk as cross mine!'[4]

In short, judgments of coherence, simplicity, etc., are presupposed by physical science. Yet *coherence* and *simplicity* and the like are *values*. Indeed, each and every one of the familiar arguments for relativism (or radical contextualism) in ethics could be repeated without the slightest alteration in connection with these epistemic values; the argument that ethical values are metaphysically 'queer' (because, *inter alia*, we do not have a *sense organ* for detecting 'goodness') could be modified to read 'epistemic values are ontologically queer (because we do not have a sense organ for detecting simplicity and coherence)'; the familiar arguments for relativism or noncognitivism from the disagreements between cultures concerning values (arguments which are often driven by the fashionable, but I believe wholly untenable, pictures of different cultures as 'incommensurable')[5] could be modified to read that there are disagreements between cultures concerning what beliefs are more 'coherent', 'plausible', 'simpler as accounts of the facts', etc.; and in both the case of ethics and the case of science there are those who would say that when cultures disagree, saying that one side is objectively right is mere rhetoric.

By the way, with respect to this idea of the 'incommensurability' of cultures, I cannot resist pointing out that when it comes to imperatives to abstain from pride and cruelty and hatred and oppression, one can find the same universalistic statements in ancient Egyptian literature that one hears today. For example, as Simone Weil writes:

> There has never been a more moving definition of virtue than the words, spoken in *The Book of the Dead* by the soul on the way to salvation:

> Lord of Truth . . . I have brought truth to thee, and I have destroyed wickedness for thee . . . I have not thought scorn of God . . . I have not brought forward my name for honors . . . I have not caused harm to be done to the servant by his master . . . I have made no one weep . . . I have not struck fear into any man . . . I have not spoken haughtily . . . I have not made myself deaf to the words of right and truth.
> (Weil 1970: 131–2)

I have emphasized the fact that familiar arguments for relativism with respect to values would, if they were correct, apply to our epistemic values as well because it is only by appreciating this that one can see just how self-refuting relativism actually is. Consider, for example, the well known views of Richard Rorty, a philosopher who holds that we should scrap the whole notion of an objective world, and speak of views which 'our culture' would accept (sometimes he adds 'at its best') instead. This view that *all there is* to values – *including* the epistemic values – is the consensus of 'our' culture presupposes that at least *some* of our commonsense claims can be accepted without philosophical reinterpretation of the kind proposed. For instance, talk of 'cultures' only makes sense when talk of *other people*, talk of *beliefs*, in short, the idea of a *common world*, is already in place. If Rorty were to say that talk of other people is just 'marks and noises' that help *me* 'cope', it would become obvious that his talk of 'the standards of our culture' is empty by his own lights. *Commonsense realism about the views of my cultural peers coupled with anti-realism about everything else makes no sense.* If, as Rorty likes to claim, the notion of an objective world makes no sense, then the notion of 'our culture' cannot be more than Rorty's private fantasy, and if there is no such thing as objective justification – not even of claims about what other people believe – then Rorty's talk of 'solidarity' with the views of 'our culture' is mere rhetoric.

Rorty, of course, would *agree* with my claim that scientific inquiry presupposes that we take seriously claims which are not themselves scientific, including value claims of all kinds; he would simply say that we should give up the notion that there is such a thing as objectivity *either* in scientific or nonscientific inquiry. But at least some philosophers who wish to hold on to the idea of scientific objectivity without admitting that science presupposes judgments which are not themselves scientific would take a different tack.

The only serious alternative, in fact, to admitting that the existence of warrantedly assertable claims as to matters that are 'nonscientific' warrantedly assertable claims as to what is *more plausible* than what, warrantedly assertable claims as to what is *more coherent* than what, warrantedly assertable claims as to what is *simpler* than what – are presupposed by the activity of gathering knowledge even in the paradigm science of physics is the so-called 'reliabilist' epistemology proposed by Alvin Goldman.[6] According to that epistemology, what makes a belief in science justified is that its acceptance was arrived at by a method which is 'reliable' in the sense of *having*

a high probability of resulting in the acceptance of true hypotheses. Effective objections have been made to this idea, and Goldman has made sophisticated alterations in his original formulations in order to meet them, but these are not the grounds on which I would argue that this approach does not succeed. To see why, let us simply consider the question: on what 'method' was *Einstein* relying when he accepted the Special and General Theories of Relativity?

Einstein's own views are well known. He tells us that he arrived at the Special Theory of Relativity by *applying an empiricist critique to the notion of 'simultaneity'* and that he arrived at General Relativity by *seeking the 'simplest' theory of gravity compatible with Special Relativity in the infinitesimal domain*. We know that the physicists who accepted these two theories also regarded these as compelling considerations in their favor. Both of these 'methods' are *completely topic specific* (so much so, that the reference class of theories involved is much too small for it to make sense to speak of 'probabilities' here at all!),[7] and both of these methods presuppose judgments of reasonableness. And judgments of reasonableness simply do not fall into classes to which we are able to assign probabilities.[8] In sum, not only is there no reason to think that the sorts of judgments I have been talking about – judgments of reasonableness – can be reduced to non-normative judgments; there is not even a serious *sketch* of such a reduction.

Objectivity

The claim that judgments of fact presuppose judgments of value has been around at least since Dewey. This makes one wonder at the enormous reluctance of so many philosophers to acknowledge that value judgments can have any objectivity at all. The real source of our difficulties, I believe, is the crudity of the notions of 'objectivity' that are so often brought to these discussions.

Let us begin by thinking about how we judge objectivity when we are not trying to do 'metaphysics'. Normally we call statements[9] which are made from an idiosyncratic standpoint, or by persons who are heedless of other relevant interests and standpoints, 'subjective', while statements are called 'objective' if their claim to truth is not dependent on idiosyncratic standpoints or on disregarding the standpoints and interests of others.

A sufficient condition that an ethical claim be objective in this 'ordinary' sense is that it be reasonable from the standpoint of an interest in the common welfare, where the common welfare is not thought of as something already handed down, but as something that is itself to be determined by intelligent discussion among persons who share this commitment. I wish to emphasize that this is something that I suggest *only* as a sufficient condition, and by no means a necessary one. 'Value judgments' are not a homogeneous class, and different sorts of judgments possess different sorts of objectivity.

If it is reasonable for those affected to accept an ethical claim of this sort after experimentation and discussion, it will be – so long as reasons to question it do not arise – what John Dewey called a 'warrantedly assertable'

claim. And the similarity between asking what *beliefs* are acceptable from the standpoint of persons who are (1) concerned to be able to justify their beliefs to other persons; and (2) to do so by appeal to standards that other persons who share that very concern cannot reasonably reject, and asking what *actions* are justifiable from the standpoint of persons who are concerned to be able to justify their actions to other persons, and to do so by appeal to standards that other persons who share that very concern cannot reasonable reject, is not accidental; these concerns, like the concern with cognitive values and the concern with ethical values in general, presuppose one another.

This is, of course, not the way philosophers usually think of objectivity. More often philosophers attempt to define 'objective' by phrases like 'reality has an existence and character wholly independent of human practices, beliefs and evidence'[10] or 'something's being the case is independent of how anyone would regard it'.[11]

But such definitions are philosophers' blinkers rather than workable conceptions. Indeed, as the historian of science Peter Gallison has pointed out to me, this use of the word 'objective' is somewhat of a curiosity. In scientific practice, questions of objectivity are not questions of metaphysics; they are questions as to the character of particular claims made in particular inquiries. In contrast to this epistemological sense of the term, 'objective' seems to be used by metaphysical realists today somewhat as 'cognitively meaningful' used to be used by Logical Postivists: as a term for claims which 'really', metaphysically or ontologically, 'have a truth value'.[12]

In fact, metaphysical realist definitions of 'objectivity' are easily seen to be failures in their own terms. Re 'something's being the case is independent of how anyone would regard it', it suffices to note that reality does *not* have an existence and character wholly independent of human practices, beliefs, and evidence for the simple reason that human practices beliefs and evidence are a very large part of the reality we talk about, and reality would be quite different were they different. Perhaps causal independence is not what is meant? But then I do not know what *is* meant.

Metaphysical realists often insist that a truly objective statement is one whose truth has *no connection with warranted assertability*, actual or possible; but this too is just a philosophical shibboleth, because there are many statements for which truth is *conceptually connected* to warranted assertability under appropriate conditions.[13] And these include many statements which metaphysical realists would class as 'objective'. That there are mountains in the area bounded by 70°W and 75°W and by 40°N and 45°N is an objective fact if anything is; but given that it is part of the concept of a mountain that mountains are big enough to *see*, it necessarily follows that if there are mountains in that area, and if appropriate conditions exist (people who know their own latitude and longitude are there to see them, and there is nothing to interfere with their seeing the mountains, etc.) it will be warrantedly assertable that there are mountains in the area in question. (Perhaps conceptual

independence is not what is meant either?! It is no accident that metaphysical realists never do tell us what they mean by 'independent'.)

That in such a case (and in the case of most ordinary statements about observable things) truth – 'realist truth', if you please – and warranted assertability under appropriate conditions *coincide* is no accident. To understand the claim that there is a mountain in a certain place I must know what a mountain is,[14] and normally this means knowing what mountains look like. Grasp of the content of a claim (and hence of its 'truth conditions') and grasp of its verification conditions are conceptually related, even they are not the same.

Moreover, such extreme requirements for 'objectivity' as *total* independence from what humans could do or could know or believe are irrelevent to *ethics* from the start. No ethicist except a rampant Platonist[15] would say that what is right and wrong is independent of human nature, or, more particularly, independent of how human beings who are raised in a community with a moral tradition would regard things. Certainly Aristotle did not hold that what it is right for human beings to do or to be is 'independent of how human beings would regard it' in any and all circumstances. Yet it is decidedly odd to suppose that the sort of objectivity Aristotle sees ethical statements as having is, for that reason, not 'realist' or not 'cognitivist'. For these (and other reasons, too numerous to go into now)[16] I find the attempt to force us to classify our beliefs as 'objective' or 'subjective' (and the assumptions that are tacitly made about which beliefs are which, and about what follows if a belief is put in one box or the other), decidedly objectionable. A pressing task for philosophy, as *I* see it, is to challenge these classifications, so that we may see the terrain without the distortions which they inevitably produce.

But how are objective *ethical* claims possible?

By now I hope to have convinced you that the denial of the very possibility of objective value claims threatens to turn into a denial of the very possibility of (a reasonable sort of) objectivity *tout court*. But I know that this will not shake the confidence in the fact/value dichotomy of people who have come to see that dichotomy as inseparable from modern scientific sophistication.[17] Such people may agree that we should not think of objectivity in the way in which metaphysical realists think of it, but they do not see how value judgments in ethics can have any sort of objectivity at all. In their view, acceptance of a fact/value dichotomy is part of the epistemology that goes with modern science. I have already alluded to the crudest of the epistemological defenses of the fact/value dichotomy, which run like this: 'How can there be "objective ethical values"? We can say how we detect *yellow*, since we have eyes, but what sense organ do we have for detecting value?'

What makes this argument crude is its naiveté about perception. Perceptions of yellow may, indeed, be pretty minimally conceptually informed. But

consider the parallel question: 'How could we come to tell that people are *elated*? After all, we have no sense organ for detecting elation.' We can tell that other people are elated, and sometimes we can even *see* that other people are elated. But we can only do so after we have acquired the *concept* of elation. Perception is not innocent; it is an exercise of our concepts, an exercise of what Kant called our 'spontaneity'.[18] Once I have acquired the concept of elation, I can see that someone is elated, and similarly, once I have acquired the concept of a friendly person, or a malicious person, or a kind person, I can sometimes see that someone is friendly, or malicious, or kind. To be sure such judgments are fallible; but pragmatists have never believed in infallibility, either in perception or anywhere else. As Peirce once put it, in science we do not have or need a firm foundation; we are on swampy ground, but that is what keeps us moving.

Connected with the idea that to know that there are values we would need to have a special sense organ is the empiricist psychology according to which perceptual experience (as opposed to 'emotion') is value neutral, and values are added to experience by 'projection'. (In a variant of this idea – one equally wedded to separate mental 'faculties' – 'perception' supplies 'reason' with neutral facts, and values come from a faculty called 'the will'.) This empiricist psychology has been sharply criticized by a number of authors.[19] And the American pragmatists in particular have always emphasized that experience *isn't* 'neutral', that it comes to us screaming with values. In infancy we experience food and drink and cuddling and warmth as *good* and pain and deprivation and loneliness as *bad*; and as our experiences multiply and become more sophisticated, the tinges and shades of value also multiply and become more sophisticated. Think, for example, of a wine-taster's description of a great wine.

However, the pragmatists do not make the error of supposing that merely being valued, as a matter of experiential fact, suffices to make something valu*able*. Indeed, no distinction is more insistent in John Dewey's writing than the distinction between the *valued* and the *valuable*, between a satisfaction and the *satisfactory*, between the desired and the *desirable*.[20] Dewey's answer to the question, 'What makes something valu*able* as opposed to merely being valued?', in a word, is *criticism*. Objective value arises, not from a special 'sense organ', but from the *criticism of our valuings*. Valuings are incessant and inseparable from all of our activities, including our 'scientific' ones; but it is by intelligent reflection on our valuings, intelligent reflection of the kind that Dewey calls 'criticism', that we conclude that some of them are warranted while others are unwarranted. (Philosophy, by the way, is described by Dewey as *criticism of criticism!*)

But this leads to the next question: *By what criteria do we decide that some valuings are warranted and some are unwarranted?* With this question, we enter more sophisticated levels of the epistemological issue. What I shall present is John Dewey's answer, which it is convenient to divide into three parts.

(1) In judging the outcome of an inquiry, whether it be an inquiry into what are conventionally considered to be 'facts' or into what are conventionally considered to be 'values', we always bring to bear a large stock of both valuations and descriptions *which are not in question in that inquiry*.[21] We are never in the position imagined by the positivists, of having a large stock of factual beliefs and no value judgments, and having to decide whether our first value judgment is 'warranted'; of having to infer our very first 'ought' from a whole lot of 'ises'.

(2) We neither have nor require one single 'criterion' for judging warranted assertability in ethics any more than we do in any other area. In particular, the authority of philosophy is not the authority of a field vested with knowledge of such a criterion or set of criteria. As Dewey himself put it:

> A philosophy has no private store of knowledge or methods for attaining truth, so it has no private access to good. As it accepts knowledge and principles from those competent in science and inquiry, it accepts the goods that are diffused in human experience. It has no Mosaic or Pauline authority of revelation entrusted to it. But it has the authority of intelligence, of criticism of these common and natural goods.
>
> (Dewey 1925: 407–8)

(3) With the appearance of the term 'intelligence' we come to the last part of Dewey's answer to the 'By what criteria?' question. If Dewey does not believe that inquiry requires 'criteria', in the sense of algorithms or decision procedures, either in the sciences or in daily life, he does believe that there are some things that we have *learned* about inquiry in general *from* the conduct of inquiry. In our writing on Dewey, Ruth Anna Putnam and I have insisted that if one thing distinguishes Dewey as an ethicist or a meta-ethicist (the whole normative ethics/metaethics distinction tends to collapse for pragmatists), it is his emphasis on the importance of and his consistent application of the idea that *what holds good for inquiry in general holds for value inquiry in particular*.[22]

But what does hold good for inquiry in general? We have learned, Deweyans insist, that inquiry which is to make full use of human intelligence has to have certain characteristics, including the characteristics which I have elsewhere referred to by the phrase 'the democratization of inquiry'.[23] For example, intelligent inquiry obeys the principles of what Habermasians call 'discourse ethics'; it does not 'block the paths of inquiry' by preventing the raising of questions and objections, or obstructing the formulation of hypotheses and criticism of the hypotheses of others. At its best, it avoids relations of hierarchy and dependence; it insists upon experimentation where possible, and observation and close analysis of observation where experiment is not possible. By appeal to these and kindred standards, we can often *tell* that views are irresponsibly defended in ethics as well as in science.

Not everyone will be convinced, I know. Some of the undergraduates in a class I taught last year suggested that belief in giving reasons and actually observing how various ways of life have functioned in practice, what the consequences have been, discusing objections etc., is just 'another form of fundamentalism'! The experience of these students with *real* fundamentalism must be rather limited. Anyone who has seen real fundamentalists in action knows the difference between insisting on observation and discussion and the repressive and suppressive mode of conducting discussion that is characteristic of fundamentalism. But, in any case, I think that this objection was both anticipated and adequately responded to by the founder of pragmatism, Charles Sanders Peirce, in his famous essay 'The Fixation of Belief'.[24] The discovery that inquiry which is to be successful in the long run requires observation and experimentation and public discussion of the results of that observation and experimentation is not something a priori, but is itself something that we learned from observation and experimentation with different modes of conducting inquiry: from the failure of such methods as the method of tenacity, the method of authority, and the method of appeal to allegedly a priori reason.

Conclusion

I said at the outset that the distinction between science and nonscientific knowledge is a fuzzy one. But even the two cases that I have considered, the science-related case (choosing between theories in advance of any crucial experiment, or when a crucial experiment is not possible) and the case of social ethics illustrate one aspect of the distinction: while judgments of reasonableness (coherence, plausibility, simplicity and the like) are presupposed by science, they are not often *thematized* by science, whereas in the 'nonscientific' case they are likely to be the explicit subject matter of our controversies and discussions. Textbooks of physics do not very often contain statements to the effect that one theory is more 'reasonable' than another (although in periods of scientific 'revolution' they may), whereas essays on ethical and political questions constantly contain claims of this sort.

I have argued that judgments of reasonableness can be objective. That does not mean that they are totally independent of what human beings can know and do; 'reasonableness' means reasonableness *for human beings*, and invariably for human beings in a particular context. On the other hand, the view that there is 'no more' to reasonableness than what a particular culture believes leads immediately to paradox; for since our own culture does not believe that cultural relativism is correct as a general view of truth and justification, it follows from cultural relativism itself that cultural relativism is neither true not justified! (Rorty, of course, hopes to change this awkward – from his point of view – state of affairs, but I don't think he will succeed.) In brief, reasonableness is *relative to* context, including culture,

but not simply what a culture takes to be reasonable. Also, I have argued in various books and papers, and again in good pragmatist fashion, that the fact that we cannot reduce reasonableness to an algorithm does not mean that we cannot say a good deal about it.

I mentioned at the outset that I have been writing and lecturing about these topics for over two decades. There is one topic that I have invariably discussed in my courses which has not yet entered into my discussion today, and I want to rectify that omission right now. I have always discussed at some length the curious fashion in which recent disputes about the objectivity of *meaning facts* (viz. the 'indeterminacy of translation') exactly parallel the older disputes about the objectivity of value claims, particularly of ethical claims. Interestingly, almost every move that has ever been made in the meta-ethical dispute has been repeated in the dispute over Quine's claim that there are no meaning facts. Corresponding, for example, to the Utilitarian attempt to give ethics objectivity by *reducing* ethical claims to natural-scientific claims (e.g. claims about 'pleasure', thought of as something we would eventually be able to measure), are the attempts by such philosophers as Fred Dretske and Jerry Fodor to reduce meaning claims to claims about causal-probabilistic covariation. (The idea being that, in some way, the fact that 'cat' refers to cats, or that 'cat' means cat, can be reduced to the alleged fact that 'tokenings' of the word 'cat' *covary* with occurrences of cats, or to the alleged fact that there is a 'nomic connection' between tokenings of 'cat' and a Property of Cathood.) And corresponding to the noncognitivist strategy of denying that there is such a thing as an ethical fact is the Quinian strategy of denying that there is any such thing as a meaning fact. Ethical claims are just expressions of feeling, for the emotivists; meaning claims are just expressions of a decision to translate a discourse one way rather than another – a decision which may be convenient or inconvenient, but not scientifically right or wrong, for Quine. (Of course, Quine also believes that there are no ethical facts, and he has expressed scepticism about 'confirmation' – that is the objectivity of scientific justification. What keeps him from total scepticism is only his positivist faith in *prediction* as the sole touchstone of objectivity.)[25]

In sum, if ethical questions are not the subject matter of a special science, they have a surprising number of 'companions in the guilt'. Justification, coherence, simplicity, and now meaning and reference all exhibit the same problems that ethical predicates do from an epistemological point of view. Nor is this something to be wondered at; for like ethical predicates all of them have to do with reasonableness: reasonableness in action, in belief, and in interpretation. And it is the refusal to tolerate any sort of objectivity that is not underwritten by a grand metaphysical narrative that leads to the corrosive scepticism that we find with respect to each of them in at least some fashionable quarters today. (In this respect, 'postmodernism' is often just the sceptical face of the metaphysical itch.)

In 1982 I published a paper called 'Beyond the Fact/Value Dichotomy'[26] that I read to the first meeting of my course 'Non-Scientific Knowledge'

each time I give the class. It has become, so to speak, my 'manifesto', and I shall close with a few sentences adapted from it:

> Where are we then? On the one hand, the idea that science (in the sense of exact science) exhausts rationality is seen to be a self-stultifying error. The very activity of arguing about the nature of rationality presupposes a notion of rationality wider than that of laboratory testability. If there is no fact of the matter about what cannot be tested by deriving *predictions*, then there is no fact of the matter about any philosophical statement, including that one. On the other hand, any conception of rationality broad enough to embrace philosophy – not to mention linguistics, mentalistic psychology, history, clinical psychology, and so on – must embrace much that is vague, ill-defined, no more capable of being 'scientized' than was the knowledge of our ancestors. The horror of what cannot be 'methodized' is nothing but method fetishism. It is time we got over it. Getting over it would reduce our intellectual *hubris*. We might even recover our sense of *mystery*; who knows?
>
> (Putnam 1990b: 140)

3 Pragmatism and legal reasoning*

Richard Warner

Legal reasoning – in particular, adjudication, decision-making by judges – should fascinate philosophers more than it does. Rationality fascinates philosophers, and adjudication offers insight into the rationality of practical decision-making. How could it not? It offers for examination a hundreds-of-years-long written record of attempts to resolve disputes consistently, fairly, and justly. In particular, reflection of this record sheds light on pragmatism and its treatment of moral matters.

Pragmatism

Professor Putnam conceives of pragmatism as characterized by four theses:

> Those theses are (1) *antiskepticism*: pragmatists hold that *doubt* requires justification just as much as belief . . . (2) *fallibilism*: pragmatists hold that there is never a metaphysical guarantee to be had that such-and-such a belief will never need revision . . . (3) the thesis that there is no *fundamental* distinction between 'facts' and 'values'; and (4) the thesis that, in a certain sense, practice is primary in philosophy.
>
> (Putnam 1994a: 152)

Each of these theses merits detailed discussion; our focus, however, will be on the primacy of practice. In the case of moral philosophy, Professor Putnam provides the following gloss on what he means by the primacy of practice:

> According to pragmatists, normative discourse . . . is indispensable in science and in social and personal life as well . . . [W]e make and cannot escape making value judgments of all kinds in connection with activities of every kind. Nor do we treat these judgments as matters of mere *taste*; we argue about them seriously, we try to *get them right* . . . And, . . . classical pragmatists do not believe that there is a 'first philosophy' higher than the practice that we take more seriously when the chips are down.
>
> (Putnam 1994a: 154)

* I am indebted to Morry Lipson, philosopher and lawyer, for keeping this essay on the right road.

Surely this is right. If one looks at life with open eyes at all, it is obvious that *everyone* engages intricate reasoning to strike a proper balance, a rationally defensible balance, between respect and care for others and for themselves. No one would ever really live, or even really consider living, a life utterly devoid of concern and respect for the ends of at least *some* other people. Our values and the guiding role they play in our thought and action are too deeply embedded in our lives for it to be an option that we should shed our values as if they were discardable clothing. Morality is, in this sense, inescapable. We might, quoting Kant out of context, say that we are conscripts, not gentlemen volunteers, in the army of morality. Conscripted though we may be, we are *not* soldiers in an army of falsehood. We serve the truth. At least so we think. In our practice of moral reasoning, we regard our value judgments as both capable of truth, and, on many occasions, in fact true. As Putnam notes, we do not 'treat these judgments as matters of mere *taste*; we argue about them seriously, we try to *get them right*'. It is misguided to insist here that it is problematic to regard *value* judgments as capable of *truth*. This is to invoke too sharp a distinction between fact and value, and pragmatists recognize 'no *fundamental* distinction between "facts" and "values"'.

Even so, couldn't we still be wrong in regarding our value judgments as, on many occasions, true? Pragmatism answers, yes. The pragmatist thesis of fallibilism holds 'that there is never a metaphysical guarantee to be had that such-and-such a belief will never need revision'. *But*: acknowledging the mere possibility of error provides no reason to *doubt* that our value judgments are often true (anymore that the mere fact that we might be wrong provides any reason to doubt that the sun is about 93,000,000 miles from the earth). The pragmatist's antisceptical thesis holds 'that *doubt* requires justification just as much as belief'. Consequently, 'when the "chips are down"' – when we are beset by theoretical or practical questions concerning what we ought to do – it is to our practice that we should – and must – turn. 'Classical pragmatists do not believe that there is a "first philosophy" higher than the practice that we take more seriously when the chips are down.' This is the 'primacy of practice' in philosophy, or at least in moral philosophy.

This is a reassuring picture. It paints us as inescapably entwined in moral reasoning and tells us that we should be confident that our practice of moral argument and reasoning can, and does, lead us to true convictions. The picture is also incomplete, a fact Professor Putnam would hardly deny. It is incomplete because two crucial aspects of the moral landscape are hardly visible at all: namely, moral disagreement, and the cultural relativism of many moral values. What would the complete picture look like? We could turn directly to the topics of disagreement and relativism, but I propose a much more roundabout route. Let us first, through the lens of legal reasoning, take a longer look at our practice of moral reasoning. In this way, we begin where the pragmatist would like us to begin – with an unprejudiced look at practice. Our look will be a lawyer's look, or more exactly a philosopher-turned-lawyer's look. Most of the philosophers-

turned-lawyers that I know think that they see something in moral reasoning that the merely-philosophers miss. The payoff is a much deeper understanding of the issues of disagreement and relativism.

A description of legal reasoning

Legal reasoning is supremely practical. The typical task of adjudication is to resolve particular disputes, disputes that often profoundly affect people's lives. Legal decisions determine whether money changes hands; whether a person gets stigmatized as a criminal and goes to jail; whether a historically significant building can be torn down, and so on. Contrast philosophical essays about practical rationality. They typically attack or defend very general principles of rationality, or discuss possible criteria for assessing and ranking such principles, or defend or impugn the objectivity – in some sense or other – of such principles and criteria. Of course, no matter how these philosophical debates come out, courts will continue to decide cases, and continue to offer reasons for those decisions. Courts will, for example, continue to make remarks like this: 'the ability of government, consonant with the Constitution, to shut off discourse solely to protect others from hearing it is . . . dependent upon a showing that substantial privacy interests are being invaded in an essentially intolerable manner',[1] and courts will continue to determine what counts as 'substantial' and 'intolerable'. Unfortunately, philosophers rarely undertake a detailed and well-informed examination of this adjudicative activity. This is disappointing – to the extent that we want an account of practical rationality that illuminates our actual practice of making decisions and offering justifications. It is difficult to see how we are going to get this if we never look closely at the day-to-day routine of practical decision-making.

So, with the aid of an example, let us take at least a look. In 'United States versus Escamilla',[2] the lower court convicted Escamilla of involuntary manslaughter for killing a co-worker at a research station located on an island of ice that floats around the Arctic Ocean. The island has no police force, and the doors of its living quarters have no locks (as a precaution against fire); consequently, as the court notes,

> discipline and order on the island depend on the cooperation of all of the men and the effectiveness of the group leader, particularly in the summer months when it is virtually impossible to remove any wrongdoer from the ice.
>
> (*Escamilla*: 343–4)

During the summer of 1970, David Leavitt, nicknamed Porky, was a worker on the island. Porky habitually drank excessively and became violent as a result. Prior to 16 July, the date of the killing, Porky had, on at least three occasions, attacked other personnel, including Escamilla, with butcher

cleavers in attempts to get alcoholic drinks. On 16 July, Escamilla's roommate telephoned him at the research facility to tell him that Porky was drunk and had taken wine from their living quarters. Fearing Porky's return, the roommate urged Escamilla to return. On his way back, Escamilla selected a rifle from the common storage of firearms. The rifle was defective. It would fire even if one did not pull the trigger; it could be fired by

> banging it, by dropping it, by putting the safety on and off, by ramming the bolt handle down, and by applying slight pressure to the bolt handle when holding it.
>
> (*Escamilla*: 344)

Escamilla was unaware of, and had no reason to know about, these defects in the rifle. When Escamilla was in his living quarters, Bennie Lightsey, a friend of Porky's, entered. Lightsey was very drunk; he had come over from next door, where he and Porky were drinking 140 proof grain alcohol cut with grape juice. An argument began over whether Porky should be allowed to have some of Escamilla's wine. Waving the rifle back and forth, Escamilla ordered Lightsey to leave. At this moment, the rifle discharged, Lightsey was wounded and subsequently died.

The trial court convicted Escamilla of involuntary manslaughter. That is, they found that Escamilla's killing of Lightsey a result of Escamilla's serious negligence – a result of his being much less careful than a reasonable person would have been. The point of calling the negligence 'serious' and of saying that Escamilla was 'much less' careful, is that not every negligent killing is a crime. A negligent killing is a crime only when the killer is *sufficiently* careless. Escamilla appealed the trial court's decision, and the appeals court overturned the conviction. The appeals court held that the trial court incorrectly instructed the jury about how to apply the law on negligent killing to the facts of the case.

The law, as we noted, is that a negligent killing is a crime if the killer acted with *sufficient* negligence. The question, of course, is just *how* negligent is that? The law's answer is that:

> A person acts negligently [to the relevant degree] when he should be aware of a substantial and unjustifiable risk that . . . will result from his conduct. The risk must be of such a nature and degree that the actor's failure to perceive it, considering the nature and purpose of his conduct and the circumstances known to him, involves a gross deviation from the standard of care that a reasonable person would observe in the actor's situation.[3]

Obviously, this does not tell us how to decide *Escamilla*. The law tells us that criminal negligence involves a 'gross deviation'. But did Escamilla's behavior involve such a deviation? This is just to ask, was his behavior

negligent enough to be a crime? And, this is where we started. The rule does not provide a non-circular definition of criminal negligence.

So how does a legal decision-maker apply this law to the facts to get a decision? The bridge that leads from the facts and the law to a decision consists of a capacity, acquired in part through education and experience, to reach decisions in particular cases; this capacity includes the ability to back those decisions by relevant reasons. This is entirely uncontroversial. *Any* view that explains how reasoners get from laws and facts to decisions must identify certain features of reasoners by virtue of which they are capable of combining facts and laws to arrive at decisions. Controversy begins when we try to identify just what those features are. One obvious explanatory strategy is to postulate some shared set of underlying rules – in some sense of 'rules' – that lawyers and judges follow – in some sense of 'follow' – in reaching decisions. On this view, rule following explains how we reach decisions, and the formal properties of the rules guarantee that, if we start with truths (or probable truths, or justified beliefs), the conclusions at which we arrive will also be true (or probably true, or justified beliefs). Depending on the senses of 'rules' and 'follow', such proposals tend either to be unacceptably vague, trivially true, or patently false. One reason is that the exercise of the capacity to link law and facts to decisions often involves the exercise of imagination, reflection, and insight. Legal reasoning has the character that David Wiggins attributes to practical reasoning in general. Wiggins notes that a person

> usually asks himself 'What shall I do?' . . . only in response to a particular context. This will make particular and contingent demands on his moral or practical perception, but the relevant features of the situation may not all jump to the eye. To see what they are, to prompt the imagination to play upon the question and let it activate in reflection and thought experiment whatever concerns and passions it should activate, may require a high order of situation appreciation, or, as Aristotle would say, perception (*aisthesis*) . . . few situations come already inscribed with the names of all the concerns which they touch or impinge upon.
>
> (Wiggins 1980: 233)

It is a commonplace of the classroom and courtroom alike that 'few situations come already inscribed with the names of all the concerns which they touch or impinge upon'. Much of what is crucial occurs as the legal decision makers respond to 'particular and contingent demands on [their] moral or practical perception' and let 'imagination to play upon the question and let it activate in reflection and thought experiment whatever concerns and passions it should activate'. The current state of our commonsense and scientific knowledge does not allow us to characterize imagination, thought experiment, and reflection as, in any informative sense, a rule governed activity. So I would contend, but we need not pursue this issue.

We should instead focus on the remarkable fact that lawyers and judges will, over a wide array of instances, agree about what the proper legal decision should be; they will also agree about what reasons are relevant to justifying this decision and about what relative weights those reasons should have. A final, and important, point: these shared judgments about decisions and the reasons for them are responsive to criticism. *Escamilla* illustrates the point. The trial court erred in failing to grasp the differences between T-3 and the Eastern District of Virginia. The appeals court cited this failure as a reason to overturn the trial court's decision. The court remarked that

> [i]t would seem plain that what is negligent or grossly negligent conduct in the Eastern District of Virginia may not be negligent or grossly negligent on T-3 when it is remembered that T-3 has no governing authority, no police force, is relatively inaccessible from the rest of the world, lacks medical facilities and the dwellings thereon lack locks – in short, that absent self-restraint on the part of those stationed on T-3 and effectiveness of the group leader, T-3 is a place where no recognized means of law enforcement exist and each man looks to himself for the immediate enforcement of his rights.
>
> (*Escamilla*: 347–8)

We should emphasize one point that has been implicit in our discussion so far: judicial decisions are backed by reasons. Indeed, courts typically decide by *comparing* reasons for and against possible decisions. This is not to say that courts can always find a unique set of clearly superior reasons. Considerations may be tied in strength, or they may – I would contend – simply be incomparable.[4] Moreover, it would be wrong to envision a precise metric here; rather, competing considerations – perhaps rather indeterminate and not fully explicit – may be better, worse or of roughly equal strength in the sense that expert lawyers and judges would so regard them.

One reason it is important that courts decide for reasons is that, in a democracy, a governmental decision-maker

> accepts the responsibility, among others, to explain, particularly to those adversely affected, why different treatment of others in other circumstances is not capricious or arbitrary or discriminatory.
>
> (Dworkin 1991: 373–4)

In the making of public policy, there will almost always be 'those adversely affected'. How does a decision-maker show that the treatment is not 'capricious or arbitrary or discriminatory'? By articulating the reasons for the policy, and – especially to address the concerns of the adversely affected – explaining why those reasons are better than the reasons for competing policies that would have allocated costs and benefits differently. This is a

requirement of political legitimacy. The ideal of legitimacy is the ideal of a government that commands compliance with its commands, not through the threat of force, but because citizens, insofar as they are rational, see themselves as having adequate *reason* to comply.[5]

But who decides when a decision is well or poorly reasoned? We should expect considerable disagreement here. Unresolvable disagreement on fundamental moral matters is a fact of contemporary life. Rawls makes the point:

> Long historical experience suggests, and many plausible reflections confirm, that reasoned and uncoerced agreement are not to be expected . . . Our individual and associative points of view, intellectual affinities and affective attachments, are too diverse, especially in a free democratic society, to allow of lasting and reasoned agreement. Many conceptions of the world can plausibly be constructed from different standpoints. Diversity naturally arises from our limited powers and distinct perspectives; it is unrealistic to suppose that all our differences are rooted solely in ignorance and perversity, or else in the rivalries that result from scarcity. [The appropriate view of social organization] takes deep and unresolvable differences on matters of fundamental significance as a permanent condition of human life.
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> (Rawls 1980: 515, 534)

Escamilla illustrates the potential for disagreement.

Disagreement can arise, for example, over whether Escamilla acted reasonably when he armed himself with the rifle. Now I think he did. After all, Escamilla had reason to think Porky might attack with a knife or some other weapon, and his intention in arming himself was presumably to deter an attack through a display of superior force, and, if necessary, to meet deadly force with deadly force. However, he could also have avoided an attack by simply giving Porky the wine, and some will certainly think this the more reasonable course. However, law enforcement did not exist on T-3; consequently, if Escamilla were to surrender his property to avoid a confrontation, he would be unable to enlist a police force to recover the property or to extract compensation for it. Moreover one suspects that, if unopposed, Porky's drunken demands might easily have grown more frequent, insistent and irrational, and neither the law nor morality require us to live at the mercy of the tyrannical whims of others. But, even if it was reasonable for Escamilla to arm himself, was it also reasonable to point a loaded rifle at Lightsey? The rifle ended up pointed at him because, when Lightsey knocked on Escamilla's door, Escamilla thought it was Porky, and

> he raised the rifle, put the safety off, opened the bolt, and assuring himself that the rifle was loaded, returned the bolt to the firing position and pointed the gun at the door.
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> (*Escamilla*: 350)

Would a reasonable person in this situation have kept the safety on, or unloaded the rifle, or at least not pointed it at another human being? Pointing the rifle at Lightsey makes the threat to use it more credible and contributes more effectively to deterring attacks through a show of superior force; releasing the safety on a loaded rifle ensures that deadly force is available to repel an attack that uses deadly force.

Obviously, there is considerable room for disagreement over these questions. However, most American criminal law experts would, I think, find that Escamilla was not guilty of the crime of negligent killing – that is, he did not deviate sufficiently from the behavior a reasonable person would have exhibited. Of course, this agreement is agreement *among a particular community* – in this case the community of American criminal law experts, and even in this community, we will find some disagreement, as, indeed, the trial court and appeals court disagree about the right outcome in *Escamilla*. Moreover, other communities and cultures will certainly disagree. The decision rests on various moral and political views about what counts as reasonable self-defense, adequate respect for the lives of others, and reasonable care in the use of firearms. There are clearly multiple acceptable ways to balance the various factors and considerations involved, and ways of doing so indeed vary from culture to culture.

This relativism should not worry us. The relativism is not worrisome because the court is embedded in and serves a particular community by interpreting and applying the law of that community. What the appeals court claims to do is to apply the law *of the relevant community* – the Eastern District of Virginia. The court would not be carrying out its institutional role if it were not working with the views of that community. Of course, in speaking this way of 'the' community, we are assuming that the relevant community exists. It is the existence of this community, not relativism, that is a real worry. A sufficient condition for the existence of the relevant community is that the views that guide the courts' decisions are sufficiently widely shared in the group it serves that members of that group will see the reasons for the court's decision as also reasons to voluntarily comply with it. In a group that meets this condition, court decisions are consistent with the demands of democratic political legitimacy. Failure to meet this condition comes in degrees of disagreement, and, where disagreement is sufficiently profound and too widespread, citizens will often not see themselves as having adequate reason for uncoerced compliance with court decisions, and indeed with governmental dictates generally. In such cases, the state falls far short of the ideal of legitimacy. Where disagreement is the norm – as it typically is, groups approximate the ideal of legitimacy only through some combination of shared values and toleration. Shared views and values reduce disagreement while toleration provides a reason to comply with decisions even when one disagrees with them. One may tolerate what one regards as mistaken out of an appreciation of the needs of social and political order, and out of the realization that one's own

viewpoint, like everyone's, is limited, fallible, and not entitled to carry the day in every dispute.

A lawyer's perspective

We began this description of legal reasoning to reveal what lawyers think they see in practical reasoning that philosophers tend to miss. So what is it? When I ask philosophers-turned-lawyers this question they invariably focus on the extremely fact-specific character of the questions courts must resolve, and they note that the moral views and values courts invoke in answer these questions are, as *Escamilla*, illustrates views and values that can and do vary from community and community. It is certainly agreement within this or that community on views and values that explains – in part – why members of that community move from laws and facts to more or less the same particular judgments in particular cases. But – and this is another point that impresses the lawyers – this cultural relativity matters little, as we argued earlier. Our point was that, when deciding cases, what courts claim is that the explicit law and views and values *of a particular community* permit or require so-and-so. The point to emphasize now is that there is no particular puzzle about how courts can know the explicit law of the community and know about its moral views and values. The explicit law of the community is contained in common law cases, statutes, constitutions and the like, and, subject to the errors any member of a community is likely to make when ascertaining the moral views and values of that community, courts certainly can and do know the values and views of the communities they serve. Informed by knowledge of the explicit law and the community's moral views and values, judges exercise their capacity to move from the law and the facts to a particular decision, and in doing so they reach decisions they can and do back by reasons. The conclusion expresses the courts' opinion that, in light the explicit laws and the communities' moral views and values, the weight of all relevant reasons best supports the conclusion that such-and-such activity is permitted or required. Such judgments can obviously be true, and, when true, there is no reason to deny that the court *knows* its conclusion to be true.

These observations extend to moral reasoning. *Escamilla* illustrates the point. That case asks us to balance our right to protect ourselves against the respect and consideration we owe to others. We balance these considerations in answering whether it is reasonable for Escamilla to arm himself with a rifle; whether it is reasonable to release the safety on the loaded rifle, and point it at another person, and so on. Balancing one's own concerns against the concerns of others is a constant feature of everyday life; everyone gives some weight to the concerns of others – some giving more, some less weight. The reason, of course, is that our moral values require that we sometimes forgo pursuing ends in order to assist others in the pursuit of their ends, or at least to not interfere their pursuit of those

ends. In our attempts to live in accord with our values, we balance our interests against the interests of others on a daily basis in a variety of trivial to substantial ways. In this area, moral reasoning, in its day-to-day routine, is, like legal reasoning, deeply fact specific. We balance competing concerns by answering questions such as: was it, in the particular circumstances, reasonable to release the safety on the rifle? When we balance our interests against those of others, we employ views and values that are culturally relative, as *Escamilla* illustrates.

We argued that this relativism was not worrisome in the case of the law since all courts claim to do is to apply the law of the community they serve. Is this relativism worrisome in moral matters? Yes and no. No, because we live our lives in particular communities and cultures, and often – and *Escamilla* is an illustration – our goal is to determine what we owe to others, given the standards and views of our particular community. Yes, because we all live in a variety of communities and cultures, and our moral and political views and values can, and do, conflict. And again, no – because it is an undeniable fact that we do reason our way to resolutions of such conflicts. Indeed, the law provides models of such resolutions in the appeals process, in doctrines and devices of international law, the dispute resolution procedures of international regulatory bodies, and in world courts, such as the world criminal court.

Experience with the day-in-day-out routine of legal decision-making hammers home the point that culturally relative values play an absolutely central and decisive role. The court's interpretation and application of such values determines whether a person goes to prison; whether large amounts of money change hands; whether a child of divorced parents lives with its mother or father, and the like. When we really look at practical reasoning, it is true, as Professor Putnam says, that we do not treat our value 'judgments as matters of mere *taste*; we argue about them seriously, we try to *get them right*'. But what we 'try to get right' would *seem* to be our convictions about what *culturally relative* values require.

A philosopher's response

The problem with the position is that rational justification itself cannot be just one more culturally relative value or practice on a par with all other values or practices. If it were, it would follow that an attempt to critique values and practices as less than fully rational would merely be a commentary on the value or practice from the perspective of another value or practice. This would be a radical relativism, a relativism many, including Hilary Putnam, have rightly criticized as incoherent. I will not review these criticisms.

I want, rather, to focus on how philosophers can supplement the lawyer's perspective to reveal rational justification as not just one culturally relative value among others? To answer, let us narrow the question. Consider that

our moral values require that we sometimes forgo pursuing ends in order to assist others in the pursuit of their ends, or at least to not interfere their pursuit of those ends. I think that, insofar as one is rational, one has and is guided by such values. How can we show this to be true? The key is to ask why morality is indispensable in our lives. Why can't I desert from morality's army?

It certainly looks like I have a motive to desert. After all, my values require that I sometimes forgo pursuing ends in order to assist others in the pursuit of their ends, or at least to not interfere with their pursuit of those ends. Why should I? Why should I act in accord with values that require this? Imagine, for example, I smoke cigarettes. Suppose, however, that the hotel in which I am staying has put me in a non-smoking room. I agreed to this as this was the only sort of room available. Exceptional circumstances aside, this is a case in which I should forgo pursuing my end – smoking – in favor of the ends of non-smokers. But, of course, I may smoke in the room anyway; many do. And, why should I not adopt this attitude toward others generally? Why shouldn't I gain at their expense? Why shouldn't I restrict my willingness to forgo pursuing my ends for the sake of others to a small circle of intimates? Indeed, why shouldn't I collapse this circle to include just a single intimate acquaintance – me? Why shouldn't I reduce to zero the weight I give other's concerns?

Now, I would, if I could, show that this is not an option, that – in precisely the sense Kant intended – we are conscripts, not volunteers, in the army of morality. I would, if I could, show that our nature as free rational beings imposes on us inescapable a priori moral constraints. Much of the charm of philosophy is – or was – its promise of some relief from the ruthless contingencies of life through delineating reality's eternal framework of necessary truths. But limning out reality's immutable lines is a project that pragmatism enjoins us to abandon. Pragmatism rejects – rightly, I think – the notion of a priori truth. But this does not prevent me from seeking solace in replacements. Solace comes, I would contend, in the form of a combination of facts about persons, institutions, social and political organization and the history thereof. This is not a reductionist claim. I am not suggesting that the relevant facts can be fully described in language devoid of any reference to value. I would contend that these facts – especially those intimately involved with my status as a person – that makes moral considerations an inescapable guide for and constraint on my thought and action. This claim is consistent with pragmatism's fallibilism, the thesis that 'there is no guarantee to be had that such-and-such belief will never need revision'. It is consistent with this thesis to hold that our current unguaranteed belief is that assent to certain claims is definitive of rationality. Surely something of this sort is correct. Something about us has to account for the inescapability of morality, and what could it be but persons, institutions, social and political organization? Indeed, it does not take too much reflection to see that our values play a central role in defining our identities and

that we cannot totally turn our backs on them without – impossibly – turning our backs on ourselves.

Imagine that we complete the philosophical task of painting in detail a compelling picture of this conception of the inescapability of morality. The picture would still be incomplete. We would be confronted with two depictions of morality – the lawyer's picture that rightly portrays the absolutely central role of culturally relative values in resolving the highly fact specific questions that make up the fare of day-in-day-out practical reasoning; and, the philosopher's picture of the non-culturally-relative inescapability of rational justification and a certain concern for others. What is unsatisfactory here is that the universal and culturally relative aspects of morality are not like oil and water; they are not elements that separate into distinct domains. They interpenetrate in complex patterns. *Escamilla* illustrates the point. We have emphasized the fact-specific nature of the inquiry in that case, where, for example, our concern is whether Escamilla deviated too far, if at all, from how a rational person would behave when, in the particular circumstances that obtained, he released the safety on the rifle. But in answering this question, we are of course trying to determine in a particular case how to comply with the universal rational obligation to take others appropriately into account. The requirement that we take others into account is not without content and constrains our reasoning, and our present interpretations of this requirement are rationally required to be consistent with our past interpretations, or to be justifiable departures from our past practice. Law, politics and morality weave a complex web of interpretation over time.

One task for philosophers is to present a picture of practical reasoning that reveals how its universal and culturally relative components interpenetrate and work together. I submit that this is a proper task for a pragmatist philosopher.

One final point: in suggesting this task, haven't I fallen foul of another pragmatist principle, the rejection of the 'the correspondence theory of truth'? After all, I have described facts – about identity as persons, about society and so on – as making our moral judgments true. Isn't this 'truth as correspondence'? Yes, but what is wrong with that? After all, how could it be false that what makes the statement that so-and-so is true is that so-and-so is the way the world is? What makes the statement 'This is a desk' true is that there is a desk here. What makes 'Smith is a powerful politician' true is that Smith has certain capacities that he has exercised and is in a position to exercise again over some suitably long period of time. What makes 'That action was noble' true are certain features of the actor, action and the surrounding circumstances (this is, of course, *not* to say that we can describe these features without invoking various values). If pragmatism is inconsistent with these claims, so much the worse for it.

There is, however, no inconsistency here with pragmatism, or at least not with what pragmatism ought to say. When pragmatism attacks the

'correspondence theory of truth' it attacks a *philosophical theory* of truth, a theory it rightly rejects for drawing too sharp a distinction between warranted assertability and truth. But this is no reason to reject the *common-sense conviction* that what makes the statement that so-and-so true is that so-and-so is the way the world is, as long as we do not read into that conviction any philosophical view that entails too sharp a division between warranted assertability and truth.

Comment on Richard Warner's paper

Hilary Putnam

Let me begin by reviewing my stance on so called 'indispensability arguments' – arguments from the indispensability of a belief to its truth, or to its warranted assertability (often it is unclear which is being argued to).

> Pragmatism tells us that we have to take seriously the beliefs that we find indispensable in our lives. That doesn't mean that we must always retain such beliefs unaltered. If there is a devastating criticism of a belief that has been fundamental to our practice up to now, then we must alter the belief (and that usually means altering the practice as well). But if every philosophical 'refutation' of such a belief proves, on examination, much more problematic than the belief – which is what I believe to be the case with all the attacks on the possibility, indeed on the very idea, of rational argument, both in the case of science and the case of ethics, then I go with the pragmatists and say 'Yes, there is such a thing as rational argument here, yes there is such a thing as an objectively warranted assertion here.' If there couldn't be objectively warranted judgments of value, then there couldn't be objectively warranted judgments about anything.

I recognize that indispensability arguments have sometimes been carelessly formulated. In mathematics what Quine's arguments (for example) show is that we cannot do without such concepts as *number*, *function* and *set*; but Quine's habit of analogizing the role of mathematical axioms to the role of physical assumptions may unfortunately suggest that mathematics would be *false* (because mathematical entities wouldn't 'exist') in a world in which we didn't *need* its concepts.[6] That is a problem for Quine's overly-empiricist version of the argument.[7] In ethics, I would never attempt to offer an indispensability argument for standing within the ethical life at all (e.g. for agreeing that the welfare of many households is more important than the welfare of one person – a principle which is, in essence, enunciated by Aristotle at the very beginning of the *Nichomachean Ethics* – or for regarding the suffering of other people as something that demands a response). As John Dewey says somewhere, if you think that human beings

are so bad that most of them can never be moved by ethical motives, then no 'proof that they ought to be' could possibly help. I think that in his book, *Ethics and the Limits of Philosophy* (Williams 1985), Bernard Williams didn't take seriously enough his own (so to speak, Deweyan) insight that what people need is justification addressed to those who stand within the ethical life, not 'proofs' intended to convince those who stand outside it.

The position you propose in the first part of your paper seems to be this: that the task of, for example, legal reasoning, the reasoning of judges and lawyers, is simply to keep the system going well enough so that there isn't a violent revolution – so that the populace isn't out there in the streets pulling down courthouses and dragging the judges and the government officials off to the guillotine. That is very different from the (classical) pragmatist position that I am arguing for.

Dewey's position, the position I defend, is that it is possible to have what we might call a *deliberative democracy*, a democracy in which people deliberate together not about abstract philosophical questions (e.g. about whether Kantianism or Utilitarianism or Platonism is right – pragmatists reject the whole attempt to base ethics on any of these traditional metaphysical alternatives), but about the most intelligent way to resolve situated political, economic, and social problems. Such deliberation, we believe, can lead to *warranted assertions* – not, notice, timeless a priori truths. That means that, in contrast to the position you sketched, Dewey and I are committed to the existence of such a thing as a *reasonable outcome* to a discussion, and not just the existence of *politically successful* outcomes.

I have argued that the usual arguments against the very existence of such a thing as a reasonable outcome of a discussion (and in particular, against the existence of warranted assertability in ethics) prove too much; if they worked, they would also refute the existence of warranted assertability in science! If I use an indispensability argument here, it is simply that the indispensability of the belief that there are such things as *better and worse reasons in ethics* to our whole ethical lives is a justification for retaining that belief in the absence of good arguments against it, and in view of the point just made (that the arguments against are self-undermining, since they cast the very notion of a 'good reason' into doubt), there *aren't* good arguments against it.

4 Pragmatics and pragmatisms

Robert Brandom

Introduction

Pragmatism can be thought of narrowly: as a philosophical school of thought centered on evaluating beliefs by their tendency to promote success at the satisfaction of wants, whose paradigmatic practitioners were the classical American triumvirate of Charles Peirce, William James and John Dewey. But pragmatism can also be thought of more broadly: as a movement centered on the primacy of the practical, initiated already by Kant, whose twentieth-century avatars include not only Peirce, James and Dewey, but also the early Heidegger, the later Wittgenstein and such figures as Quine, Sellars, Davidson and Rorty. I think that the broader version of pragmatism is much more important and interesting than the narrower one. But I also think that an understandable tendency to bring the pragmatist tradition into relief by emphasizing features distinctive of that narrower conception has made it difficult to bring the broader one into focus. In this essay, I want to say something about the relations between the two. I'll start by distinguishing a number of commitments of different sorts that shape pragmatism in the broader sense. I'll then try to say how pragmatism in the narrower sense might be thought to fit into this constellation of ideas. I'll close by arguing against the utility of the model of language (and thought generally) as a kind of *tool*, which is characteristic of the narrower construal of pragmatism.

Pragmatics and semantics

Philosophers approach language from at least two quite different directions. Language can be seen as a kind of *practice* or *activity*, a kind of *doing*. What is most prominent from this point of view is language *use* – which falls into place as an aspect of the natural history of certain kinds of organisms. We are encouraged to think of ourselves as *language* using animals in much the same sense in which we are (to pick an example not wholly at random) *tool* using animals. Contrasting with this anthropological Wittgensteinean approach is a semantic Tarskian approach to language. Here the emphasis

is not on the *use* of linguistic expressions, but on their *content* or *meaning* – not on the activity of saying but on what is said.[1]

We can distinguish these approaches as focusing respectively on *pragmatics* and on *semantics*. Using the terminology this way, pragmatics is the systematic or theoretical study of the use of linguistic expressions, and semantics is the systematic or theoretical study of the contents they express or convey. This way of using the expressions 'pragmatics' is different from some standard contemporary ones. According to one such use, the topic of pragmatic theory is the semantics of expressions whose meaning varies with circumstances of use: paradigmatically indexicals and demonstratives.[2] According to another common contemporary usage, pragmatics studies the ways in which the broadly economic demands of efficient communication in the face of the potentially differing expectations of the parties to a conversation explain conventional practices of understanding one another. Here a paradigm is Gricean implicatures. The more inclusive usage I am recommending understands pragmatics as the study of Fregean force generally, of the moves one can use utterances to make in language encompassing the study of illocutionary as well as perlocutionary force. A paradigmatic undertaking of a general theory of speech acts and practices of this sort would try to state what an individual should be understood as doing when making a claim or assertion.

It is possible to pursue the pragmatic and the semantic theoretical enterprises independently of one another. One might think, with some Wittgensteineans, that properly appreciating the variety of uses of expressions found in actual practice entails giving up the idea of a unitary conception of meaning somehow structuring them all. One might think, with some Tarskians, that actual usage is scarcely enlightened by an appreciation of semantics. The idea is that since we so often don't know what our terms refer to or what the facts are, learning from semantics about when it would in a semantic sense be correct to apply various expressions (for instance, when the claims made would be true) just doesn't tell the theorist much about how practitioners in fact are disposed to use them. Views that in these ways see pragmatics and semantics as autonomous disciplines wholly independent of one another represent extremes on the contemporary scene, however. It is much commoner for those who study linguistic practice and those who study content and meaning to assert systematic connections between their topics.

'Pragmatism', as I understand and shall use the term, is a generic expression that picks out a family of views asserting various senses in which practice and the practical may be taken to deserve explanatory pride of place. One more determinate class of such views concerns the relations between pragmatics and semantics. In this more specific sense, a view deserves the appellation 'pragmatism' insofar as it insists that semantic theory must answer in various ways to pragmatic theory – for instance by asserting some sort of explanatory priority of pragmatics over semantics. Many sorts of

priority are possible, so there are many sorts of pragmatism as well. We will do well to begin with some analytic work, to sort out some of the important variants. In what follows my aim will be to delineate and distinguish various views, with perhaps a few words about what motivates and attracts their proponents, rather than to endorse or argue for the views discussed.

Methodological pragmatism

Here is a thesis characteristic of a kind of pragmatism: The *point* of talking about the content expressed or the meaning possessed by linguistic expressions is to explain at least some features of their use. This claim expresses commitment to what we might call '*methodological* pragmatism'.[3] Pragmatism of this sort sees semantics as answering to pragmatics in the sense that pragmatic theory supplies the explanatory target of semantic theory – and hence is the ultimate source[4] of the criteria of adequacy according to which the success of that theoretical enterprise is to be assessed. Here is a characteristic statement of Dummett's:

> [A] semantic theory which determines the truth-conditions of sentences of a language gets its point from a systematic connection between the notions of truth and falsity and the practice of using those sentences.
>
> (Dummett 1973: 413)

Methodological pragmatism in this sense might be used as a criterion of demarcation distinguishing genuinely *semantic* theories from others. For example, consider Tarski's topological semantics for the first order predicate calculus. Its underlying idea is that quantifiers can be understood as corresponding to topological closure operations. Mathematically, it takes the form of a representation theorem: exhibiting a structure-preserving mapping relating sentences to objects in a topological domain. Now twentieth-century mathematics is replete with representation theorems, but most of them are not properly thought of as underwriting specifically *semantic* claims. The Stone Representation Theorem, for instance, which correlates Boolean algebras with set-theoretic operations on power sets does not (at least by itself) constitute a semantics for anything. What is it that makes Tarski's representation theorem, but not Stone's qualify as a semantics? (The fact that one of the structures it relates is a formal language may be necessary, but is nowhere near sufficient.) Methodological pragmatism supplies an answer to this question. It is that Tarski's mapping reconstructs a crucial dimension of the *use* of expressions of first order quantification theory: namely the inferential consequence relation (and hence the property of logical theoremhood). His theory qualifies as a semantic theory precisely because and insofar as it serves the purposes of codifying this central feature of the practice of using quantificationally complex expressions.

Methodological pragmatism might also be appealed to in arguing that semantic theory ought not to appeal to certain sorts of theoretical objects. For instance, the overall argumentative strategy Quine pursues in 'Two Dogmas of Empiricism' (Quine 1953) can be understood as having this form. For there he finds wanting semantic theories that have as central elements a distinction between two sorts of true sentences: analytic ones, supposedly true in virtue of meaning alone, and synthetic ones, whose truth depends in addition on how things are in the extralinguistic world. He does so by asking what feature of the *use* of those sentences it is that is to be explained by this theoretical distinction. Canvassing various alternatives, such as immunity from revision, he concludes that there is nothing about linguistic practice that is explained by the semantic distinction in question. And on that basis he rejects semantic theories that treat it as central. (This argument may or may not succeed; my point is just that the strategy it deploys is recognizably that here denominated 'methodological pragmatism'.)[5]

Methodological pragmatism might usefully be compared with the principle that the point of postulating theoretical objects is to explain the behavior of observable ones. Such a commitment to what we might call methodological *empiricism* could also be appealed to as a criterion of demarcation, or in criticizing a particular theory. Thus, judicial astrology – trying to explain the vicissitudes of personal fortune on the basis of theoretical properties of the stars and planets – would at least count as an empirical theory, albeit a bad one. But if the *only* reason the theologian could give us for caring about which doctrine of the Trinity is correct is that unless we know that we can't know who the true Pope is, then his theory would be disqualified, as not even aiming at the explanation of anything observable.

In the context of some auxiliary hypotheses, methodological pragmatism appears as a special case of methodological empiricism. Thus if one both believes that semantic properties are *not* observable, and restricts one's account of linguistic practice or the use of language to features that *are* observable, then a commitment to methodological empiricism will entail a commitment to methodological pragmatism.

Semantic pragmatism

A related, but I believe distinguishable, sort of pragmatism takes as its point of departure the plausible view that it is the way practitioners *use* expressions that makes them *mean* what they do. After all, just as *noises* – that is, apart from the way we use them, the role they play in our practices – our utterances don't mean anything. The noise 'horse' could mean anything (or nothing) at all, depending on how it came to be used. This truism at least motivates a methodological requirement on the semantic theorist: that whenever she associates with expressions some semantically relevant whatsis as its content or meaning, she undertakes an obligation to explain what it is about the use of that expression that

establishes in practice the association between it and the semantically relevant whatsis. Thus a semantic theory that tells us to associate sets of possible worlds with utterances of declarative sentences as the propositions they express should be understood as issuing a promissory note to the effect that a pragmatic story can be told about what features of the use of those sentences (or their component words) it is in virtue of which it is related both to *any* set of possible worlds, and in particular to *that* set, rather than to a slightly different one.[6] This sort of responsibility can be particularly onerous for a semantic theory that appeals to semantic interpretants that are either abstract objects, or very finely individuated. (Some possible worlds theorists have both problems.) I take it that the arguments Kripke attributes to Wittgenstein (Kripke 1982) show that individuation can cause a problem in this context, quite apart from issues of abstractness.

We might call this sense in which one can take it that semantics must answer to pragmatics '*semantic* pragmatism'. One way to see that it is different from what I called 'methodological pragmatism' is to think about the analogy with the relation between theoretical and observational vocabulary. We are accustomed to the idea that observations underdetermine theory. To say that is to say that the theorist is precisely *not* obliged to be able in every case to say what observations so or would entitle her to apply a certain theoretical term or to endorse a certain theoretical claim.[7] Further, to insist on an account of what features of the use of an expression it is that confer on it the content associated with it – that in that sense establish the semantic association – is not yet to say, as Dummett sometimes does,[8] that one ought to be restricted in one's choice of semantic interpretants features of the use of the expressions so interpreted. Such a restriction would be the analogue of instrumentalism about theoretical entities: insisting that one not postulate anything unobservable in order to explain observable goings-on. We might call such a view 'semantic pragmatism' in the *narrow*, contrasting that with the *broad*, sense defined above.

The differences between what I've called 'methodological' and 'semantic' pragmatism are subtle.[9] For instance, one might read Quine in 'Two Dogmas of Empiricism' as asking what it is about the use of sentences in virtue of which they deserve to be semantically interpreted as true in virtue of meanings alone. That would be to read him as a semantic pragmatist, rather than as a methodological pragmatist. But there is a real difference of explanatory order between these strategic commitments. The methodological pragmatist looks at the explanation of the practice of using expressions, the subject of pragmatics, in terms of the contents associated with those expressions, the subject of semantics. The semantic pragmatist looks at the explanation of the association of contents with expressions in terms of the practice of using those expressions. While those explanations may be facets of one story, they need not be.

Significance of the vocabulary in which use is specified

The semantic pragmatist is in a very general sense a functionalist about content. While the meanings studied by semantics may not *consist* in the roles played by expressions in linguistic practice (meaning need not be *identified* with use), according to this view those roles must at least establish the connection between contents, meanings or semantic interpretants, on the one hand, and linguistic expressions on the other. The semantic pragmatist's basic insight is that there is nothing apart from the use of expressions that *could* establish such connections. And this is surely correct – if we construe the notion of *use* broadly enough.

I've been talking about 'use' as though we all knew and agreed about what that term means. Of course that is not so. The specifications of both the varieties of pragmatism I've offered so far leave unspecified some crucial parameters. And for each of those parameters there are some values that would trivialize the claims in question.

One such parameter is the vocabulary one is allowed to use in describing the practices that are the use of linguistic expressions. If one is allowed to use the full resources of *semantic* vocabulary in specifying the use – describing an operator as 'used so as to express negation', or a term as 'used to refer to Leibniz', then the requirements of semantic pragmatism will automatically be met. For in that case one can easily point to the features of the use of those expressions that establish their association with their semantic interpretants. Another such parameter is the sort of interpretant associated with expressions by semantic theory. If one picks some aspect of the use of expressions – say, assertability conditions (on some renderings of such conditions) – as the semantic interpretants, then the requirements of methodological pragmatism will automatically be met. For in that case the relevance of semantics to pragmatics comes for free: the semantic features of the language are just a subset of the pragmatic ones.[10]

Typically, when philosophers of language put forward claims about the relations between pragmatics and semantics – for instance, versions of methodological or semantic pragmatism – they have in mind, at least implicitly, some sort of restrictions on the vocabulary in which pragmatic and semantic features of the language are specified. They are thinking of specifying linguistic behavior in a naturalistic vocabulary, for instance, or thinking of semantics in terms of truth conditions and reference relations. Once those presuppositions are made explicit, claims about how semantic theory must answer to pragmatic theory become substantive. Some of these specifications – and I have in mind here particularly those directed at the vocabulary one is allowed to use in describing linguistic practice – are themselves associated with varieties of pragmatism. A couple of these are considered in what follows.

Fundamental pragmatism

It is characteristic of pragmatists in the broad sense to see knowing *how* as having a certain kind of explanatory priority over knowing *that*. This is one influential form taken by an insistence on the explanatory primacy of the practical over the theoretical. Explicit theoretical beliefs can be made intelligible only against a background of implicit practical abilities. Pragmatism in this sense – call it '*fundamental* pragmatism' – is opposed to the kind of platonistic intellectualism that seeks to explain practical abilities in terms of some sort of grasp of principles: some sort of knowing that behind each bit of know how. That sort of intellectualism was the dominant philosophical approach until at least the nineteenth century. Among the contemporary heirs of this tradition are programs in cognitive science that are committed to explaining an organism's capacities to navigate around and cope with various environments and environmental features by postulating the presence of internal representations of those environments and features.

Opposing intellectualism by seeing the capacity to know or believe *that* something is the case as parasitic on more primitive kinds of know *how* – capacities to *do* something that is not yet saying, thinking or believing anything – is the basic thesis of the first part of Heidegger's *Being and Time*.[11] It is this fundamental pragmatism that links his thought of the 1920s to Dewey's thought of the same decade (much to Heidegger's later chagrin).[12] It is the basis of criticisms by contemporary pragmatists such as Dreyfus and Haugeland of the project of classical artificial intelligence, which depends on being able to make explicit in the form of claims, rules and principles, all of the practical know how that is implicit in the everyday skills and capacities to cope with the environment deployed by intelligent creatures.[13]

One consideration that has been taken to motivate this sort of pragmatism is the kind of regress argument epitomized by Lewis Carroll's *Achilles and the Tortoise* (Carroll 1895). Beliefs would be idle unless the believer could at least sometimes tell what followed from them (what else they committed the believer to) and what was incompatible with them. (Even if they might still in some sense be said to have propositional contents, those contents wouldn't make a difference to the believer.) But distinguishing the potential beliefs that are incompatible with a given belief, and those that are its inferential consequences is a practical skill or ability: a kind of know how. This sort of ability or know how cannot be taken in every case to be codified in the form of an explicit, propositionally contentful belief (say, conditional beliefs, including conditionals whose consequent is negated), on pain of an explanatorily unproductive infinite regress. Being able explicitly to believe *that p* (endorse a theory) presupposes a background of practical implicit know how. An even more direct version of this argument is available to those pragmatists, like Sellars, who insist on specifically *linguistic*

practice as essential to the capacity so much as to entertain propositions. If, as he claims, grasping a concept is practically mastering the use of a suitable word, then it is clear such mastery cannot in every case itself be explained in terms of prior grasp of a concept.

Fundamental pragmatism enforces a restriction on the vocabulary a semantic pragmatist can use to describe the linguistic practices that establish the association of semantic interpretants with linguistic expressions. A semantic pragmatist who is also a fundamental pragmatist cannot use exclusively *intentional* vocabulary in describing the use of language. It follows that from the point of view defined by these two strategic theoretical commitments, accounts of meaning such as that of Grice must be deemed essentially incomplete. For his account of what it is to use a linguistic expression with a certain meaning appeals only to propositionally and conceptually contentful beliefs and intentions. According to the fundamental pragmatist, such an account leaves out the implicit background of not explicitly conceptual abilities presupposed by the capacity to have explicitly conceptually contentful beliefs and intentions. The fundamental semantic pragmatist need *not*, however, be committed to the possibility of explaining the association of semantic interpretants with expressions in terms of linguistic practice specified entirely in nonintentional terms. This view might be called '*reductive* fundamental semantic pragmatism'. Such a reductive project (about which more will be said later) would depend on further collateral metatheoretical commitments.

Fundamental pragmatism does, however, open the door for the characteristically twentieth century view that might be called '*linguistic pragmatism*'.[14] This is the view that engaging in specifically *linguistic* practices is an essential necessary condition for having thoughts and beliefs in a full-blooded sense. The view of Sellars, adverted to above, according to which possession of a concept just consists in mastery of a word, is a cardinal instance. Davidson's linguistic pragmatism is encapsulated in his claim that to be a believer one must be an interpreter of the speech of others.[15] Dummett gives voice to an even more extreme version of this commitment when he says:

> We have opposed throughout the view of assertion as the expression of an interior act of judgment; judgment, rather, is the interiorization of the external act of assertion.
>
> (Dummett 1973: 362)

Normative pragmatics

Theorists pursuing any of the varieties of pragmatist explanatory strategies considered so far must worry about what vocabulary it is appropriate to employ in pragmatic theory – that is, in specifying the practices of using linguistic expressions which:

i are to be explained by semantics, according to methodological pragmatism;
ii establish the association of linguistic expressions with semantic interpretants, according to semantic pragmatism; and
iii constitute the practical know *how* against the background of which alone the capacity to know, believe or think *that* can be made intelligible, according to fundamental pragmatism.

The suggestion concerning that vocabulary that is most important for understanding the relation between classical pragmatism and the broader tradition of pragmatism in which it is embedded is, I think, that any pragmatics whose concept of practice is a serious candidate for playing the three roles just adverted to must employ *normative* vocabulary.

This thought has a distinguished pedigree. One of Kant's most basic ideas is that what distinguishes our judgments and actions from the responses of merely natural creatures is that they are things we are in a distinctive way *responsible* for – that they involve the undertaking of *commitments*. He understands judging and acting as essentially *discursive* activities – that is, as consisting in the application of *concepts*. And he takes concepts to be *rules*: rules that specify *what* one has committed oneself to, what one has become responsible for, in producing a judgment or an action. They are the rules that govern assessments of the *correctness* of a judgment, in the light of a fact, and of a performance, in the light of an intention. Since one of the tasks of his theoretical concept of conceptual contents is to determine the conditions of correctness of practical performances of judging and acting, Kant is a methodological pragmatist. But his account of discursive practices is couched in a pointedly *normative* idiom.

We owe to Frege the distinction between force and content – and so, as I have been using the terms, the distinction between pragmatics (the study of force) and semantics (the study of content). Claiming, or making a claim, is attaching to or investing in a sentence the fundamental sort of pragmatic force, namely assertional force. Frege understands assertional force in terms of a certain kind of normative assessment. Asserting a sentence is taking it to be *correct* in a specific sense: taking it to be *true*. Frege's most basic objection to psychologistic logicians is that they do not provide the theoretical resources to fund a notion of content that can make sense of the essential dimension of normative assessment that is implicit in attaching assertional force to a sentence. Sentences (or ideas) must for them just matter-of-factually be *there*, like eddies in a stream,[16] whose occurrence is not intelligible as the making of a claim, the undertaking of a commitment, the adoption of a stance toward the *truth* of the sentence. They cannot show how assessments of sentences as correct or incorrect in the sense of true or false get a grip on them, and hence cannot explain what we are doing in making a claim. Since he takes providing the resources to make sense of that notion of pragmatic force to be one of the central tasks of the theory

of content, Frege is a methodological pragmatist. And his understanding of pragmatic force is a *normative* one.

One of Wittgenstein's central preoccupations in the *Philosophical Investigations* is with the norms implicit in linguistic practices. To take an expression, say the 'plus' of arithmetic, to have a determinate meaning is to commit oneself to the correctness of certain ways of applying it, and the incorrectness of others. To understand, or grasp the content of an intention is to know what performances would count as correct according to it, in the sense of fulfilling it. Wittgenstein sees a pair of theoretical perils raised by these implicit practical norms. On the one hand, certain pictures of or ways of thinking about our practices can make this normative dimension seem puzzling, mysterious, or unintelligible. On the other hand, restricting the vocabulary in which we discuss our practice to resolutely nonnormative terms – discussing only regularities and dispositions to move and make noises – renders invisible the very phenomena we discuss under such rubrics as 'meaning', 'understanding', 'assertion', 'belief' and 'intention'.

The later Wittgenstein endorses fundamental pragmatism: the thesis that the attribution of intentional states with contents that can be explicitly stated in the form of propositional 'that'-clauses ('knowing *that*', for short) is intelligible only in the context of the attribution also of practical skills and abilities ('know *how*', for short). In the context of his commitment to a normative pragmatics, this fundamental pragmatism takes a distinctive form: pragmatism about norms, or *normative pragmatism*. For he deploys a version of the sort of regress argument characteristic of fundamental pragmatism to draw the conclusion that norms that are explicit in the form of rules are intelligible only against a background of norms that are implicit in practices. A rule codifies a norm. It makes a distinction between what is correct and what is not correct, according to the norm it formulates, by *saying* or *describing* what is and is not correct. But understanding a rule, applying the concepts expressed by the words used in its formulation, is itself something that can be done correctly or incorrectly. If explicit rules are the only form that norms can take, then one would need another rule – what Wittgenstein calls an 'interpretation' [*Deutung*], a rule for applying a rule – in order for the first rule in fact to distinguish performances that are correct according to that rule from those that are incorrect according to it. That platonist or intellectualist hypothesis about norms accordingly generates a regress that makes the very idea of normative assessment unintelligible. The alternative is to acknowledge that some norms are implicit in practices – in what practitioners actually *do* – rather than explicit in the form of rules that *say* what the norm is. This pragmatism about norms is *normative* fundamental pragmatism.

Classical pragmatism

It should not be assumed that commitment to a normative pragmatics is incompatible with pursuing both one's pragmatic theory and one's semantic

theory in a naturalistic spirit. Normative pragmatics is incompatible with naturalism only in the context of some sort of dualistic understanding of the relation between the normative and the natural. One might accept that the discursive practice to which methodological, semantic and fundamental pragmatism are addressed must be susceptible to specification in normative terms – that it must make sense to distinguish performances that are correct in various senses from those that are not, that talk of what one commits oneself to or becomes responsible for by producing a speech act must be in order, and so on – without giving up hope for an ultimately naturalistic account of the applicability of such normative assessments. (Of course, a great deal will turn on what one means by 'naturalistic'. But this is an issue I cannot pursue here.)

I think it is useful to think of the classical American pragmatists as engaged in an enterprise that has this shape. As I read them, they are pragmatists in *all* of the senses I have distinguished so far.[17] They manifest their endorsement of what I have called 'fundamental pragmatism' by giving pride of place to habits, practical skills and abilities, to know-how in a broad sense, and in the way they distinguish themselves from the intellectualist tradition in terms of this explanatory priority. They manifest their endorsement of methodological pragmatism by taking it that the point of our talk about what we mean or believe is to be found in the light it sheds on what we *do*, on our habits, our practices of inquiry, of solving problems and pursuing goals. They manifest their endorsement of semantic pragmatism by taking it that all there is that can be appealed to in explaining the meaning of our utterances and the contents of our beliefs is the role those utterances and beliefs play in our habits and practices.

I also think that the classical American pragmatists endorse a normative pragmatics, and therefore, given their fundamental pragmatism, a normative pragmatism. But this generic commitment is to some degree masked by the specific account they go on to offer of the norms they see as structuring our broadly cognitive practices. For they focus exclusively on *instrumental* norms: assessments of performances as better or worse, correct or incorrect, insofar as they contribute to the agent's success in securing some end or achieving some goal. This is the kind of norm they see as implicit in discursive practice, and (in keeping with their semantic pragmatism) as the ultimate source of specifically semantic dimensions of normative assessment such as truth. They understand truth in terms of usefulness, and take the contents possessed by intentional states and expressed by linguistic utterances to consist in their potential contribution to the success of an agent's practical enterprises. Peirce, James and Dewey are *instrumental* normative pragmatists. Indeed, they – and their critics – place so much emphasis on this aspect of their approach that both their commitment to a normative pragmatics and the other strands of their pragmatism are in danger of receding from view entirely.

The strategy of understanding how what underwrites various sorts of normative assessment can be implicit in practice in terms ultimately of the success or failure of practical performances to achieve antecedent ends has some conspicuous advantages. Not the least of these is the promise it holds of reconciling the insights that motivate normative pragmatics with a thorough-going naturalism. The instrumental construal of norms allows discursive practice to be seen as norm-laden without appearing mysterious. Since even the beasts of the field have desires and distinguish between performances that lead to their satisfaction and those that do not, this basic sort of normativity has sound evolutionary credentials. Appeal to the success of practical undertakings is the master idea the classical pragmatists used to reconcile their Kantian appreciation of the essential normativity of discursive practice with their post-Darwinian naturalism.

Three objections to instrumental pragmatism

I said at the outset that I think that the broader version of pragmatism is much more important and interesting than the narrower one. The analytic apparatus that has been put into play so far makes it possible to refine this claim a bit. I think that the constellation of ideas thrown up by the broader pragmatist tradition – methodological pragmatism, semantic pragmatism, fundamental pragmatism and a normative approach to pragmatics – offers a richer and more promising field for exploration, construction of variants, tinkering and recombination when considered on its own than it does when supplemented by an instrumental construal of basic practical norms characteristic of the narrower classical pragmatist tradition. This is far too large a claim for me to try to demonstrate here. Elsewhere I have tried to offer some case for the positive part of the claim (Brandom 1994b). Here I want to indicate at least briefly why I am sceptical about the promise of the instrumental reading of the kind of implicit practical norms that matter for thinking about conceptual content.

The basic idea of classical pragmatism is that one can understand normative assessments of the truth of beliefs as assessments of the extent to which the holding of that belief would contribute to the satisfaction of desires.[18] Beliefs are true insofar as they are good tools or instruments for getting what one wants. Very abstractly, then, the order of explanation proceeds from the satisfaction of desires to the truth of beliefs, and so from the satisfaction conditions of desires to the truth conditions of beliefs. The project of this sort of pragmatism is to elaborate a semantic theory – a theory of the contents of beliefs and claims – based on the pragmatic distinction between a desire's being satisfied and its not being satisfied.

What is there to recommend an order of explanation that begins with the concept of a desire's being satisfied, rather than, say, the concept of a belief's being true? I think the basic idea is that there is a notion of *felt satisfaction* of a desire that can be made sense of prior to any content

attributions. Just by being in those states, an animal knows that it itches (just watch it scratch), and again that its itch has been removed (watch it stop scratching). By considering what behavior removed or relieved the motivating state, one can characterize the itch as a need to be scratched just *there*, and not elsewhere. On that sort of basis, one can then hope to get more complex content attributions off the ground.

How might those content attributions go? Desires motivate behavior, and permit the sorting of behavior into that which does and that which does not satisfy, fulfill or eliminate the desire. In the context of those desires, beliefs can be imputed as implicit in the behavioral strategies an organism adopts to satisfy them. The beliefs will concern how things are, and, so, what effects can be expected to ensue from various sorts of performance. The success or failure of those strategies then permits assessment of the truth or falsity of the beliefs – at least when we look at the contribution any one belief would make to the success or failure of a variety of practical enterprises.

This line of thought is not silly, but I believe that it is mistaken and ultimately unworkable. Furthermore, the mistake is of a familiar sort. It depends on commitment to what Sellars called the 'Myth of the Given' (Sellars 1956). For the central concept of *felt satisfaction* is called on to play two roles. On the one hand, one is not supposed to need to have mastered concepts in order to be in this state, and to discriminate it from the state of felt *dis*satisfaction that motivates behavior. On the other hand, being in those states is supposed to count as *knowing* something, in the sense that it provides *evidence* for or against the truth of a belief. Felt satisfaction of a desire, in playing both these roles, is a paradigm of givenness in the sense Sellars insists is a myth.

Making out the difference between the states of itching and not itching does not require attributing conceptually articulated content to those states. It is not in that sense an intentional matter at all. This is what makes it tempting to appeal to such a difference as a *point d'appui* outside of and antecedent to intentional interpretation – something that can constrain and shape such interpretation, providing its criteria of adequacy and serving as the ultimate source of evidence for intentional attributions. But when we say, as I did above, that in the context of desires, beliefs can be imputed as implicit in the behavioral strategies an organism adopts to satisfy them, we are thinking of desires as something that has intentional – that is, conceptually articulated – content. For we are thinking of desires as something that can play a role as premises in pieces of practical reasoning such as:

if
i Sara desires to stay dry (i.e. that she stay dry),
and
ii Sara opens her umbrella,
then

iii Sara believes that it is raining,
and
iv Sara believes that if she opens her umbrella, she will block the rain and stay dry.

Desires of this sort engage inferentially (both evidentially and consequentially) with beliefs. Desires that are capable of playing this sort of role in the imputation of beliefs are quite different from mere itches. They are not an external input to the Davidsonian process of intentional interpretation, but one more element requiring such interpretation. Given actions and desires, we can infer an agent's beliefs by considering what constellations of beliefs and desires would provide practical reasons for those actions. Dually, given actions and beliefs, we can infer an agent's desires. But Davidson is right that desires are in the same boat with beliefs here. Neither of them can be counted as a given in the process of interpretation, even in the relatively weak sense in which what the agent actually *does* can be so counted. The idea that there can be one sort of state that can have the properties both of itches and of the conceptually contentful desires that engage with conceptually contentful beliefs in practical reasoning is an episode of the Myth of the Given.[19] It is perhaps ironic that if this is right, the methodological pragmatists Sellars and Davidson show what is wrong with pragmatism of the classical instrumentalist sort.

One way the difference that matters between things like itches and things like desires emerges concerns the possibility of *mistakes*. The notion of *felt satisfaction*, of relief from a motivating pressure, includes an element of immediacy as *incorrigibility*. The organism cannot be mistaken about whether its itch has been relieved. But I don't always and automatically know whether I have gotten what I want. The desires that, together with actions, permit the imputation of beliefs are not like that. If I desire to stay dry, or to put the ball through the hoop, to play a good chess game or to eradicate world poverty, I may in each case mistakenly *think* I have succeeded in satisfying that desire when in fact I have not. For desires of this sort, by contrast with itches, satisfaction of the desire just *is* the truth of a belief: that I am dry, that the ball went through the hoop, that I play a good chess game, that world poverty is eradicated. (One might be tempted to respond that in the case of the itch, relieving it corresponds to the truth of the belief that the desire that is the itch has been satisfied. But this is not in fact analogous, as the need to use a second-order concept such as *satisfied* in stating the content of the belief shows.)

Even putting aside the issue of givenness and staying resolutely within the realm of intentional interpretation, and ignoring the fallibility of our judgments of success (understood as consisting in the satisfaction of desire) the strategy of defining the truth of beliefs (and so ultimately their content in the sense of truth *conditions*) by appealing solely to contribution they make to the success of practical undertakings is hopeless – and it is so for structural

reasons. The essentially *inferential* articulation of conceptual content means that it is in principle impossible in general to *isolate* the contribution a belief makes to the success of practical undertakings based on it – again, even bracketing concerns about the inherent circularity of supposing that assessments of success in satisfying a desire can be taken for granted (counted as 'given') in advance of knowing anything about the truth of beliefs. For a true belief makes success of a practical undertaking more likely *only* in the absence of substantial relevant collateral *false* belief, *and* the absence of substantial relevant *ignorance*. My true belief that one can tan hides by boiling them together with bits of oak bark will contribute to the satisfaction of my desire for leather only if I have true beliefs about which trees are oak trees. Your false belief that one can tan hides by boiling them together with bits of birch bark will contribute to the satisfaction of a desire for leather in the context of the false belief that what are in fact oak trees are birch trees. A true belief conduces to practical success only in the context of a set of *true* background beliefs. In the context of the sort of semantic program pursued by the classical pragmatists, there is no noncircular way to state or eliminate this condition. And without that, it simply is not true that having a true belief about some particular topic is more likely to lead to satisfactory results than having a false one. And ignorance can be as corrosive in this context as actual error. My true belief that I find my way better in the light than in the dark and my true belief that I can produce light by striking a match will not help me satisfy my desire to find my way safely out of the room I am in if I am unaware that it is filled with an explosive vapor. The attempt to impute truth and truth conditions to beliefs on the basis of their role in practical reasoning that does, and practical reasoning that does not result in success in the sense of satisfaction of desires fails not only because of the *circularity* of appealing to satisfaction of desires in this context (tempting because of the mistaken assimilation of desires to itches), but also because of the intractability of the problem of *isolating* the contribution of individual beliefs to such success or failure.[20]

For these reasons, I think an *instrumental* construal of the norms implicit in discursive practice will not support the project of fundamental semantic pragmatism. So although I take it that there is a lot to be said for the broad pragmatism that project epitomizes, I reject pragmatism in the narrower sense of which the classical American pragmatists are the paradigmatic proponents. Happily, there is another way to understand the norms implicit in discursive practice, besides the instrumental. Implicit conceptual commitments can be understood as *social statuses*, instituted by the practical attitudes of participants in an essentially *social* linguistic practice. It is on that basis of a working-out of that idea that I pursue the project of semantic and fundamental pragmatism in *Making it Explicit* (Brandom 1994b) – but I won't say anything more about it here.

The language-as-tool metaphor

Instead, I would like to close this essay by considering briefly a more global sort of instrumentalism about discursive practice. Classical pragmatism, as I have presented its basic ideas here, is a local instrumentalism, in that it considers possession of each particular concept, mastery of each particular word, and adoption of each particular belief as means for securing antecedent ends generally. The classical pragmatists pursue the project of semantic pragmatism by seeking to derive the content of particular concepts and beliefs from the role that they play in the pursuit of a variety of independently specifiable goals. That functional role is a matter of the instrumental difference the concept or belief in question makes in the context of a constellation of other concepts and beliefs already in play as a background. This last feature is the origin of the *isolation objection* to the feasibility of this sort of local instrumentalism as a means for achieving the end of semantic pragmatism.

It is also possible, however, to think of discursive practice as a whole as being *for* something. Thus Locke understands language itself as a tool for the expression of thought. In this regard he epitomizes the entire Cartesian tradition, which takes linguistic expressions generally to be instruments for the communication to others of ideas that are what they are antecedently to and independently of their relation to the means of expressing them. This view is something like the converse of linguistic pragmatism. I don't find this approach attractive,[21] but it is not my current target.

For there is another fairly widespread way of thinking of discursive practice as a whole in instrumental terms: understanding language and thought as a tool, not for communication, but for the securing of any ends whatsoever. Classical pragmatism sought to assess individual concepts and beliefs in terms of their utility in pursuing ends in general. The sort of global discursive instrumentalism I want to address puts discursive practice in a box with tools, and sees its point as consisting in its utility as a means for getting what we want. The language-as-tool trope unites figures otherwise as diverse (in spite of their shared fundamental pragmatism) as the early Heidegger and the later Wittgenstein. I want to close by arguing that the idea that language is *for* anything – in particular that it is for pursuing antecedently intelligible ends – is confused and wrongheaded.

I do not mean to say that everything about the language-as-tool metaphor is bad or misleading. There are a number of important points it can be used to make. I would include among these the following:

a If we understand grasp of a concept as mastery of the use of a word, then we should acknowledge that those uses are quite varied. They do not all have the same point – do not all answer to the same sort of norms. One way of talking about the very different roles they play is

to talk about the 'jobs' they perform. Indeed, talk about their 'point', their 'role', their 'job' are all ways of talking about their use in broadly instrumental terms. Thus words such as 'the', 'not', 'somewhat', 'tall', 'cat', 'imaginary', and so on are used in *quite* different ways. Being reminded of how different the use of tools such as a wrench, glue, a straightedge, and a level are can be helpful in reminding ourselves of this. (Notice for instance that a tape-measure has a different 'direction of fit' from a hammer, and that a level can work either way.) This is a point to which we can easily be blinded by a picture – for instance the nominalist representationalist picture that structured the classical semantic tradition, according to which words should be thought of as names of things. The purposes that can be served by tools are many and various, and so are the uses to which words can be put.[22] We might call this the *'motley' point.*

b Often the use of one tool makes sense or is possible only in connection with the use of others: nuts, bolts, and wrenches (and possibly drills) all depend on one another, as do screws and screw drivers, nails and hammers. These 'equipmental involvements' (as Heidegger calls them) are at least as essential to the functioning of the equipment as are their reference to other things (e.g. relatively flat objects that we might want to fasten together). We might call this *the 'holism' point.*

c The language-as-tool metaphor might also be a way of introducing the idea of a normative pragmatics. For it brings into play the idea that the use of a tool to perform a task induces a dimension of *normative assessment.* Uses can be assessed as more or less successful, and so tools can be assessed as more or less adequate or apt for the task in question, and their deployment as more or less skillful. We might call this the *'normative' point.*

d Such assessment will not typically be all-or-none; it is more typically a more-or-less affair. Thinking of the application of concepts this way will start us off with access to a sense in which a concept such as Newtonian mass can give us a cognitive grip on things (slipperier or firmer, in various circumstances). This contrasts with the puzzlement we have when we realize that since, strictly, there is no such thing as Newtonian mass, all claims in which it essentially occurs are false. Once again, the representationalist paradigm is liable to mislead here about normative assessment. (Even thinking about this in terms of 'approximation' is wrong, since still in the space in which *exactness* is possible. But that is just not how the use of all concepts works.) We might call this *the 'more-or-less' point.*

e Again, the assessment of success and aptness may be seriously *multidimensional*: one can succeed fully in some respects, partly in others, and not at all in still others. We might call this *the 'multidimensionality' point.*

The motley point, the holism point, the normative point, the more-or-less point and the multidimensionality point all provide good reasons to be attracted to the language-as-tool metaphor. So what's wrong with it? What I object to is the idea that language as a whole is *for* something, that it's *point* is to serve as a means for the pursuit of ends. Now of course typically the thought is not that there is some *particular* set of ends that language should be seen as in aid of. (Although some reductive evolutionary accounts come close to putting the reproductive success of the species in this role.) It is rather that language can be thought of as a tool for pursuing whatever goals we might find ourselves with. I think this idea gets the essence of the linguistic precisely wrong. What is wrong about it is that making something intelligible as a tool is exhibiting it as a means to an end *that can be grasped or specified independently of consideration of that means*. Our antecedent grasp of the goal or purpose then provides the basis for normative assessments of success and failure of the tool, and so for comparison of various alternative means to that same end. My claim is that it is a mistake to seek to make discursive practice intelligible in this way.

The reason is straightforward. Though linguistic practice does, to be sure, help us in pursuing our ends, the vast majority of those ends are ones we could not so much as *entertain*, never mind secure, apart from our participation in linguistic practice. Most of the things we want to do we can only want to do because we can talk. The very intelligibility of the ends depends on our linguistic capacities. They are precisely *not* goals we can make sense of *first,* so that later, language can be brought into the picture playing the role of a possible tool for achieving them – as fastening two pieces of wood firmly together *can* be made sense of in advance of considering nails-and-hammers, screws-and-drivers, glue, clamps and so on.

In fact, insofar as it makes sense to talk about language as *for* anything, what it *is* 'for' is making intelligible and accessible the possibility of novel ends. One of the founding insights on which Chomsky erected the edifice of contemporary linguistics is the observation that almost every sentence uttered by an adult native speaker is a novel one – not just novel in the sense that that speaker has never before heard or uttered that very sequence of words, but novel in the far stronger sense that *no-one* has ever before heard or uttered it. Linguistic know-how is essentially productive and creative, in the sense that the skilled linguistic practitioner can produce and understand an indefinite number of novel sentences, and that the core of linguistic practice consists in the exercise of that capacity. Participants in such a practice are bound by norms governing the use of familiar words: not just any use is appropriate. They accordingly surrender some negative freedom – freedom *from* constraint by such norms. But in return they are richly rewarded with positive freedom – freedom *to* do things they could never otherwise do or contemplate doing. For the novel, though norm-governed, rearrangements of those familiar words express candidate beliefs,

desires and intentions available for adoption or rejection by speakers and their audiences.

And this, if anything, is what language is 'for'. Only by its 'means' can one deny that for every tree there is another that is taller, or wonder whether it is always possible to do what one ought to do, or decide to devote one's life to relieving poverty. The essence of specifically discursive practice – the practice of deploying *concepts* – is precisely its engendering of this capacity to entertain an indefinite number of novel beliefs, and to frame an indefinite number of novel ends. Thinking of discursive practice itself in instrumental terms obscures just this defining feature of it. Of course, one can still use instrumental formulae – saying, as I just did, something to the effect that the aim, goal, or purpose served by language is to make possible the envisaging and endorsing of new aims, goals, or purposes. But this is a misleading way of describing the situation. For the particular sort of intelligibility promised by exhibiting something as a means to an end depends on the end being specifiable antecedently to consideration of possible means for pursuing or securing it, on the in-principle possibility of alternative means to that same end, and on the availability of means of assessment of the success in achieving the goal that is independent of the means employed. The case in point satisfies *none* of those conditions of instrumental intelligibility. For this reason, I think one ought to reject the global form of instrumental pragmatism, as well as the local one.[23]

Conclusion

In this essay I have tried to sketch the elements of a broad tradition of pragmatism about the discursive, and to distinguish it from the narrower instrumental pragmatism notoriously associated with the classical American pragmatists. I have not attempted to argue for the commitments encapsulated in methodological, semantic, fundamental and linguistic pragmatism – merely to delineate them. I have tried to say why I think conjoining the instrumental variety of pragmatism with these other thoughts makes them less, rather than more promising.

Comment on Robert Brandom's paper

Hilary Putnam

I regret that the essay that follows is wholly critical. For this reason it may give a very wrong idea of my opinion of Brandom as a philosopher. He is unquestionably a brilliant and consistently interesting and important thinker. I wish to stress that my criticism of his paper is almost entirely limited to one aspect: his depiction of classical American pragmatism. Indeed, Brandom's paper could be turned into an excellent essay very simply: all he would have to do is change 'Pragmatism . . . centered on evaluating beliefs by their tendency to promote success at the satisfaction of wants' to 'Richard Rorty centered on evaluating beliefs by their tendency to promote success at the satisfaction of wants', etc. Indeed, I suspect that Brandom's real target may well be Rorty, and he is simply using 'the classical American pragmatists' as a sort of stand-in for his real target.[24] But the fact remains that serious students of pragmatism have spent almost a century rebutting the sort of travesty of what the classical pragmatists thought that Brandom relies on, and it must not be allowed to go unrebutted now.

Brandom on 'the classical American triumvirate'

I have to admit that my heart sank when I read the first sentence of Brandom's paper: 'Pragmatism can be thought of narrowly: as a philosophical school of thought centered on evaluating beliefs by their tendency to promote success at the satisfaction of wants, whose paradigmatic practitioners were the classical American triumvirate of Charles Peirce, William James, and John Dewey.' I had hoped that this caricature of what the classical American pragmatists were about was no longer alive and well, but I see that I was wrong. Much of this reply will therefore by focused on saying why this description of the 'triumvirate' is, in my view, completely wrong. I will make my points by taking up the members of the triumvirate in turn. But first some general remarks about the 'philosophical school of thought' in question.

Each member of the school had certain distinctive aims and interests that the other members did not very greatly share. Peirce, for example, was interested in constructing a metaphysical theory of the evolution of the

entire cosmos, and in showing that his theory entailed consequences for the direction physics would have to take,[25] an interest neither of the others shared; James was interested in the extent to which 'the right to believe' could be defended against rationalist critics (a subject on which Peirce wrote only once or twice, and Dewey not at all, unless one counts *A Common Faith*, in spite of its naturalism); and Dewey was interested in democratic theory and in the relation of art to the rest of experience. In spite of these differences, one *can* say that all three owed a debt to Peirce's theory of truth (although James alters it substantially); that all three were strong fallibilists; and that all three were 'cognitivists' with respect to value judgments: indeed, all three believed that all knowledge of fact presupposes value judgments.[26] The question is: does this mean that they *either* (1) identified what is true with what promotes success in the satisfaction of wants; *or* (2) thought that we should forget about truth and just concentrate on finding what promotes success in the satisfaction of wants; *or* (3) thought that what promotes success in the satisfaction of wants is more important than what is true? I shall argue that the answer is 'No, they did none of the foregoing.'

Peirce

This is perhaps the easiest case in which to refute the 'success in the satisfaction of wants' story. Peirce insisted that the interest that drives pure scientific inquiry is utterly different from the interests that drive ordinary practical inquiry. If one does not know this, one cannot understand why Peirce distanced himself from James' pragmatism.[27] Moreover, as early as Peirce's famous 'The Fixation of Belief', the interest that drives scientific inquiry is identified with the interest in having one's beliefs fixed by 'an external permanency', by 'nothing human'. In short, it is the aims of pure science (which are *sui generis*, in referring to the indefinitely long run) that Peirce has in mind here (as elsewhere), and not the wants of the agent (unless what the agent wants is *truth*). Indeed, in the first of his Cambridge Conference Lectures,[28] Peirce pours scorn on the idea that the philosopher/scientist should have any concern at all with the needs (or 'wants') of practical life.

James

This particular misreading of James was common in James' own lifetime, and James never tired of repudiating it. Contrary to what he himself terms 'misunderstandings', James insists that a truth must put us in contact with a reality.[29] This strain in James' thought is termed (by him) his 'epistemological realism', and Perry admits that his famous work 'largely ignores' it.[30] Early and late James speaks of 'agreement' with reality and even of 'correspondence' although he also insists that correspondence is a notion that must be explained, not one that can simply function as the explanation of the notion of truth.[31] However, James also thinks that what kinds of

contact with realities will count as 'fruitful' depends on our 'aesthetic and practical nature'. Thus James rejects both the view that agreement with reality isn't required at all for truth (or isn't a meaningful notion) and the Peircean view that our convergence to certain beliefs will be forced on us 'by nothing human'.

In fact, the idea that satisfactions are *sufficient* for truth is explicitly listed as a 'misunderstanding' of his doctrine by James in *The Meaning of Truth*.[32] 'Such anti-pragmatism as this', James says,

> seems to me a tissue of confusions. To begin with, when the pragmatist says 'indispensable,' it confounds this with 'sufficient'. The pragmatist calls satisfactions indispensable for truth-building, but I have everywhere called them insufficient *unless reality be also incidentally led to*. If the reality assumed were cancelled from the pragmatist's universe of discourse, he would straightway give the name falsehood to the beliefs remaining in spite of all their satisfactoriness. [emphasis added]

We shall return to James views on the respective roles of 'reality' and 'satisfactions' when we look at Brandom's section on 'Classical pragmatism'.

Dewey

In Dewey's most worked-out statement of his own pragmatism, *Logic: The Theory of Inquiry* (Dewey 1938), Dewey concerns himself exclusively with questions concerning warranted assertability. (The concept of truth is mentioned only in one footnote, in which he endorses Peirce's definition.) So we have to ask: does Dewey identify *warranted assertability* with the tendency of beliefs to promote success at the satisfaction of wants?

The answer again (by this time the reader will not be surprised, I trust) is 'no'. To be warrantedly assertable, according to Dewey, a belief must resolve a problematical situation. But it isn't the case that satisfying wants is sufficient for resolving a problematical situations – as a staunch cognitivist, Dewey is quite willing to say that *you may have the wrong wants*.[33] Nor is it the case that resolving a problematical situation is *sufficient* for warrantedly assertability: you may not have *inquired* sufficiently well to be *warranted* in thinking the belief resolves the problematical situation even if it does. Dewey is certainly concerned with what he calls 'growth' (in *Human Nature and Conduct*, 'growth' is a sort of final end of human existence), and Dewey measures growth by the increase in the ability of human beings to find out what is *valuable* and to achieve it, but he is insistent that what is *valuable* is not the same as what is *valued* (i.e. wanted). And, as just said, when *beliefs* are what we are talking about, Dewey's first question is always *are they warranted or not*? – a question that makes no appearance in Brandom's picture of 'the classical American triumvirate of Charles Peirce, William James, and John Dewey.'

Classical pragmatism

Brandom returns to his account of the founding fathers of American pragmatism in the section of his paper titled 'Classical pragmatism'. He begins by saying that, as he reads them, the classical American pragmatists are pragmatists in all three of the senses he has distinguished so far. Although I do not find his terms 'fundamental pragmatism', 'methodological pragmatism' and 'semantic pragmatism' completely clear,[34] I will not take issue with this. What I do take issue with is the 'instrumentalism' he reads into the classical pragmatists. Brandom writes,

> I also think the classical American pragmatists endorse a normative pragmatics, and therefore, given their fundamental pragmatism, a normative pragmatism. But this generic commitment is to some degree masked by the specific account they go on to offer of the norms they see as structuring our broadly cognitive practices. For they focus exclusively on *instrumental* norms [emphasis in the original]: assessments of performances as better or worse, correct or incorrect, insofar as they contribute to the agent's success in securing some end or achieving some goal.

As we have already seen, none of the classical triumvirate thought that a cognitive performance can be assessed as better or worse exclusively in terms of how far it contributes to 'the agent's success in securing some end or achieving some goal'. To go through the list again: as we have seen, *Peirce* thought that (1) the *agent's* practical goals are irrelevant to the success of his cognitive performance, what counts is the verdict of the community of inquirers imagined as going on *forever*, and (2) the community of inquirers referred to is limited to those who employ the scientific method. The goal of those who employ that method is to allow their opinions to be fixed by 'external permanencies', by 'nothing human'. *James* thought that satisfactions are 'indispensable' to 'truth-building' but not *sufficient*.[35]

James says, as we already saw, that for a belief to be true a reality must be 'incidentally led to'. The reason he can regard this as a substantial requirement (in contrast to Schiller, whom he criticizes in *Pragmatism* for getting things 'butt-end foremost')[36] is that he is 'an epistemological realist', i.e. he thinks that there is a 'pre-human fact' given in experience which, however modified by our conceptualizations, is still not totally plastic.

As he goes on to say:

> *Reality is in general what truths have to take account of*; and the *first* part of reality from this point of view is the flux of our sensations. Sensations are forced upon us, coming we know not whence. Over their nature, order and quantity we have as good as no control. *They* are neither

> true nor false; they simply *are*. It is only what we say about them, only the names we give them, our theories of their source and nature and remote relations, that may be true or not.
>
> The second part of reality, as something that our beliefs must also obediently take account of, is the *relations* that obtain between our sensations or between their copies in our minds.

And after pointing out

> that we have a certain freedom in our dealings with these elements of reality, and that in particular *which* [of our sensations] we attend to, note, and make emphatic in our conclusions depends on our interests; and according as we lay the emphasis here or there, quite different formulations of truth result. We read the same facts differently. 'Waterloo', with the same fixed details, spells a 'victory' for an Englishman, for a Frenchman it spells a 'defeat'

James cautions against carrying this thought too far:

> Both the sensational and the relational parts of reality are dumb; they say absolutely nothing about themselves. We it is who have to speak for them. This dumbness of sensations has led such intellectualists as T. H. Green and Edward Caird to shove them almost beyond the pale of philosophical recognition, but pragmatists refuse to go so far.[37]

In the same vein, James cautions Schiller (in a letter dated 9 August 1904), writing:

> After all, our side is only half developed – I am sure that not one of us has any clear idea of what the ultimate *pre-human fact* – which we encounter and which works, through all our stratified predicates, upon us – the *hyle* as you call it – really is or signifies [emphasis in the original].

But the clearest statement of James' realism is undoubtedly in the letter to Dickinson Miller dated 5 August, in which James uses the following analogy:

> The world *per se* may be likened to a cast of beans on a table. By themselves they spell nothing. An onlooker may grasp them as he likes. He may simply count them all and map them. He may select groups and name them capriciously, or name them to suit certain extrinsic purposes of his. What ever he does, so long as he *takes account* of them, his account is neither false nor irrelevant. If neither, why not call it true? It *fits* the beans-*minus* him and *expresses* the *total* fact, of beans-*plus*-him.
>
> (James 1920: 295)

And last but not least, I have already reviewed the several respects in which Dewey thinks that evaluating beliefs simply in terms of their tendency to 'secure some end or achiev[e] some goal' is quite inadequate.

Am I perhaps misinterpreting Brandom's claim that

> they [the classical pragmatists] focus exclusively on *instrumental* norms: assessments of performance as better or worse, correct or incorrect, insofar as they contribute to the agent's success in securing some end or achieving some goal?

Unfortunately, it seems that this sentence expresses exactly how Brandom reads the classical pragmatists. For he continues:

> This is the kind of norm they see as implicit in discursive practice, and . . . as the ultimate source of specifically semantic dimensions of normative assessments such as truth. They understand truth in terms of usefulness, and take the contents possessed by intentional states and expressed by linguistic utterances to consist in their potential contribution to the success of the agent's practical enterprises.

The pragmatists, he writes, have

> [t]he strategy of understanding how what underwrites various sorts of normative assessment can be implicit in practice ultimately in terms of the success or failure . . . to achieve antecedent ends.

I repeat: not one of the three classical pragmatists had such a strategy.[38]

And it goes on like that . . .

Nor does Brandom ever relent. Thus the second paragraph of the next section ('Three objections to instrumental pragmatism') opens with the sentence 'The basic idea [*sic*] of classical pragmatism is that one can understand normative assessments of truth of beliefs as assessments of the extent to which the holding of that belief would contribute to the satisfaction of desires. *Beliefs are true insofar as they are good tools or instruments for getting what one wants* [emphasis added].' Precisely James' 'Fourth misunderstanding' of pragmatism! Precisely the misunderstanding that Peirce feared when he changed the name of his philosophy from 'pragmatism' to 'pragmaticism'! Precisely the misunderstanding Dewey referred to when in a letter to James in 1903 he complained about the misunderstanding that pragmatism has no room for purely intellectual interests![39]

Interestingly, in the same section Brandom gives a fine argument against the mistake of supposing that the notion of a desire's being satisfied (in the sense in which we can speak of human desires and wants as being satisfied)

is prelinguistic. When we think of an organism as adopting *strategies* to satisfy desires, we are thinking of desires 'as something that has intentional – that is, conceptually articulated – content', he writes. There is a tremendously important distinction between desires and strategies for their fulfillment and *itches* and things that make them go away. But he mars this fine observation in two ways: (1) in a footnote he writes, 'Dewey was aware of this distinction and makes much of it in his writings on value [he certainly did! – HP]. But I believe that he never thought through its consequences for the foundations of his approach.' The idea that 'the foundation of Dewey's approach' is the idea that true beliefs are one's that satisfy 'antecedent' desires is, of course, Brandom's own fabulation – a fabulation which, apparently, Brandom does not lose his confidence in even when he notices that it is completed contracted by Dewey's 'writings on value'! (2) When he comes to 'holistic' versions of what he calls 'instrumental pragmatism', Brandom lists Heidegger and Wittgenstein as examples, writing:

> The language-as-tool trope unites figures otherwise as diverse . . . as the early Heidegger and the later Wittgenstein. I want to close by arguing that the idea that language is *for* anything – in particular that is for pursuing antecedently intelligible ends – is confused and wrongheaded.

Now I am no Heidegger scholar, but Wittgenstein makes precisely the point that Brandom makes about desire and its satisfaction in connection with *expectation* and its *fulfillment* (Wittgenstein 1953: §445), and it would be absurd to suppose that he did not think the same about a desire and its satisfaction. (But no doubt Brandom would reply that he believes that '[Wittgenstein] never thought through its consequences for the foundations of his approach'.)

And the 'swipes' at classical pragmatism go on, unrelentingly, to the very end of the essay. Thus, the penultimate sentence of the essay reads 'In this essay I have tried to sketch the elements of a broad tradition of pragmatism about the discursive, and to distinguish it from the narrower instrumental pragmatism *notoriously associated with the classical American pragmatists*.' As I said at the outset of this reply, serious students of pragmatism have spent almost a century rebutting this sort of travesty of the thought of the classical pragmatists. It is regrettable that Brandom is putting it back into circulation.

5 Knowledge of the truth in pragmatic perspective

Nicholas Rescher

Internal realism and truth as (available) warrant

The pursuit of knowledge aims at discovering the truth of things. But if truth pivots on the idea that truths state how things actually stand, without any inherent reference to our beliefs, views and opinions about that matter – if, as mainstream tradition has it, truth is something altogether detached from human thought and ideas – then how can we possibly achieve knowledge about it? How could we then ever validly claim that our thought corresponds with thought-external reality so as to get at the real truth? How can we get there from here?

As Hilary Putnam puts is, a whole host of contemporary philosophers, himself included, react to this formidable challenge by adopting the seemingly heretical view that truth must be construed in terms of humanly available warrant and that

> our grasp of the notion of truth must not be represented as simply a mysterious mental act by which we relate ourselves to a relation called 'correspondence' to something totally independent of the practices by which we *decide* what is and what is not true.
>
> (Putnam 1995b: 11)

To be sure, ordinarily people (many philosophers included) would hold that the truth is something we discover, and that while we do indeed *decide what to accept as true*, since acceptance is something that we actually do, we are not ordinarily in a position to *decide the actual truth of things*. But exactly this distinction between what 'really is true' and what 'we are prepared to accept as true' is one that philosophers of the tendency Putnam endorses decline to acknowledge.

All the same, such a contrast-rejection has its problems. After all, with 'what is true' there can – by hypothesis – be no further question of correctness. But with what we (or anyone) actually accepts as true, there still looms before us the ever-additional question, 'Is this acceptance really warranted?' However, just this gap between factually actual and normatively

appropriate acceptance is one that these 'internalist' truth theorists seek to close by injecting some element of normativity into the acceptances at issue. For the we/us group of 'we decide what is true' is, on their approach, not the we/us of this imperfect dispensation of ours in the spatiotemporal present, but the 'we' of the scientific community of the eventual future – or of some other comparably idealized group of rational inquirers. Already pragmatism's founding father, Charles S. Peirce, initially proposed to domesticate 'the truth about reality' by construing it as a matter of *ultimate* science – that is to say it is the 'final irreversible opinion' of the scientific community once its thought becomes settled and fixed. Truth, so regarded, is the opinion that science will eventually reach, being 'fated' (as Peirce puts it) to be achieved ultimately by the efforts of the ongoing scientific community. And this led him to his well-known characterization of truth as 'the opinion which is fated to be ultimately agreed to by all who investigate [by the use of scientific methods]'. On third thought, however, Peirce shifted from what the scientific community *will* (and *must*) eventually realize to what it *would* realize if its efforts continued long enough in sufficiently favorable circumstances. With this more cautious approach in view, he held that the truth is 'what any man *would* believe in, and be ready to act upon, if his investigations *were* pushed sufficiently far' (Peirce 1958, §8.4 [1885]). The subjunctive is called upon to do real work here. And along these lines Putnam's, *Representation and Reality* also proposes 'idealized rational acceptability' as a definition of truth.

Nevertheless, such an approach involves difficulties and faces obstacles of which Peirce himself was perfectly aware. The idea that truth is what future science will deliver into our hands is open to a series of 'what if' objections:

- What if inquiry ended owing to the extinction of intelligent life?
- What if inquiry came to a stop because of the indolence (fecklessness, laziness) of scientific workers?
- What if inquiry were hamstrung because of human limitations: because scientists are not smart enough or imaginative enough to look upon the theories required correctly to characterize nature's modus operandi?
- What if inquiry were blocked because of a lack of resource commitments: science ought never afford the large scale instruments and experiments needed to advance its frontiers.

In the face of 'what if' concerns of this sort, a theory that equates the truth with the product of inquiry would undergo the following series of saving transformations and sophistications to the effect that the truth is:

- What science will eventually deliver.
- What science will deliver in the theoretical long run, that is, what it would deliver if continued long enough.

- What ideally able scientists (i.e. those practicing the scientific method with ideal competence) would deliver if they continued their effort long enough.
- What ideally able scientists working under ideally favorable conditions (and thus without any resource constraints) would deliver if they continued their efforts long enough.

In contemplating this series, three considerations become clear. (1) The demands of plausibility force us to move along this path because otherwise these 'what if' objections would render the theory of 'truth = product of inquiry' untenable. (2) A continually growing amount of idealization is going on here, as we shift from simple futurity in this world eventually to reach hypothetical realizability under utterly unrealistic conditions. (3) By the time the end of the series, the thrill has run out of the process. For with the equation 'truth = the product of *idealized* inquiry' we arrive at a position that is substantially emasculated, true enough but virtually trivial. No reasonable person could – nor surely would – question that the truth is what absolutely idealized inquiry would deliver into our hands in absolutely idealized conditions. But this result is now not so much an interesting theory about the nature of truth as a near-tautological gloss on what is at issue with 'absolutely ideal inquiry'.

The problem is that cognitive idealization is not a cost-free resource. For it is, or should be, clear that the more strongly we gerrymander that group of truth-deciders into an ideal fraternity of rational inquirers proceeding in ideal and unrestrictedly optimized circumstances the more we lose the putative advantage that initially motivated this whole approach. After all, the theorists in view initially wanted to bring the conception of truth down from the transcendental unrealizability of a cognitively unaccessible 'correspondence' to the realm of achievable practice. But they now succeed in this only by transposing this practice from the observable operations of an existing community of inquirers to the merely conjectural operations of an idealized community that is every bit as unmonitorable and reality-transcendent as was that transcendental 'correspondence' from which we were trying to escape.

We seem to be driven to a Hobson's choice between actual veracity (real truthfulness) on the one hand and cognitive availability (evidential accessibility) on the other. A dilemma looms. If truth is to be construed in ontological terms as a matter of correspondence to authentic (thought-independent) reality, then it is not realistically accessible. And on the other hand if truth is construed in epistemic terms as a matter of evidential availability ('warranted assertability' or the like), then there is no assurance that there will be no gap between our evidence and the real and actual condition of things. How can we possibly manage to unite the two factors – factual authenticity and epistemic warrant – that we would ideally like the idea of truth to fuse together for us? If we opt for warrant as the key to truth, then

how do we know that actuality is not at risk; but if we opt for actuality as the key, then how can we be assured of epistemic warrant? How are these two disparates to be brought together?

Interdependency problems

Can purely conceptual connections perhaps do the job for us? In *Pragmatism: An Open Question*, Putnam tells us that while 'I do not believe that truth can be *defined* in terms of verification' (Putnam 1995b: 11) nevertheless 'I do agree with the pragmatists that truth and verification are not simply independent and unrelated notions' (ibid.: 11–12). But the now operative idea that 'being true' and 'being (warrantedly) thought be true' are *conceptually* interdependent but nevertheless interrelated admits of diverse constructions. And this thesis is certainly questionable in its most straightforward construction, which is:

> We cannot (correctly) characterize what truth is without (adequately) explaining how it is that people are to go about establishing this, that is: To give a (correct) explanation of the meaning of '*p* is true' we must be in a position to provide a viable account of how people are to go about showing that this is so. The meaning of the claim that a thesis is true hinges on the process of verification that is at issue.

But can this evidentialist–pragmatic–verificationist vessel hold water? Consider the claim 'The Rosetta stone was in the British Museum on the day Germany invaded Poland at the outset of World War II'. No reasonably well informed person would hesitate to acknowledge the truth of this contention. But establishing it is something else again. Should we rely on the memory of some grizzled sage who claims to have seen it there that day? Should we conduct research into the (conceivably destroyed) records of the museum? Need we await the realization of some neo-H.G. Wellsian time machine that enables us to go back and check? The possibilities boggle the mind.

We can of course leap (figuratively) into the region of speculative possibility via the following schematic supposition: 'If someone were to "find a person with good memory who was there that day; come up with the day's inventory check; go back in time and have a look; etc." then they would find . . .' But to take this conditionalistic line is in effect to stand the issue on its head. Those conditional claims are not true because they can (hypothetically) be verified. The actuality of it is the very reverse: they can (hypothetically) be verified because they are true. Truth and verification are indeed 'interdependent and interrelated'. But this is not (as per some incautious pragmatists) because verification is the independent and truth the dependent variable here. Verification is not the tail that wags the dog of truth. The matter stands the other way round: truth is the independent variable here and verification the dependent one. William James to the

contrary nothwithstanding, a true statement is verifiable because it is true, it is not true because it is verifiable.

However while the *conceptual* primacy in the truth/verification relation thus lies with truth, the matter stands very differently with *epistemic* primacy. For (and *this* is the real crux of pragmatism) verification is a practical process which, while not in general *determinative* of truth as such, is nevertheless perfectly adequate for the *probative* authorization of rationally appropriate truth claims. It is not that the propositions we evidentiate must *ipso facto* be (identical with) the truth but rather that evidentiation *ipso facto* authorizes us in rationally warranted claims to truth. (And even our best efforts can go awry here, which is why sensible pragmatists are fallibilists.)

Let us scrutinize the line of thought that is at issue here somewhat more closely. To all appearances, it roots in the consideration that we face the following aporetic situation:

1 The truth must agree with reality.
2 Therefore, in order to determine the truth we must determine what is really so, that is, what reality is like.
3 We have no access way to reality independent of what we take to be the truth about it.

Here (3) says that we can only get at reality via truth but (2) says that we cannot get at truth save via reality. We seem to be trapped in a Catch-22 situation where scepticism – inability to get at truth – is the only outcome.

There are three basic alternatives for freeing ourselves from this trap. The first is the 'postmodernist' response of simply abandoning the conception of truth. And the second alternative is to reject (1) and reconceptualize 'the truth' in a way that does not ask for adequation to reality but merely calls for cognitive access under appropriate (perhaps even ideal) conditions. This is the 'deflationist' response of construing truth in terms of knowledge.

A third possibility exists, however. For the actual fact is that (1) does not actually necessitate (2) with the result that (1) must be abandoned in the face of the 'fact of life' represented by (3). Instead, we can opt for the essentially pragmatic response of abandoning (2) as is, and instead *reversing* the truth/reality relationship that it envisions. In taking this line we would reject (2) and instead adopt:

2′ To determine what reality is like we must seek out what the truth is (exactly as per (3)): reality determinations supervene upon truth-assessments: the epistemic route is our only access-way to reality: only be *estimating* the truth can we validate claims about the real.

And it is just here that pragmatism enter in. For given this inversion of the truth/reality relationship, pragmatists can – and do – go on to insist that there indeed is a practically effective route to rational truth-estimation, namely the criteriological route afforded by the standard experience-based

methodology of inquiry. Thus in retaining the classic construction of truth represented by (1), sensible pragmatists can – and presumably would – insist on viewing truth-determination in a 'realistic' light. But of course what is now at issue is not the *meaning of 'truth'* (for which (1) continues to be decisive) but rather *the criteriology of truth-determination* by way of rational estimation. What pragmatism of this realistic sort accordingly does is not to abandon truth (as per postmodernist scepticism) nor yet to alter its meaning in evidentialist directions (deflationism), but rather to re-focusing our attention upon the matter of rationally appropriate claims to truth, thereby bringing into the foreground the issue of truth criteriology – of the methodology for making rational estimates of the truth.

However, such a perspective indicates that there are two possible versions of pragmatism. One is a *meaning-of-truth revisionism* that abandons the idea that it is a conceptual part or consequence of the definition of 'truth' that truth corresponds to reality. And the second is a *truth-criteriology realism* that takes the line that our standard epistemological recourses are sufficient – that is, criteriologically sufficient for all sensible purposes – to enable us to decide what is true (i.e. to settle how we can apply the adjective qualifier 'is true' in concrete cases, and so to settle an actual practice the matter of truth categorization).

And so, while many contemporary pragmatists take the reconceptualization approach and accordingly enroll in the school of meaning-of-truth revisionism, nevertheless a good case can be made out for holding that a more conservative (and sensible) course for pragmatists is to adopt a view of truth that is 'realistic' in this respect also. It is the crux of such an approach that it sees the usual criteriology of truth-estimation as good enough for 'truth determination' construed not in the sense of airtight guarantees but rather of plausible (and generally effective) evidentiation.

Still, the question remains that if truth does not equate to verification by definition, as it were, then what sort of relationship can we claim here? Without an account of how the ever-possible gap between evidentiation and actuality is to be overcome, the truth/verification relationship will (as Putnam rightly says) remain 'occult'.

As far as I can see Putnam's own otherwise helpful discussions do not adequately address – let alone resolve – this question. He says:

> [T]he real worry is that *sentences cannot be true or false of an external reality if there are no justifactory connections between things we say in language and any aspects of that reality whatever.*
>
> (Putnam 1995b: 65)

This is true enough. And Putnam accordingly insists that there must be a 'justifactory connection' of some appropriate sort between the appropriateness of saying 'It is OK to say "*p* is true"' and the fact of *p*'s actually being true. However, Putnam rejects Davidson's thesis that the linkage here

is one of common cause – that truth and verification are coordinated because the factors that operate so as to authorize us to claim verification are (largely or wholly) just the same factors that engender (or otherwise stand causally coordinate with) the state of things that is at issue in our claim. Since this causal theory has its problems (as Putnam cogently maintains),[1] then how does he propose to cross that seeming epistemology/ontology gap and established the language/reality condition that is – to all appearances – critical for the achievement of truth? He certainly does not think that this can be effected by resorting to what 'we' ('people-in-general', or 'our cultural peers', or whatever) think (Putnam 1990b: 21–6). For him neither matters of 'definition' (analyticity) nor of 'convention' (social practice) will do the coordinating job – nor yet will the facts of the world's causal order do so. Then what will?

Regrettably, Putnam is not as clear on this matter as we might wish.[2] As best I can tell, his discussion amounts to proposing a 'pragmatic' solution to the effect that we should adopt the practical policy of simply ignoring this gap. On this approach, we should not look for any sort of theoretical solution here but simply content ourselves with the experience-validated consideration that we can in practice proceed as though there were no gap and 'get away' with it.

Such an attitude of proceeding on the presumption that our epistemology is adequate (i.e. is truth-achieving) is eminently sensible as far as it goes. But it does not go quite far enough. It smacks too much of Pascal's policy *Allez en avant et la fois vous viendra* (essentially: just press ahead and things will come right in the end.). But philosophers – and sensible people in general – will want to know the reason why. They require such a policy to have the backing of a *rationale*. Yet, so far as I can see, Putnam's pragmatism takes the line of an epistemic fideism taking comfort in the democratic consideration that this puts all of us into the same boat. And there is something deeply unsatisfactory about this. One would surely prefer a more thoroughgoing pragmatism – one that does not rest content with a neo-pragmatic social-practice validation in the descriptive terms of 'this is what we (reasonable people) are all involved in doing' but a hard-line pragmatism that asks for validation in the normative terms of 'this is the very best that can be done (by anyone) in the circumstances'.

A different approach: methodological pragmatism

Deflationary epistemologists are fearful that if we take a hard objectivistic line on the meaning of truth then truth becomes transcendentally inaccessible and scepticism looms. And they accordingly insist that we soften up our understanding of the nature of truth. But another option is perfectly open, namely to retain the classical (hard) construction of the *meaning* of truth as actual facticity ('correspondence to fact') and to soften matters up on the epistemological/ontological side by adopting a 'realistic' view of what is *criteriologically* required for staking rationally appropriate truth claims.

Pragmatists accordingly have the option of approaching 'the truth' with a view to the methodology of evidence – of criteriology rather than definitional revisionism. The sort of truth pragmatism that moves in this (surely sensible) direction is one that does not use pragmatic considerations to validate claims and theses directly, but rather uses inquiry methods (claim-validating processes) for this purpose, while validating these practices themselves not in terms of the truth of the products (a clearly circular procedure) but in terms of the capacity of their products to provide the materials for successful prediction and effective applicative control. Accordingly, the most promising position here is – as I see it – a *methodological* pragmatism rather than a *thesis* pragmatism. That is, it is a position that assesses thesis assertability in terms of the methodological processes of substantiation and their assesses method appropriateness in terms of the practical and applicative utility – systematically considered – of the thesis from which the methods vouch. Such an approach calls for a prime emphasis on the methodology of truth-estimation, bringing into the forefront the processes of evidentiation and substantiation by which we in practice go about determining what to accept as truth.

But just how reliable are the truth-estimates that we can manage to get on such a basis? This, clearly, is not the place to write a manual on the epistemology of truth-estimation. But three telegraphically brief observations should suffice for present purposes.

(1) Our confidence in the acceptability of a truth-estimate varies immensely with its precision. We might be tempted to squabble about the claim that yonder person is 3.735 meters tall. But the truth of the thesis that his height is between 1 meter and 4 meters is beyond (reasonable) question. (2) This trade-off between precision and tenability means that our comparatively imprecise claims about everyday-life matters are less science than its presence and highly general claims of natural science. The truth of the claim in science at the theoretical future is not as such as is the truth of claims like 'The population of New York exceeds six million'. (3) With those complex issues at the theoretical frontier of science we are well advised to speak not of unqualified truth as such, but rather of our 'best-estimates' of the truth as we are able to realize them with the investigative resources at out disposal. (The commonsense realism of everyday-life matters is thus on securer ground than a scientific realism which claims that the objects of scientific inquiry exist in just exactly the descriptive manner in which present-day science conceives of them.)

The most promising approach to the problem of truth-claim validation would accordingly be to focus on the epistemology of truth estimation and to leave the matter of its definition alone, allowing this to be addressed via the classic conception of truth as *adaequatio ad rem*, as correspondence with (mind-independent) reality. After all, no useful purpose is ever achieved by attributions of 'absolute (or "ultimate") truth' or 'absolute (or "ultimate") reality in matters of concrete detail'. Where plain 'truth' and 'reality' will

not serve, nothing will. Truth can accordingly be left to enjoy the 'transcendental' construction that is has always enjoyed. To be sure, the matter of its accessibility is something else again. But this something can be resolved through epistemic deliberations, via the idea of truth-estimation pretty much as standardly conducted.

Yet how can we ever determine that we are actually getting at the real truth of things – how can we tell that our truth-estimates are actually good estimates. Here the pragmatically appropriate response, as I see it, goes roughly as follows: 'Because they are provided by methods which yield results that work. They emerge from the use of inquiry methods whose products can be implemented successfully in practice – with success monitored in the usual way of effective application and prediction.' However, Putnam takes a very different line here – that of communal favor. For him, with 'pragmatists, the model is a *group* of inquirers trying to produce good ideas and trying to test them to see which ones have value' (Putnam 1995b: 71) so that for them 'science requires the *democratization of inquiry*' (ibid.: 73). With Putnam, as with Dewey, communal acceptance is the key.

This laudably democratic stance nevertheless still leaves us with a dilemma. For it the community is actual, then we leave too much to the vagueness of contingent arrangements, while if it is idealized, then we know not how to get there from here. Instead, the sort of pragmatism I favor looks to cognitive methods of truth-estimation that can be quality controlled through considerations of applicative efficacy.[3] (To be sure, if, by good fortune, the community at issue is actually a thoroughly rational one, then the two approaches will not be far apart because the community will then *ipso facto* use applicative efficacy as its standard of assessment for methodological acceptability.)

Validation issues

But should we settle for the idea of estimating the truth in scientific matters? Should we not ask for certification – for categorical guarantees? Are mere estimates good enough?

The characteristic genius of pragmatism lies in its insistence on being practical about things and specifically on its steadfast refusal to allow us to view the very best that we can possibly do as not being good enough. Its operative injunctions are: Approach the course of the cognitive accessibility of truth by asking the classical pragmatic question: 'If that is indeed how realities stand, then what would be the best sort of evidence for it that we could expect to achieve?' Realize that we have no access to matters of fact save through the mediation of evidence that is often incomplete and imperfect. And realize too that to say that the best evidence is not good enough is to violate Peirce's cardinal pragmatic imperative is ever to bar the path of inquiry.

In line with this perspective, a realistic pragmatism insists upon pressing the question: 'If *A* were indeed the answer to a question *Q* of ours, what sort of evidence could we possibly obtain for this?' And when we obtain such evidence – as much as we can reasonably be expected to achieve – then pragmatism to see this as good enough. ('Be prepared to regard the best that can be done as good enough' is one of pragmatism's fundamental axioms.) If it looks like a duck, waddles like a duck, quacks like a duck, (and so on) then – so pragmatism insists, we are perfectly entitled to stable the personal claim that it is a duck – at any rate until such time as clear indications to the contrary come to light. Once the question 'Well what more could you reasonably will ask for?' meets with no more than hesitant mumbling, then sensible pragmatists say: 'Feel free to go ahead and make the claim.'

It is not that true *means* warranted assertability, or that warranted assertability entails *truth*. What is the case, rather, is that evidence here means 'evidence *for truth*' and (methodologically) warranted assertability means 'warrantedly assertable *as true*'. After all, estimation here is a matter of truth estimation and where the conditions for rational estimation are satisfied we are – *ipso facto* – rationally authorized to let that estimates stand surrogate to the truth. The very idea that the best we can do is not good enough for all relevant reasonable purposes is – so pragmatism and commonsense alike insist – simply is absurd, a thing of unreasonable hyperbole. Whatever theoretical gap there may be between warrant and truth is something which the very nature of concepts like 'evidence' and 'rational warrant' and 'estimation' authorizes us in crossing.

And so at this point we have in hand the means for resolving the question of the connection between thought and reality that is at issue with 'the truth'. The mediating linkage is supplied by a methodology of inquiry. For cognition is a matter of truth estimation, and a properly effected estimate is, by its nature as such, an at least *pro tem* rationally authorized surrogate for whatever it is that it is or estimate of.

Being 'realistic' (in both senses)

That the actual truth 'corresponds' with reality in that it 'represents' it correctly is (on such a view) quite right but also close to tautological and thereby unhelpful. The 'representative' nature of truth – the fact that the truth of the matter characterizes what is in fact really so – does not root in or emerge from a *theory about* truth, but is a merely truistic and banal *conceptual fact* that roots in the very ideas ('truth', 'reality') that are at issue. A claim does not deserve to be characterized as true that fails 'to tell it like it is'. The matter is ultimately one of the groundrules governing the usage of these term. 'It is true that *p*, but nevertheless *p* is at variance with reality and in conflict with the actual facts of the matter' is a contradiction in terms, a mere bit of unintelligible nonsense. Moreover, we have no access

to reality apart from what we think to be true about it. 'Tell me something about reality but do it independently of and apart from what you consider the truth of the matter: tell me what the real truth is in contradiction from what you merely think to be true' is an absurd instruction. We can realize *in abstracto* that some of the theses we accept as true are false but there is no way in which we could ever then-and-there substantiate this phenomenon. It lies in the nature of things that we cannot conceivably distinguish between our putative truth and the real truth in matters of concrete detail: it would not be our putative truth if we did not regard it as the real truth. And we thus treat our perceptions are innocent until proven guilty. Since the whole course of our thought and experience is such that the standing presumption is on their side. All the same, an unhappy inference confronts us when we turn from perceptual judgments to more sophisticated ones:

- The truth must be certain: it makes no sense to say '*P* is true, but it may possibly eventuate that *P* is actually not the case.'
- In matters at the technical frontiers of science, at any rate, there is no room for categorical certainty. We realize full well that the science of the future may amend, qualify, and correct the science of today. We cannot but acknowledge that the science of the future will regard our science as we ourselves regard the science of 100 years ago.

Therefore:

- We cannot characterize the frontier theories of the science of the day unqualified truths.

The premisses look to be inescapable here. And this means, in effect, that we cannot claim flat-out truth for our theories at the scientific frontier. Here again we have no choice but to view them not as the truth per se but merely as the best *estimates* of the actual truth that we are able to make at this juncture. We cannot routinely assume that science as we have it depicts nature as it actually is. To be 'realistic' in one sense of this term (the colloquial) we are constrained to moderate our 'realism' in another sense (the philosophical).

But just what does this mean for our knowledge of reality?

Scientific realism in its strongest form stands committed to the thesis that the world is as science holds it to be: that the theories of science state the literal truth about reality as it actually is. But given that we regard the science we have here and now as something corrigible – as subject to revision in respects that we cannot as yet specify – this is a position that is ultimately indefensible.

In view of this some theorists propose a weaker theory of *convergent realism*. They hold that science is not, indeed, actually right but only approximately right. And this may be alright as a figure of speech. But the trouble with

invoking literal approximation is its commitment to the idea of convergence – to getting closer and closer to the real thing – is this requires that the future changes of mind always be small and become ever smaller. This rules out any prospect of further scientific revolutions – of changes which even when introduced by small-scale phenomena (the perihelion of Mercury) pave the way massive conceptual revisions (the theory of relativity). This consequence surely precludes any endorsement of literal convergence.

Alternatively, there is the theory of *blind realism* proposed by Robert Almeder (1992). This holds that the theories of science are mostly right though sometimes wrong, and that this transpires in such a way that we can never say, here and now, which are which. But the shortcoming of such a view is that it maintains that the substantial majority of our present scientific theories are right as they stand and thus exempt from future revision (even though we cannot say which ones they are). And the history of science strongly indicates that even this is an eminently dubious proposition.

To arrive at a tenable version of realism we must – as I see it – look in a somewhat different direction. And here it is useful to go back to basics.

Increased confidence in the correctness of our estimates can always be purchased at the price of decreased accuracy. *There is in general an inverse relationship between the precision of a judgment and its security: detail and probability stand in a competing relationship*. We estimate the height of the tree at *around* 25 feet. We are *quite sure* that the tree is 25 ± 5 feet high. We are *virtually certain* that its height is 25 ± 10 feet. But we can be *completely and absolutely sure* that its height is between 1 inch and 100 yards. Of this we are 'completely sure' in the sense that we are 'absolutely certain', 'certain beyond the shadow of a doubt', 'as certain as we can be of anything in the world', 'so sure that we would be willing to stake your life on it', and the like. For any sort of estimate whatsoever there is always a characteristic trade-off relationship between the evidential *security* of the estimate, on the one hand (as determinable on the basis of its probability or degree of acceptability), and on the other hand its contentual *definitiveness* (exactness, detail, precision, etc.). A situation obtains. A *complimentarity* relationship of the sort depicted in Figure 5.1 obtains here as between definiteness and security.[4]

Now this state of affairs has far-reaching consequences. It means, in particular, that no secure statement about reality can say exactly how matters stand universally, always and everywhere. To capture the truth of things by means of language we must proceed by way of 'warranted approximation'. In general we can be sure of how things 'usually' are and how they 'roughly' are, but never how they always and exactly are. The variety of nature's detail prevents its faithful presentation by the imperfect instrumentality afforded by our symbolic resources.

The moral of this story is that insofar as our ignorance of the relevant issues leads us to be vague in our judgments we manage to enhance the likelihood of being right. I have forgotten that Seattle is in Washington State and if 'forced to guess' might well erroneously locate it in Oregon.

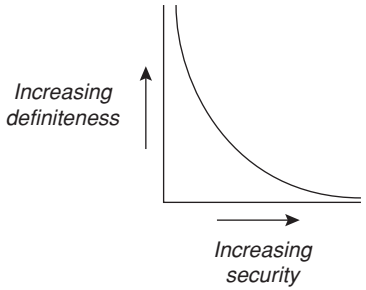

Figure 5.1 The trade-off between security and definiteness in estimation.

Note: The representation is merely descriptive and phenomenological. However, given suitable ways of measuring security (s) and definitiveness (d), the curve at issue can be supposed to be the equilateral hyperbola: $s \times d$ = constant. (On the ideas at issue here see Chapter 3 of Rescher 1989.)

Nevertheless, my vague judgment that 'Seattle is located in the Northwestern US' is nevertheless correct. This state of affairs means that when the truth of our claims is critical we may be well advised to 'play it safe' and make our commitments less definite and detailed. We can purchase truth at the price of imprecision.

It is a fact of life of the general theory of estimation that the harder we push for certainty – for security of our claims – the vaguer we have to make these claims, the more general and imprecise we have to make them. And so if we want our scientific claims to have realistic impact we have to fuzz them up. Take the atomic theory. We should not – cannot say – that atoms are in every detail as the science of the day holds them to be: that the 'Atomic Theory' sector of our *Handbook of Physics* succeeds in every jot and tittle on characterizing reality as it actually is. But if we 'fuzz things up' – if we claim merely that physical reality is granular and that atoms exist and have roughly such-and-such features – then what we say is no longer subject to (reasonable) doubt.

Accordingly, this line of consideration points towards a different sort of realism, one which it might be appropriate to call *myopic realism*. And it means that at a more broadbrush level – the level of the looser generalities of 'schoolbook science' – we indeed can and should be scientific realists.

However, what we obtain on the basis of the present evidentialist approach is not an 'internal realism' which sees the truth/reality connection that is operative in our thought and discourse as a closed domestic issue subject to no sorts of theory-external quality controls. 'Thought externalized' objectivity is still at our disposal. For with regard to our methodological resources of truth-estimation we can indeed deploy a theory-external means of quality control – viz. applicative efficacy. The *success* of our thought-guided practice is something that lies substantially outside of the range of thought

itself. And so the arbitrament of practice – of efficacy in matters of application for the purposes of prediction and control (i.e. effective active and passive involvement with nature) – can and will in the final analysis serve as theory-external monitor over our theorizing. Theory is, in this sense, subordinated to practice, a circumstance that speaks loud and clear on behalf of a realistic pragmatism – a position whose orientation is at once realistic and pragmatic because successful praxis is, in the end, the best index of reality that is at our effective disposal.

Comment on Nicholas Rescher's paper

Hilary Putnam

I very much appreciate both the care and the friendly tone that Rescher's 'Knowledge of the truth in pragmatic perspective' displays. Rescher is an important thinker, and I hope this exchange may be the beginning of a fruitful dialogue between us. In my reply to Jürgen Habermas, I wrote: 'I am delighted that he has read so much of my work, and that he has thought about it so carefully. Nevertheless, I need to contest his "Putnam-interpretation" at a number of points, for to concede his interpretation would be to concede his criticisms.' Not surprisingly, the same is true in Rescher's case!

The position Rescher *ascribes* to me

Rescher writes:

> Yet how can we ever determine that we are actually getting at the real truth of things – how can we tell that our truth-estimates are actually good estimates. Here the pragmatically appropriate response, as I see it, goes roughly as follows: 'Because they are provided by methods which yield results that work. They emerge from the use of inquiry methods whose products can be implemented successfully in practice – with success monitored in the usual way of effective application and prediction.' *However, Putnam takes a very different line here – that of communal favor*. For him, 'with pragmatists, the model is a *group* of inquirers trying to produce good ideas and trying to test them to see which ones have value . . . [so that for them] science requires the democratization of inquiry.' *With Putnam, as with Dewey, communal acceptance is the key*. [my emphases – HP]'

I believe that the particular misinterpretation (of both myself and Dewey) involved here is the key to understanding where Rescher and I do and do not diverge.

One would never guess from Rescher's quotation that what he calls 'effective application and prediction' are *stressed* in the article from which he quotes.[5] Pragmatists, I explained, see *active intervention*, *intelligently directed*

experimentation and *attempting to falsify even 'highly confirmed' hypotheses* (Putnam 1994a) as essential to rational belief fixation; I criticized logical positivists precisely for writing as if scientists viewed the universe from outside ('through a one-way mirror', which allowed them to look in without interacting (ibid.); Carnap, I pointed out (ibid.: 170), does not even have an entry for 'experiment' in the index of his *Logical Foundations of Probability*, his masterwork on the logic of induction! (Carnap 1950) *However*, pragmatists like Pierce, Dewey and myself also argued that both for the effective generation of hypotheses *and* for designing good tests *and* for deciding when the results of testing warrant acceptance of a hypothesis, *communities* of competent inquirers are indeed necessary. Rescher hears this as saying 'communal acceptance is the key' – that is, as saying that communal acceptance is 'the' key *as opposed to* 'effective application and prediction'. What I actually wrote (Putnam 1994a: 171) was, 'For Dewey, inquiry is cooperative human interaction with an environment; *and both aspects, the active manipulation of the environment and the cooperation with other human beings, are vital*' [emphasis added]. This explicitly says that *both* cooperation and active manipulation of the environment are vital (and there is also a big difference between saying *cooperation* is vital and saying *communal acceptance* is). So what is going on here?

To make a guess at what may be going on, let us now look at Rescher's next paragraph:

> This laudably democratic stance nevertheless still leaves us with a dilemma. For if the community is actual, then we leave too much to the vagueness of cognitive arrangements, while if it is idealized, then we know not how to get there from here. Instead, the sort of pragmatism I favor looks to cognitive methods of truth-estimation that can be quality controlled through considerations of applicative efficacy. (To be sure, if, by good fortune, the community at issue is actually a thoroughly rational one, then the two approaches will not be far apart because the community will then *ipso facto* use applicative efficacy as its standard of assessment for methodological acceptability.)

Here the picture seems to be the following: it is *methods* (not individual theories) that are assessed by their propensity to yield successful prediction and applicative efficacy, and then individual hypotheses are (warrantedly) accepted or rejected by using these methods. This was precisely the picture I was criticizing when I wrote in the same paper:

> One more point must be mentioned at the very outset of any discussion, however brief, of Dewey's conception of inquiry: the model of an *algorithm*, like a computer program, is rejected. According to the pragmatists, whether the subject be science or ethics, what we have are maxims and not algorithms; and maxims themselves require contextual interpretation. Furthermore, the problem of subjectivity was in the

> minds of the pragmatists from the beginning. They insisted that when one human being in isolation tries to interpret even the best maxims for himself and does not allow others to criticize the ways in which he or she interprets those maxims, or the way in which he or she applies them, then the kind of 'certainty' that results is always fatally tainted with subjectivity.
>
> (Putnam 1994a: 172)

Rescher's picture, if I described it correctly, assumes that communities are something we don't have to refer to in describing warranted 'truth-estimation': we only have to talk about 'methods that yield results that work'. Individuals can check their own truth-estimates by seeing whether they agree with those methods. *But the only methods that do not require exercises of judgment, of 'guter Menschenverstand', to apply are algorithms.* And scientific methods are not algorithms; they are partly encapsuled in paradigms (as Kuhn rightly saw, even if he misinterpreted the significance of paradigm-change in a relativistic way), partly in habits of behavior learned from competent inquirers, and partly in maxims, and all three require interpretation. The point of my argument (which Rescher simply chose to ignore) is that it is not the case that 'methods' fix what inquirers do; it is the inquirers who, in their practice, determine what the method *is*. And it is only cooperative practice of a certain kind that corrects the subjectivity of individual inquirers and insures the openness of the community to testing hypotheses that any one inquirer might dismiss as a priori too implausible.

Successful prediction and application are not enough

Assuming that I have correctly located the issue that divides us, let me expand on the point that one cannot simply appeal to 'prediction and successful application'. First, let us ignore for a moment that Rescher's position is a kind of 'reliabilism'; that is, the criterion of successful prediction and application is not applied by him directly to theories but to (undescribed) 'methods'. Why should one not simply say that the right method of truth-estimation is simply to accept those theories which lead to successful predictions (and no false ones) [counting 'application' as a form of prediction-testing]? There are a number of reasons why this doesn't work. (Apart from the fact that there are theories – the Darwinian theory of the origin of the species being a famous example – which are accepted as 'inferences to the best explanation', but which do not lead to very many predictions.)[6]

First, this 'method' gives no directions as to *which* theories to test. (In a conversation I had with him, Bronowski once told me that he wrote his friend Popper a letter in which he said: 'You wouldn't say we must test all strongly falsifiable theories if as many crazy theories crossed your desk every week as

cross mine.') However vague they may be, notions of 'simplicity', 'coherence', 'plausibility in the light of what we know' and even the intangible notion of 'beauty' that Dirac famously invoked, do provide some guidance in deciding what is worth testing at all and what is almost certainly a waste of time to test – and as Peirce (himself a world-class experimental scientist) pointed out, *tests cost time and money*. Popper's advice is literally impossible to follow.

Second, the 'underdetermination of theories by evidence' is not just a *theoretical* possibility. An example I have often used is the example of Whitehead's 1922 theory of gravitation, which agreed with special relativity and which predicted all the phenomena that General Relativity had successfully predicted at the time. The existence of a rival theory which led (as far as they knew) to the same successful predictions did not keep physicists from accepting Einstein's theory instead; Whitehead's theory was simply too ad hoc, as they saw it. Nor was this a short-lived state of affairs: it was only *forty-nine years later* that Clifford Will succeeded in refuting Whitehead's theory (Will 1971). Indeed, with a little ingenuity, one can always cook up an 'ad hoc' alternative to a successful theory.

In sum, without appeal to *methodological norms additional to successful prediction/application*, theory testing and theory choice would be impossible. And it is these methodological norms that, I argued, would really be hopelessly 'vague' and subjective if it were not for the fact that there is often significant consensus in their interpretation and application in specific contexts among competent inquirers. *This* was the context in which I said that 'the problem of subjectivity was in the minds of the pragmatists from the beginning. They insisted that when one human being in isolation tries to interpret even the best maxims for himself and does not allow others to criticize the ways in which he or she interprets those maxims, or the way in which he or she applies them, then the kind of 'certainty' that results is always fatally tainted with subjectivity.'

Notice, there is nothing in this about *communal acceptance* being any sort of criterion for the truth (or even the warranted assertability) of a theory. But at the same time, if acceptance of theories as warranted did not win communal acceptance in a very large class of cases, the very notion of 'warrant' would become suspect.

Reliabilism doesn't work

As I already pointed out, however, Rescher's proposal is not to 'estimate the truth' of individual theories by just seeing if they lead to successful 'prediction and application', but to use 'methods' of estimation which have led (presumably via the theories they directed us to accept) to successful prediction and application. But I have already pointed out that to the extent that science proceeds by 'methods', those methods require interpretation, and the only reliable and successful form of interpretation we have found to date is provided by a community of inquirers

competent in the given area of inquiry. That is why – I still insist – *both aspects, the active manipulation of the environment and the cooperation with other human beings, are vital.*

Some further remarks

I will now only comment briefly on three of the many other interesting issues Rescher raised.

Truth as correspondence to reality

As I explain in my reply to Habermas, I now defend a version (one of the three versions I distinguished) of the 'disquotational' account of truth. This is not discussed by Rescher at all; his 'deflationism' is a species of verificationism, and has nothing to do with what I described as (Fregean/Wittgensteinian) disquotation in my *Dewey Lectures*. I do agree that many *terms* 'correspond to reality' in the sense of being connected with them via some mode of reference: in my idiolect, 'cats in Jerusalem' usually corresponds to a number of realities, furry four-footed realities in fact. I do not find it helpful to say of *whole sentences* that they 'correspond to reality'; that looks to me, as it did to James, like (at best) a purely *verbal* definition of truth. Moreover, it suggests that one must regard *all* true sentences as *descriptions* of realities, including mathematical sentences, conceptual truths of all kinds, ethical sentences of all kinds, etc. Since I have already discussed this issue at length in the reply to Habermas, I will not expand upon it further here.

Interdependency problems

Rescher is puzzled about how I can say that the concepts of truth and verification (warranted assertability) are interdependent. So let me try to explain: Some values of *p* may be true but physically impossible to verify ('There are no intelligent extraterrestials' may be an example). But there are many many statements which are such that if they are true then it follows *conceptually* that a human being could verify them under favorable circumstances. 'There are chairs in this room' is (as I write these words) an example. If there are chairs in this room, then it is (logically and physically) possible for a human being to verify that fact. But I do not suppose that to say the statement that there are chairs in this room *means* 'if conditions were ideal, then a human being would be in a position to verify that there are chairs in this room', or anything like that. What I have claimed, and argued in a paper (Putnam 1995a), is that it is a *conceptual truth* that to understand 'there are chairs in this room' and similar sentences about chairs one must have the ability to *perceptually verify* some such sentences. *The ability to verify* is, in the case of such familiar 'observation sentences', part of *understanding their meaning* – not in the sense that when

such sentences aren't verifiable (imagine the chair is in a rocket ship that has fallen into a Black Hole!), we don't understand what they mean – not, that is, in the logical positivist sense that in *each case* in which a sentence makes sense it must be possible to explain how it could be verified – but in the holistic sense that if you couldn't verify such sentences *at all* you could correctly be said not to understand them. Modes of verification can be an *element* in the meanings of sentences without 'the verifiability theory of meaning' being true (without its being the case that 'The meaning of the claim that a thesis is true [*any thesis*, apparently – HP] hinges on the process of verification that is at issue'. The meaning of the 'claim' that the 'thesis' that there is a chair in this room is true is simply that there is a chair in this room [disquotation]; but the understanding of 'there is a chair in this room' is dependent on verification abilities without consisting simply in verification abilities.

Certainty and precision

Rescher writes, 'There is in general an inverse relationship between the precision of a judgment and its security.' Rescher may be interested to know that this is something Peirce also pointed out.[7]

Part II

Putnam on realism

Introduction

Urszula M. Żegleń

Realism is one of the most important themes in Putnam's work. But it has many faces, as he says, and so it is not easy to characterize. Putnam thinks philosophers should not ignore the world of everyday man. This does not mean, however, that he defends a naïve, commonsense realism. Philosophical studies should take into account scientific results, and although our everyday world seems to be far from a scientific one, philosophy should be both scientific and humanistic. According to this view philosophy should not describe the world from the perspective of scientific materialism, because scientific materialism leaves no room for the rich cognitive and normative activity of human beings. Nor should the world be considered from the imaginary absolute perspective of metaphysical realism, which aspires to conceive of the things in the world independently of any of our beliefs about them. In Putnam's view, scientific materialism and metaphysical realism are two versions of the same misguided philosophical quest for a completely objective perspective on the world.

For more than twenty years Putnam has searched for an appropriate version of realism, *realism with a human face, realism without absolutes*. He has tried to explain how we can fit our commonsense realism together with the realization that *there isn't a ready-made world*.[1] His rejection of metaphysical realism led him to embrace internal realism, which he later abandoned for pragmatic realism, before he arrived at his present view – natural (or direct) realism. It is evident that Putnam's understanding of realism does not fit the traditional definitions. Moreover, there is no accurate, simple characterization of the varieties of realism in metaphysics, epistemology, the philosophy of science, the philosophy of mind or the philosophy of language, although all these disciplines are in a certain way connected, and all of them are of interest to Putnam, whose views have had a major influence on the current debate about realism.

Initially (Putnam 1978) Putnam's interest in realism concerned mainly the philosophy of science and language, where he dealt with the issues of reference and meaning. Today he emphasizes that the most important philosophical questions cannot be adequately addressed by any single philosophical discipline, in isolation from the others. For understanding the problems of realism, for instance, it is necessary to examine a number of

interconnected topics, including reference and meaning, truth and justification, mental representation and perception. '[T]he philosophical task must be to explore the circle rather than to reduce all the points on the circle to just one' (Putnam 1994b: 516).[2]

Putnam on metaphysical realism

According to Putnam, the claims of philosophers to have articulated a 'complete' or metaphysical realism that is implicit in natural science are illusory. Metaphysical realism can be characterized here as the conjunction of the following theses: (1) the world consists of a fixed totality of mind-independent objects (or, in other words, there is the world in itself), (2) there is exactly one true and complete description of the world, (3) truth is a sort of correspondence (Putnam 1981, 1983, 1994b).

All these theses are controversial. Thesis (1), which is common to all versions of metaphysical realism, including its traditional form, is linked with the thesis of epistemological realism, according to which a cognitive subject can, in principle, attain an absolute (divine) perspective on the world – a view from nowhere. Against this, Putnam argues that we cannot even conceive of a view from nowhere. A cognitive subject (a researcher) is always situated in the world, and the perspective of her inquiries shapes her 'picture' or model of the world. Her picture of the world is – in some respects and with certain restrictions – patterned by her cognitive apparatus, including her language. There is no completely transparent or neutral medium with which to describe the world. Thus, contrary to (2) there is no unique description of the world.

The acceptance of a particular conceptual scheme commits one (as W. V. Quine has demonstrated) to a particular ontology. For instance, if we decide to choose a language of mereology we get an ontology consisting in individuals and their parts; if we decide on a language of one physical theory, we commit ourselves to an ontology of particles and atoms; if we decide on a language of another physical theory, we commit ourselves to an ontology of quarks, and so on. ('Many Faces of Realism' in Putnam 1987). In Putnam's view metaphysical realism is incapable of refuting ontological relativity and this is why it is untenable (Putnam 1981, 1987). But also science itself (especially quantum mechanics) forces us to revise our conception of realism, including its traditional dualisms and concepts (e.g. subjective–objective) and concepts (e.g. truth, objectivity, epistemic relations, essential properties, etc.).

Conceptual relativism, in turn, is incompatible with a classical correspondence concept of truth. Putnam argues that the notion of correspondence interpreted as model-theoretic correspondence is also empty.[3] His model-theoretic argument is an application of the Löwenheim–Skolem theorem. In 'Models and Reality' he deployed the Löwenheim–Skolem theorem to show that the terms of theories which have models cannot be

interpreted uniquely, so an absolute concept of truth cannot be formulated.[4] In his analysis of the philosophical consequences of the Löwenheim–Skolem theorem Putnam pays special attention to the problem of reference. The Löwenheim–Skolem theorem implies that no ascription of truth-values to any class of whole sentences can suffice to fix the reference of terms and predicates (Hale and Wright 1999: 428). To this extent, Putnam's model-theoretic argument is compatible with the Quinian thesis about indeterminacy of reference. In contrast with Quine, however, Putnam thinks that, once we give up metaphysical realism, the reference relation ceases to be problematic.

In a similar vein, Putnam argues that, if there is any correspondence relation relevant to truth, there is more than one. The plurality of the worlds – as he maintains in his objections against Nelson Goodman's view (Putnam 1996: 179–203) – also involves the plurality of relations obtaining between everyday objects from our environment and scientific objects. There is no way of distinguishing any one of these relations as being proper and unique, nor is there a reason for doing so.[5] Metaphysical realists find such a reason in a particular causal structure of the world (causalism) and in its essential forms (essentialism). For Putnam, however, this sort of essentialism is unacceptable, and causal relations cannot be understood independently of a researcher's aims.[6]

Like Dewey, Putnam assumes that there is no cognitive access to the world of things-in-themselves, and that a researcher's conception of which relations are fundamental cannot be separated from her epistemic aims. This pragmatic aspect is especially evident in inquiries into the role of causal relations in the explanation of physical events.[7] This treatment of causality shows that it is not a pure physical relation, but rather a logical, or cognitive one ('Why There Isn't a Ready-Made World?' in Putnam 1983: 202–28). Causality is not a prior and fundamental relation that explains and connects events in the world. Nor is it sufficient for a characterization of reference ('Wittgenstein on Reference and Relativism' in Putnam 1992: 158–79). Putnam also argues that the definition of reference in terms of intention is circular (Putnam 1981: 52). In this way Putnam tries to show that the question of the correspondence, or more broadly, fitness of a language to the world, has been posed in the wrong way.

Internal realism

Initially internal realism was treated by Putnam as a solution to the antinomy of realism (Putnam 1994b: especially 460). His earlier works dealing with internal realism did not always present his own position. First he used the notion of 'internal realism' for a certain form of scientific realism, and only later did he elaborate his own position. In the important essay 'Realism and Reason' he characterized internal realism which, as he confessed later in his *Dewey Lectures*, was taken from Quinian philosophy of

science. In 'Realism and Reason' it was characterized in opposition to metaphysical realism by (1) the rejection of the thesis claiming the existence of the world of things themselves, (2) the acceptance of conceptual relativism, (3) the rejection of the traditional epistemological dichotomy 'objective and subjective', as well as the rejection of the metaphysical dichotomy 'projection–property of thing itself', or the 'dispositional and essential property', and the rejection of a semantic dichotomy between the characterization of a statement exclusively by assertability conditions or by truth-conditions (ibid.: 463).

At the semantic level, Putnam's early standpoint was mainly inspired by Michael Dummett's global anti-realism which offered a new perspective for the old fundamental philosophical controversy between realism and idealism. This new approach also raised new questions about fundamental semantic issues, such as meaning and truth. Is the meaning of a statement given by the conditions under which it is true or false, whether or not we can ever determine its truth or falsity (realism), or is meaning of a statement given by the conditions under which we would be warranted in asserting or denying it (anti-realism)? Are all meaningful statements decidable (or, in a certain sense, verifiable)?

Putnam's early internal realism (presented in Putnam 1987) was identified with moderate verificationism, but on the subject of verificationism his standpoint was different from that of Dummett. In opposition to Dummett, for instance, Putnam did not think that every true (meaningful) statement is one that we can verify by using methods presently available to us. Initially he claimed that a true (meaningful) statement is one that would be assertable under ideal epistemic conditions; in other words, a statement would be assertable if such conditions could be satisfied (Putnam 1981).[8] This claim was criticized by many philosophers, for being either a version of Kantian idealism or of scepticism. Putnam did accept a version of Kantian idealism because he viewed Kant as an internal realist.

Yet he did not agree to the objection of scepticism, which was derived from a conflation of his ideal epistemic conditions with Peirce's conception of the epistemic conditions approaches as a limit when scientific inquiry continues unceasingly. The objection was that, according to internal realism, the truth of a statement can only be known in an imagined final state of science, so that in practice we may only speak about approximate truth. Putnam, however, rejected the idea of a final science as utopian. In order to avoid all these objections and misleading interpretations, he stopped talking about the *ideal* epistemic conditions and began to speak about *sufficient* epistemic conditions. This led further demands from his critics for an account of what actually constituted 'sufficient' epistemic conditions. He replied in the style of the pragmatists, for whom epistemic conditions were defined and differentiated according to situations of research, i.e. according to context. His answer was very simple: conditions are sufficient insofar as they allow us to say whether a given statement is true or false (Putnam 1991).

In order to present a more complete account of the debate about realism, it is necessary to say more about epistemic access, and this is a question of perception. Putnam has recently embraced a natural (direct) realism about perception that is partly inspired by William James's pragmatism.

Natural (direct) realism

Natural realism, taken in a proper way, is for Putnam the best philosophical account of our epistemic access to the world. It does not call into question our everyday and scientific knowledge, or the objects of our experience. According to Putnam's natural realism, we have direct access to the world – we perceive objects occurring in our environment directly, without the help of any intervening epistemological entities (such as sense data, impressions, sensibilia, and so on). An important question in the theory of perception concerns the ontological status of perceived objects, and especially of the properties that were traditionally defined as secondary, for instance, the properties of being red, cold, hard, or sweet. Are these properties metaphysically independent of perceivers or are they projected by perceivers onto the object they perceive?

According to the Aristotelian tradition of natural realism, all perceived properties of an object (Aristotelian substance), both primary and secondary, belong to the object itself, external to and independent of the perceiver. Putnam does not endorse this traditional Aristotelian model, because he views it as a version of metaphysical realism. He also rejects more recent forms of realism, whether they conceive of qualia subjectively, as aspects of experience, or objectively, as neuronal configurations (or processes) occurring in the brain.

Modern research has tended to associate the issue of sense data (or qualia) with that of identity. In his discussions of this issue, Putnam refers to the grain argument which, although it is not current (it was mainly discussed in the 1950s) highlights some important intuitions (Putnam 1994b: 476). An analysis of such an argument has led Putnam to examine the issue of kinds of identity. Taking into account significant theories of mind, he has distinguished two kinds of identity: (i) theoretical (with which he dealt in his functionalist works, where propositional attitudes were identified with computational states of the brain), and (ii) token anomalous identity from Donald Davidson's theory.[9] But neither of these kinds of identity satisfied Putnam (ibid.: 476–83). First of all he stands out against materialism, or more exactly, a certain version of physicalism presented by those theories of mind which prove or assume the above kinds of identity, but he also raises objections to the causal theories of perception which are connected with them. As before Putnam's functionalism was in some sense a 'third way' between traditional Cartesian dualism and materialist monism, and thus today his 'third way' occupies the middle ground between the connection of Cartesianism with materialism (which is known in a form of the

representational-computational theory of Jerry Fodor) and eliminativist materialism (presented by Quine or Paul and Patricia Churchland).

Although after the rejection of functionalism, Putnam did not develop his own theory of mind, he has recently made some remarks about it based on his realistic theory of perception, according to which the mind is viewed as a class of human capacities and abilities. For the defense of natural realism it is important that these capacities and abilities allow for direct perception of objects in the world and that they are not highly specialized. This simply means that we can see objects in our environment, and that we can think about them, refer to them in our utterances and make different judgements about them. The task of philosophy is not to explain these abilities (psychologists or scientists can tell us more about them), but to describe them. And no proper description of them can avoid the fact we are conscious of objects that are in our environment and that the contents of our beliefs, wishes and other propositional attitudes are intentional. This does not lead to dualism, Putnam thinks, nor is it like the naturalistic theories presented by John R. Searle or Daniel Dennett.

Putnam's natural realism can be illustrated by simple examples. For instance, I can see that the piece of paper in front of me is white, that there are black letters printed on it, and so on. There is no sense (as Putnam has already argued from his position of internal realism) in distinguishing dispositional properties from properties of the perceived objects themselves because the same properties (here: being white, having black letters printed on it, etc.) can be described in a different way by using the vocabulary of physics, for instance. Natural realism does not preclude a scientific description of the perceived objects, but adds a description of perceived objects from an everyday point of view.

The content of part II

The debate on Putnam's realism starts with John Haldane's essay 'Realism with a metaphysical skull'. In reference to Putnam's *Dewey Lectures*, Haldane emphasizes Putnam's search for a middle way between 'irresponsible relativism' and 'reactionary metaphysics'. One such way is Aristotelian realism, but without Aristotelian metaphysics. Against Putnam, however, Haldane argues that 'realism with a human face requires the support of the metaphysical skull'. He notes that this metaphysical aspect of realism is especially important for understanding perception.

Perception is the main subject of Tadeusz Szubka's essay 'The causal theory of perception and natural realism'. Szubka argues against Putnam's claim that the causal theory of perception is incompatible with direct realism about perception. To test Putnam's claim, Szubka examines Peter Strawson's account of perception, which in Putnam's opinion 'mixes a genuine strain of natural realism with the wholly incompatible "causal theory of perception"'.

Another aspect of Putnam's realism appears in John Heil's paper 'Functionalism, realism, and levels of being'. To clarify the kind of functionalism that Putnam proposed early in his career, Heil examines the realistic approach to properties that Putnam held during that same period. Heil believes that Putnam's functionalism encourages us to adopt a layered picture of the world. He attempts to show that one can refute this picture, together with its ontology, without refuting realism about properties. This means that one can accept many levels of description or explanation without being committed to the idea of levels of being (i.e. without accepting the thesis of higher levels of being in which mental properties would be located).

Two further papers, namely 'From alethic anti-realism to alethic realism' by Wolfgang Künne and 'Truth and trans-theoretical terms' by Gary Ebbs, deal with Putnam's conceptions of truth. Wolfgang Künne examines Putnam's concepts of truth and tries to answer the question of whether the concept of truth is epistemically constrained. He claims that since *Reason, Truth and History* Putnam's attitude to this question has been somewhat unstable. By using formal tools, Künne briefly reviews Putnam's answers and some of their misinterpretations, giving an epistemic blindspot argument that resolves some puzzles raised by Putnam's position.

Gary Ebbs is interested in the connection between truth and the references of trans-theoretical terms. Some terms, including natural kind terms, are trans-theoretical in the sense that their references remain the same despite changes in the beliefs of their users. Ebbs examines the connection between truth and trans-theoretical terms by explaining and criticizing Quine's deflationary theory of truth and reference. He argues that Quine's naturalist approach to empirical content implies that there are no trans-theoretical terms. Drawing on both Quine's and Putnam's work, Ebbs presents a new kind of a deflationary account of truth that incorporates trans-theoretical terms.

The final essay in the collection is 'What laws of logic say' by Charles Travis. In his opinion, our treatment of logical laws depends how we answer the question 'What is logic?' Among various answers he focuses on Wittgenstein's approach, according to which logic deals with language and forms of thought. Travis uses some of Putnam's remarks in 'Rethinking mathematical necessity' to explore the close affinity between Wittgenstein's and Putnam's views of the application of logical laws. The general conclusion of Travis's analyses, illustrated with numerous of examples from everyday language, is that Putnam's views on the character and status of logical laws both fits with and helps to clarify some aspects of Wittgenstein's position.

Each of these papers is followed by Hilary Putnam's comments on it.

6 Realism with a metaphysical skull*

John Haldane

Introduction

Hilary Putnam's *Dewey Lectures* aim to chart a route in epistemology between 'irresponsible relativism' and 'reactionary metaphysics' (Putnam 1994b). Early on in the first lecture ('The Antinomy of Realism') he offers various characterisations of this middle way including 'Deweyean Realism' and 'Aristotelian Realism without Aristotelian Metaphysics'. Putnam then proceeds to expound and defend another version of this 'responsible and non-reactionary' course, one which he identifies as having influenced John Dewey, namely the pragmatic realism of William James. Thereafter he adds his own distinctive ideas. Thus emerges a broad equivalence between a multi-authored American pragmatism and an Aristotelianism detached from certain ontological assumptions.

The purpose of this short discussion is to suggest that one cannot enjoy the benefits of Aristotelian epistemological realism without accepting aspects of its attendant metaphysics. Putnam is a philosopher whom I greatly admire. He has produced technical work of power and ingenuity in logic and in the philosophies of science and mathematics, and he has engaged in expansive reflections on the human way of being in the world. To some extent this has involved him in a shift of viewpoints; put in broad and culturally-laden terms, a move from a 'scientific' to a 'humanistic' perspective. This phraseology risks implying greater discontinuity than I believe has been the case.[1] Nonetheless I suggest that Putnam's opposition to metaphysical realism is driven by an assumption carried over from earlier days and one common among philosophers of science, namely that realism is monistic and reductionist. I believe it need not be, and therefore I hope that Putnam might be persuaded that what is true in pragmatism is not only compatible with, but actually requires important aspects of Aristotelian metaphysics. Realism with a human face requires the support of a metaphysical skull.

* My title is, of course, a reference to Putnam's *Realism with a Human Face* (Putnam 1990b).

Realism in cognition

The actual title of Putnam's *Dewey Lectures* is *Sense, Nonsense and the Senses: An Inquiry into the Powers of the Human Mind*. This heading and the theme it introduces, viz. epistemological realism, carry echoes from the history of philosophy recalling John L. Austin's *Sense and Sensibilia* (1962) and Thomas Reid's *An Inquiry into the Human Mind on the Principles of Common Sense* (1764) and his *Essays on the Intellectual Powers of Man* (1785). Between the writing of these works and the present day there has been something of a shift in philosophers' conception of the paradigm cognitive state. This is particularly true with regard to Reid's era, but recall that although *Sense and Sensibilia* was published in the 1960s it was prepared posthumously by Geoffrey Warnock from Austin's lecture notes dating from 1947. Its intellectual context, therefore, is that of the first half of the twentieth century.

From the founding period of modern epistemology in the seventeenth century until the 1960s the question of realism in cognition was focused not upon propositional or sentential attitudes but upon 'objectual' ones. That is to say, philosophers were concerned with the issue of whether the immediate objects of perception were 'external things', i.e. mind-independent objects (or perhaps the surfaces of these) or 'internal sensibilia' such as sense-data, or impressions. Direct realists favoured the former; indirect realists affirmed the latter, with the attendant hope that external things might nevertheless be said to be cognised as inferred causes of sensory states; and cognitive idealists rested content with the world-as-sensorium. With the rise of analytical philosophy of language, and in particular philosophical semantics (to which Putnam has made enduring contributions) attention moved from the status of the relata of object-focused cognition, to the satisfaction conditions of propositional attitudes. The question of realism, therefore, was transformed from that of the independence of *objects* to the independence of *truth*.

Putnam's best known and most widely discussed contributions to the debate about realism are cast in the semantic mode, and he is famous for arguing that truth is epistemically constrained (though not epistemically definable). Important as such debates undoubtedly are, I think something has been lost in moving from the objectual to the propositional paradigm. Some would argue for the reducibility of the former to the latter; but that is certainly contentious, and a focus on perception has the merit of engaging a phenomenologically vivid feature integral to our status as mobile animals. Thus I greatly welcome Putnam's recent attention to the issue of realism in perception.

A further dimension of the metaphysical significance of perception (not discussed in the *Dewey Lectures*) is its bearing on the issue of physicalism. We have become used to conceiving this in terms of the 'mind–body question'; but that too readily encourages a sense of their being a single monolithic issue. This tendency is less likely if one thinks of the more local relationship between action and bodily movement (the 'agent–body question'), or of the relation between perceptual cognition and organic

modification (the 'perception–sensation' question). In each case one may raise metaphysical issues about identity, difference and composition. My own view is that because of its empiricist and materialist assumptions contemporary philosophy of mind is in as poor shape to address these issues as is contemporary epistemology to deal with realism in cognition (Haldane 2000). Putnam's recent work suggests that he may be of the same opinion in both regards. If so, I hope he might consider the suggestion – suspicious as he will be of it – that progress in these areas may best be achieved by making use of the ancient doctrine of hylomorphism.[2]

A return to form and matter

Let me say how I understand the notions of form and matter and the motivation for their introduction. My view is broadly Aristotelian though it invokes elements from Aquinas which are at least not explicit in Aristotle, and arguably may not be there at all. In allowing for their absence, however, I am not suggesting the possibility that they may be incompatible with Aristotle's conception. In fact the ideas in question are ones that pre-date Aristotle and are, I believe, what one arrives at if one thinks about the possibility of there being any things, or any thoughts of things.

The Pre-Socratics asked very broad metaphysical questions and delivered equally wide-ranging answers. One such question is 'what is the nature of reality?' Anaximander speculated that the original state of things was that of an undifferentiated mass; a vast extent of unstructured some-such. This he termed the 'indefinite' or the 'undifferentiated' (the *apeiron)*. The question then became that of the source of the structure apparent in the world. Subsequently, Pythagoras who adopted the notion of the *apeiron*, thought of emergent structure in mathematical terms. Thus he came to the view that the making of the *kosmos* involved the imposition of limit (*peras*) upon the undifferentiated, so as to produced the structured (*peperasmenon*). The Pre-Socratics thought in terms of a genesis but the general principle can be abstracted from any historical process of production. Moreover, no sense can be made of a something about which nothing can be said; a pure *apeiron* would resist any kind of subject/predicate description. This I take to show that a condition of there being something for thought to take hold of, is that the something has structure. Equivalently, a condition of there being thought is that there be relevant structuring principles (sortal and characterising concepts plus logical constants).

So we arrive at hylomorphic analysis. Every particular may be understood in terms of the instantiation of a formal principle. Its form makes it to be the kind of thing it is, providing its definitive structure, its characteristic powers and liabilities, and so on. However, since, *ex hypothesi*, things of the same specific sort have formally identical principles there arises the question of numerical difference. The analysis is completed by introducing the idea of matter as that which is structured and is the basis of numerical individuation within species. Their forms make two men alike (*qua* men);

their matter makes them distinct (*qua* individual men). Speaking, as I just have, of the 'matter' of living things it is tempting to proceed by iterative analysis so as to be lead, via the form and matter of flesh and bones, and then of tissue fibre and chemical compounds, etc., to the infamous idea of *prime matter* – stuff of no kind.

This is avoidable. Think again of the Pythagorean principle: structure conjoined with absence of structure constituting something structured. Considered in the abstract it becomes clear that the unstructured, while not a something, is not a mere nothing. It is the possibility or potentiality for the reception of structure, and that structure stands to it as an actualising principle. This, I suggest (employing Aquinas's potency/act distinction)[3] is how at the metaphysical level we should think of matter and form. The first is a potentiality for the reception of the second, the second a determinate actualisation of this potentiality. Next, if we consider various kinds of forms we can ask about the kinds of possibility there are for their actualisation or instantiation. In the case of concrete particulars the answer would appear to be 'spatio-temporality', or whatever at the most fundamental level constitutes the empirical domain. But, of course, empirical reality always comes informed by some structure (and that necessarily, for recall the earlier remarks about the *apeiron*). So we need to distinguish between (a) matter as the condition of the possibility of the actuality of form (*materia prima*); and (b) matter as a particular empirical medium (*materia signata*). Matter in the first sense is not an empirical concept; matter in the second sense is the most general empirical concept.

The nature of cognition

The problem of the nature of cognition has several aspects of which two are prominent. What is the implication of the correct account of intentionality for the traditional issue of realism vs. representationalism? and what is the character and source of the components and the structure of thought (concepts and rationality, respectively)? It is characteristic of contemporary accounts of intentionality – be they internalist or externalist – that they view the originating relationship between object and thought in terms of the efficacy of the former in producing the latter. Crudely, we are to understand thoughts as prompted by the objects they are about, as those objects or their effects impinge upon our senses, or as facts about them are relayed by chains of communication going back to such impingements.

As one reflects upon this view it is hard not to feel the prospects of realism in cognition slipping away. In contemporary debates about intentionality it is possible to distinguish two positions which I shall label 'old' and 'new' versions of 'representationalism'. According to the first, the immediate objects of thought are images, ideas or sentences. These are themselves foci of cognition and external reference is mediated by them (via a relationship of picturing (natural resemblance) or symbolism (whatever that might

be and however it might be accounted for)). On standard interpretations Descartes and Locke are old style representationalists, as, in some of their pronouncements, are Hartry Field and Jerry Fodor.[4] According to the second position, while mental representations mediate between the thinker and reality they are not themselves objects of cognition. So, while it may that in order to think about some state of affairs it has to be the case that there is some proposition-like representation in the thinker's mind, it does not follow that the thinker cognises the state of affairs by entertaining a representation. Rather the tokening of a propositional content by a mental sentence constitutes the thought, and reference is secured via the relationship between this and the external reality.[5]

Whatever the relative merits of these positions both have the consequence that mind is somewhat removed from the world. For even if a complete representationalist account of thought must make a connection between a subject's internal states and the external world (and not every theory of this sort accepts that requirement) the connection can only be *extrinsic*, a matter of efficient causation. In the *Dewey Lectures* Hilary Putnam draws upon terminology adopted from John McDowell in order to make a similar critical point. He writes:

> McDowell argues persuasively that this picture [old representationalism], whether in its classical version or in its modern materialist version, is disastrous for just about every part of metaphysics and epistemology. In McDowell's terminology the key assumption responsible for the disaster is the idea that there has to be an interface [a causal not cognitive linkage] between our cognitive powers and the external world . . . Accounts of perception that reject this claim are conventionally referred to as 'direct realist' accounts . . . But there is less to some versions of 'direct realism' than meets the eye . . . All one has to do to be a direct realist (in *this* sense) about visual experience, for example, is to say, 'We don't *perceive* visual experiences, we *have them*' . . . 'We perceive external things – that is, we are caused to have certain subjective experiences in the appropriate way by those external things', such a philosopher can say.
>
> (Putnam 1994b: 453–4)

What Putnam refers to here as 'some versions of "direct realism"' is what I have termed 'new versions of representationalism'. One may ask, however, what the alternative may be. Again following McDowell, but also under the influence of William James, Putnam advances what he calls *natural realism*: the view that 'successful perception is just a seeing, or hearing, or feeling, etc., of things "out there" and not a mere affectation of a person's subjectivity by those things' (ibid.: 454).[6]

I agree with this, but what I find missing from Putnam's discussion (and indeed from McDowell's treatment of intentionality)[7] is any explicit account of how this is possible. Elsewhere I have urged the merit of the maxim 'no

epistemology without ontology' (Haldane 1996a) and in this context the requirement is to say what else grounds the cognition of reality if not the effects of objects upon our senses, 'the affectation of our subjectivity'. Clearly input from the world is relevant and is in part at least a matter of efficient causation. However, if there is to be the sort of conformity of mind to thing which Putnam and McDowell seek, then I can only see this being provided according to an account of the sort developed by Aquinas when he writes that the intellect in act is the intelligible in act; or less scholastically, that the mind will only be of a thing when it is formally identical with it; when what we think and what is thought are the same.[8]

What does this mean? and how is it possible? It means that when I think of something, that which makes my thought to be the kind of thought it is – a dog thought, say – is formally identical to that which makes the object of my thought to be the kind of thing it is, a dog. Each actuality (thought and object) has a structuring principle (concept and substantial form); and these principles, though distinct in the modes of their actualisation, are specifically alike. The form of dog exists naturally and substantially (*in esse naturale*) in the dog, and intentionally and predicatively (*in esse intentionale*) in the thought. To make full sense of this we need to extend standard Aristotelian ontology to include three different kinds of existents (1–3) and three kinds of relation, two being modes of exemplification (4 and 5), the other being one of instantiation (6)

1 *F-ness* – the universal, or form.
2 *The f-ness of X* – a singular case, or instance.
3 *X* – a particular subject.
4 X *exemplifies* F-ness naturally, or is a natural *exemplification* of F-ness.
5 X *exemplifies* F-ness intentionally, or is an intentional *exemplification* of F-ness.
6 The f-ness of X is a natural *case* or *instance* of F-ness.

Contrary to some (mis)representations of the doctrine of intentional existence, when I think of a dog an individual animal does not come to exist in my thought. Rather my thinking takes on a general feature dogness, which serves as a concept directing me to a particular or to the class. Accordingly, although successive thoughts of the same conceptual type involve numerically distinct exemplifications of the relevant form, these thoughts are not distinct instantiations of that form. For what it is to be an instantiation of F is to be a particularisation of it – a case of F-ness, or the f-ness of a particular, the dogness-of-Lassie, say.

A merit of this view is that it explains what is otherwise a mystery, namely how a thought can be intrinsically related to its object. They share the same form. It also serves. I believe, to save realism from the threat of conceptual relativism. In recent years Putnam has insisted upon an unmediated

connection between mind and world. Yet without further specification and explanation this leaves scope for a different kind of scepticism to that traditionally associated with representationalism.

Putnam himself has maintained in a series of well-known publications that permutation arguments leave realism floundering so long as reference is thought of as something fixed objectively.[9] My own diagnosis of the deeper reasoning beneath these essays is that Putnam has presumed that reference-fixing from the side of the world could only be through lines of efficient causation from object to thinker. The problem for the realist, then, is not that there are insufficient such relations, but that there are far too many of them with none standing out as the ground of a reciprocal semantic relations between thinker to object of thought. Consider the vast number of causal lines extending from the world to me when I stand facing a dog and try to say which could constitute a privileged class sufficient to ground reference.

The difficulty is insurmountable so long as one is confined to efficient causation. But a further possibility is now before us. Form exemplified naturally makes the dog to be a dog. Form exemplified intentionally makes my thought of a dog to be a dog-type thought. To this we can add that the intentional exemplification has as a condition of its occurrence some prior natural exemplification. My thought is caused to have its content by the form of the dog.[10] There are, then, three cases of formal causation: *within the natural order*, *within the intentional order*, and *between the natural and the intentional orders*. It is very important at this point to make clear that formal causation is not a kind of efficient causation, or a rival to it. In late scholastic discussions one sometimes finds authors writing as if forms passed through the air in the manner of effluvia shed from the surfaces of objects. This invites empirical refutation and intellectual parody. But the proposal currently on offer does not require anything like this. We can say instead that the only effecting that goes on, as this is standardly conceived of, is that already known about, *but* that the effecting originates and terminates in formal structures. Efficient causation is the vehicle for the communication of form; form is what structures the object, the thought, and the movement between them. Efficient causation by itself failed to fix reference, since what the idea of it omitted was the possibility that it carries form, or, as the scholastics would more accurately say, that it itself is 'subject to formality'. What makes it possible that there be dog-type thoughts is that there be dogs and that the form(s) of the latter has been communicated via effects originating in the animals themselves.

Rather than pursue this issue further I wish to take up, in brief, the question of the general nature of persons. Unsurprisingly, a hylomorphist of my persuasion will be inclined to reject dualism and physicalism. The opposition to dualism may be clear but why not some version of physicalism? Part of the answer is implicit in what has been said already. Contemporary philosophers of mind confirm the persistence of Cartesianism in their

preoccupation with the status of qualia. I remain agnostic about the possibility of a naturalistic account of qualia and still see merit in an old suggestion of Putnam's that the 'qualitative character' of a sensation, say, is just the physical realisation of a state that has the function of signalling the presence of some feature in the body or in the surrounding environment.[11]

It must seem odd, however, to allow the possibility of token identity for qualia and yet to resist physicalism as a general account of the nature of mind. After all, phenomenal consciousness is widely supposed to be *the* problem for physicalism. I think a degree of romantic subjectivism may lie behind this, as if the key to reality is how we feel in our experiences. At any rate, my principled objection to physicalism pre-dates Descartes and is the Aristotelian–Thomistic one. Wherever there is individuation within kinds there is matter, wherever there is universality matter is absent. In sensation the sense is (efficiently) caused to change and is formally reordered. But in 'taking on' the form of the original object it still does so under material conditions (those of the organ of sense) and so one has particularised qualities: this sensation of redness deriving from that patch of objective redness in the environment. In thought, however, general concepts or universal forms are in operation and given the hylomorphic analysis advanced above this implies that at the intellectual level of information form must be exemplified without empirical instantiation. Abstract thought is structured by universals and universals only exist as such apart from (empirical) matter.[12]

Now recall the principle that acting follows upon being (*agere sequiter esse*). This captures the fact that activities are exercises of powers and that powers belong to substances as parts of their natures. If thought is a non-physical activity as I have argued (admittedly schematically) that it is, then the intellectual powers are not physical; nor, therefore, can be the substance to whose nature the powers belong. Current attribute dualists tend to identify the brain and the higher reaches of the central stem as the physical substance that also has some non-physical properties. But I am urging that a proper understanding of substantiality should lead one to reject the idea that a wholly physical particular could be the bearer of intrinsic attributes that are non-physical. The error of the Cartesian is to suppose that non-physical attributes imply an exclusively incorporeal substance as bearer. In these opposing views we can see the assumption that the only available candidates are material ('physical') substances or immaterial ('psychical') ones. Hylomorphism suggests a way of rejecting that assumption, for it allows the possibility of psycho-physical substances. Substances out of whose single nature physical and mental activity flow. Men and women have skulls and faces and they have both in virtue of having souls. That is an Aristotelian metaphysical doctrine and yet it suggest no reductive monism and nor, I believe, is it a case of 'reactionary metaphysics' in the sense in which I think that expression was intended. Aristotelian realism needs Aristotelian metaphysics, and both have much to commend them.

Comment on John Haldane's paper

Hilary Putnam

I met John Haldane when I spent two months in beautiful St. Andrews in 1990, on the occasion of my Gifford Lectures. Ever since then, he has been not only a philosopher I admire, but a close friend – even if we 'keep up' with each other mainly thanks to the 'net'. The friendly disagreement represented by the present paper, 'Realism with a metaphysical skull', concerns issues we have frequently discussed.[13] To respond properly to this latest statement of Haldane's position, I would have to write a substantial essay on what we can and cannot keep from Aristotle's insights, a topic dear to both of our hearts, but there is obviously not space to attempt that on this occasion. I will, however, try to state – without, however, adequate supporting argument, and so, to that extent, 'dogmatically' – what my present position on that question is, and also indicate briefly what my response to some of Haldane's suggestions would be.

What Haldane finds missing . . .

> [W]hat I find missing from Putnam's discussion . . . is any explicit account of how this is possible. [The 'this' refers to the statement, quoted immediately before, that 'successful perception is just a seeing, or hearing, or feeling, etc., of things 'out there' and not a mere affectation of a person's subjectivity by those things'.][14] Elsewhere I have urged the merit of the maxim 'no epistemology without ontology' . . . if there is to be the sort of conformity of mind to thing which Putnam and McDowell seek, then I can only see this being provided according to an account of the sort developed by Aquinas when he writes that the intellect in act is the intelligible in act or less scholastically, that mind will only be of a thing when it is formally identical with it; when what we think and what is thought are the same.
>
> (Haldane, this volume, 101–2)

> What does this mean? And how is it possible? It means that when I think of something, that which makes my thought to be the kind of

> thought that it is – a dog thought, say – is formally identical to that which makes the object of my thought to be the kind of thing it is, a dog . . . The form of dog exists naturally and substantially (*in esse naturale*) in the dog, and intentionally and predicatively substantially (*in esse intentionale*) in the thought.
>
> (Ibid.: 102)

First, let me say what I find *right* in this. Ever since the beginning of analytic philosophy with, let us say, Frege, analytic philosophers have divided on the relation between *concepts* and *properties*. For Frege, concepts were not mental entities (hence his celebrated polemics against 'psychologism') but they were intimately connected to reason ('reason's nearest kin'). I am no Russell scholar, but, at least when he wrote *Principles of Mathematics*, Russell wanted external things (including, I presume, properties and relations) to be constituents of thought (so that, famously, Mont Blanc itself was supposed to be a constituent of thoughts about Mont Blanc).[15] But in the second half of the twentieth century some analytic philosophers rejected talk of properties and concepts entirely (most famously, Quine), while others (including myself) distinguished sharply between the two.[16]

The possibility that went missing here was that 'properties' are neither simply external to the mind nor merely constituents of thoughts (where 'thoughts' are, if not mental, at least closely related to the mental, as in Frege's philosophy). The 'Aristotelian' view, as I would restate it in contemporary terms, is that talk of properties and talk of concepts represent two sides of the same coin, two ways of talking about the same things.

My current way of understanding this thought owes a great deal to the recent writing of Charles Travis.[17] As Travis points out, whether we talk of 'concepts' or 'properties', what we are talking about is *ways something can be*. Being a dog is a way something can be. The Aristotelian view is right (if my anachronistic restatement of it is accepted) in claiming that when I think that something is that way, and when the thing *is* that way, the 'way' in question is one and the same. (I am puzzled that Haldane thinks that John McDowell needs to be taught this, however: not only is McDowell himself an important Aristotle scholar, but, as I read his *Mind and World*, precisely this idea figures in an essential way) (McDowell 1994).

What Travis adds to this essentially Aristotelian thought is two important theses: (1) Ways in which 'ways things can be' defy the 'mind-independent/mind-dependent dichotomy is that although it is unquestionably true that things can be a certain way even if no one ever thinks that they are ('mind independence'), it is also true that 'a way something can be' is something *always capable of further interpretation* ('mind dependence').[18] (2) The individuation of 'ways things can be' is strongly *context dependent*. In some contexts, being water and being H_2O count as the same way of being; in others, as two different ways of being.[19] The latter is the part that I got

right in 'On Properties'; my mistake was to suppose there are only *two* ways of individuating ways things can be.

Thus I can agree that that 'mind will only be of a thing when it is formally identical with it; when what we think and what is thought are the same,' if that means that concepts and properties are just two sides of the same coin in the way just suggested, just two ways of talking about ways things can be. (Although I would add that referring to ways things can be as 'concepts' usually suggests one family of ways of individuating them, and referring to them as 'properties' at least sometimes suggests a different family of ways of individuating them.) But to say, as Haldane does that 'my thinking takes on a general feature dogness' when I think of a dog, seems to me to preserve what is most unhappy in Aristotle's language. My thinking is not a dog, not even when I am thinking of a dog, and to say it 'takes on the feature dogness' too much suggests that it is!

'A merit of this view is that it explains what is otherwise a mystery, namely how a thought can be intrinsically related to its object. They share the same form' [ibid.]. If this means that the way I think the object is is in fact the way it is (when I judge correctly, of course), then, I can agree (and, as I mentioned, that we need not be afraid of saying this is something McDowell stressed in *Mind and World*); if it means that my thinking *literally* 'takes on a general feature, dogness', I haven't the foggiest notion what that is supposed to mean.

Is there such a thing as 'the form' of a dog?

In my previous discussion of Haldane's view ('Aristotle after Wittgenstein'), I focused on Haldane's essentialism. Contra Haldane, I argued that no one way a dog can be counts as *the* form of a dog. There is no one property, which is 'dogness'. Of course, certain properties count as essential to what we *mean* by 'dog' in certain contexts (this is what Wittgenstein called a 'grammatical remark'); but I reject the view that nature dictates what is 'essential'.[20] I pointed out that for a molecular biologist, it is the kind of DNA that is 'essential', while for a population biologist it is belonging to a certain 'reproductive population', and that the two criteria do not pick out the same animals in all cases. For a 'dog lover', wild dogs are not 'dogs' while for a scientist they may well be. Australian dingos are paradigm dogs for the aboriginal inhabitants, while for most Americans they are a different species, etc., etc.

To this Haldane later responded that this sort of pluralism is consistent with his essentialism; one just has to take the conjunction of all these accounts as the 'form'. But there are two obvious problems with this proposal; first, that the accounts, while they may all fit the dogs I have owned (they all had fairly typical DNA, I assume; they all belonged to a large class of interbreeding mammals; none of them was a wild dog or a dingo), do not pick out exactly the same *class* of things. Second, while I doubt that speaking of

'all' the accounts has any clear sense, it is likely that if one had sufficiently many contextually appropriate specifications of what is meant by 'being a dog', all of which fit my last dog ('Shlomit'), the *conjunction* of *all* of them would fit *only* Shlomit. Perhaps Haldane is willing to accept this consequence – but I don't think much is left of *Aristotle's* notion of 'essence' if he does.

The explanatory value of form

'Form exemplified naturally makes the dog to be a dog' [ibid.]. If Shlomit's form was 'being a dog' (in any of the above senses of 'being a dog', or in any other contextually appropriate sense), then this seems to say that 'Being a dog makes Shlomit to be a dog', and this sounds either tautological or nonsensical to me.

Haldane's avowed purpose in this paper was 'to suggest that one cannot enjoy the benefits of Aristotelian epistemologic realism with accepting aspects of its attendant metaphysics.' I can go part of the way with this. If the idea that ways things can be are both worldly – things 'out there' *are* some of those ways – and available to thought, contrary to the idea of a sharp 'concept/property' dichotomy, is 'an aspect of Aristotelian metaphysics', then I do accept 'aspects of its attendant metaphysics'. But I still find Aristotelian essentialism incoherent.

7 The causal theory of perception and direct realism

Tadeusz Szubka

In his recent *Dewey Lectures* Putnam undertakes a radical improvement of what he takes to be 'a middle way between reactionary metaphysics and irresponsible relativism' (Putnam 1994b: 447), or, to put in less committed words, between metaphysical realism and radical anti-realism, that is, between the view that assumes not only that reality is mind independent but also that the way in which it is structured uniquely determines the totality of its correct descriptions, and the view that makes even the external reality dependent on our mental activities, interests, etc. At the present stage of the development of his views, Putnam wants to approach as closely as possible the old good realism of the common man by defending some form of direct realism in the theory of perception (or, as he prefers to call it, 'natural realism'). This move is motivated not just by Putnam's characteristic 'and constant dissatisfaction with the former formulations of his own views; besides that it is driven by realising that while being preoccupied with issues in the philosophy of language and mind, he has unduly neglected the more fundamental issues concerning the nature of perception. In his opinion this has been a particularly bad metaphilosophical strategy, since without a satisfactory account of perception one cannot see 'how thought and language hook on to the world' and resolve the question of realism.

In the course of developing his account of perception (heavily influenced by views of William James, Ludwig Wittgenstein, John L. Austin and John McDowell), Putnam tries to argue that, contrary to what is widely assumed, any form of the causal theory of perception is incompatible with direct or natural realism.[1] In what follows I shall first present and critically assess that claim. In the next step I shall try to illustrate and support my criticisms by a short exposition of Peter F. Strawson's account of perception, which in Putnam's opinion 'mixes a genuine strain of natural realism with a wholly incompatible "causal theory of perception"' (Putnam 1994b: 455). I shall finish with some remarks about two kinds of causal theories of perception in order to show that Putnam's attack, charitably interpreted, applies only to one kind of those theories.

Putnam on the causal theory of perception

Putnam believes that the causal theory has become the dominant account of perception from the seventeenth century onwards. According to that theory, he writes

> the objects we perceive give rise to chains of events that include stimulations of our sense organs, and finally to 'sense data' in our minds. In materialist versions of the theory, 'sense data' are assumed to be identical with physical events in our brains; in recent variations on the materialist theme inspired by cognitive science, these events in our brains are said to be a subset of the 'mental representations', or to be the outputs of certain 'modules', etc.
>
> (Putnam 1994b: 467)

This construal of the causal theory of perception is broad enough to ascribe it justifiably to anyone who is not tempted by Berkeleyian idealism (or at least, by some version of it) and assumes that there is the external world, as well as thinks that our perceptual experiences[2] are somehow dependent on the way the world is. Of course, there is a long way from these two claims to what can be taken as a *theory* of perception. And at exactly what theory of perception one arrives by the end of the day depends heavily on various factors, especially on the account one gives of perceptual experiences and their ontological status. Since these accounts range from taking them to be immaterial sense data to identifying them with a special subclass of neural or brain events, there are at least as many theories of perception as there are accounts of experiences. But despite that diversity, all of them may be roughly divided into two groups: traditional empiricist theories, and contemporary materialistic accounts.

For the advocates of the theories belonging to the first group perception of the external world takes really place 'inside' our minds. That is to say, having various perceptual experiences should be interpreted as the awareness of some mental or immaterial items, or some neutral items (i.e. the items having neither material nor immaterial nature). But whatever the fundamental nature of those items is, all the theories in question make it clear that our perceptual experience and its content is, as Putnam puts it, wholly contained in

> a realm where there are certainly no tables and chairs or cabbages or kings, a realm so disjoint from what came to be called the 'external' world that (as Berkeley insisted) it makes no sense to speak of any experience as *resembling* what the experience is 'of'.
>
> (Putnam 1994b: 468)

However, the advocates of those theories usually assume that 'external' things are *causes* of so conceived perceptual experiences. Although then we

are directly aware of those experiences, one might insist that in some cases we also 'indirectly perceive', or are 'non-immediately aware' of, things and facts in the external world. But since there is no perfect resemblance or match between the contents of perceptual experience and the external world not everything what we are immediately aware (e.g. colour and other qualities) is out there in the world, and even if it is, it may be of a quite different nature than our senses suggest. According to Putnam the account of perception along those lines was promoted, among others, by René Descartes, David Hume and Bertrand Russell.

The main change introduced to that picture of perception by the advocates of the other group is their insistence that the mind is to be identified with the brain. And this identification forces us to give a different ontological account of perceptual experiences. They no longer can be thought of as immaterial or neutral sense data or impressions but have to become physically realized representations in the brain, conceived as the final output of our sensory apparatus based on so-called external senses of sight, hearing, touch, taste and smell, as well on proprioception. But in spite of that there is a striking similarity between this materialistic account of perception and the more traditional empiricist theories, because the advocates of the former find it irresistible to

> think of some of the 'representations' as analogous to the classical theorist's 'impressions' (the cerebral computer, or mind, makes *inferences* from at least some of the 'representations', the outputs of perceptual processes, just as the mind makes inferences from impressions, on the classical story), and (2) to think that those 'representations' are linked to objects in the organism's environment only causally, and not cognitively (just as impressions were linked to 'external objects' only causally, and not cognitively).
>
> (Putnam 1994b: 453)

Taking this similarity into account, one may plausibly argue, Putnam insists, that the theories of perception belonging to those ontologically opposing groups give nonetheless the following common account of acquiring knowledge of the external world. First, the external things in our environment impact upon us, causally producing in our minds perceptual experiences of all sorts. One can put forward more or less plausible conjectures about this causal chain, but we, as perceiving subjects, are not immediately aware of the causal chain in perception. Second, perceptual experiences occurring in our minds are essentially conscious and we have a special epistemic access to them. Strictly speaking, perceiving consists in their immediate awareness; they are the objects of perception in the proper sense. Third, we have a natural disposition or tendency to take the perceptual experiences as the 'signs', or 'symbols', or 'representations' of the external world, as revealing to us the way the world is. And since this

disposition or tendency seems to be pretty well supported, we can claim to know or perceive (in a very extended use of the latter term) external things.

But putting aside such an extended use of the phrase 'to perceive the external things', any version of the causal theory perception seems to be incompatible, Putnam claims, with direct or natural realism. This is because according to the latter what we are really aware in normal, 'veridical' perception are objects, properties, events, etc. that belong to the common, external world. More vaguely, but without engaging in the controversial issue of the ontological structure of the external world, direct realism holds that in perception we are in genuine cognitive contact with the world, that our perceptual experiences are '*ab initio* encounters with a public world' (Putnam 1994b: 486). If one postulates some intermediaries in those encounters, then one should not be considered a direct realist properly speaking, even contrary to what is widely assumed. For instance, although Thomas Reid and Charles S. Peirce are usually called 'direct realists' neither of them, Putnam maintains, is a direct or natural realist in his sense, since in the philosophical account of perception both are inclined to introduce the idea of internal mental 'signs' of external things. Even further remote from natural realism are various attempts to achieve it for cheap, e.g. via a simple linguistic reform, as John Searle seems to do when he claims that according to his theory the objects of perception are not sense experiences, since we do not *perceive* them, we simply *have* them; hence, what we really perceive are some bits of the external world.

Having some idea of what Putnam means by 'the causal theory of perception' and 'direct or natural realism', we can now consider what arguments may support the claim that the causal theory of perception is incompatible with direct realism. It seems that in order to establish this incompatibility claim in general Putnam would have to make a convincing case for the following two statements:

S1 Only causal relations hold between the external things and our perceptual experiences.
S2 Our conscious perceptual experiences occur in our minds/heads, and therefore what we really perceive, or are aware of, are the occurrences taking place there, and not the way the world is.

There seem to be two strategies of establishing S1. One would amount to invoking the principle of exclusion, to the effect that obtaining of a causal relation between two items exclude obtaining between them a cognitive or epistemic relation. No doubt, this principle together with the factual claim that between our perceptual experiences and the external world obtains a causal relation, would definitely settle the matter. But from the point of view of Putnam's argument, the principle is apparently too strong, since right from the beginning it entails that the causal theory of perception is incompatible with direct realism. Thus by making use of it Putnam would

simply beg the question, instead of producing a sound argument for the incompatibility in question. In addition, although very often invoked, the principle of exclusion and the dichotomy causal–epistemic is rather problematic for another reason. Of course, it is trivially true if the causation in question comprises only some kind of efficient mechanical causation that is instantiated by, say, one billiard-ball hitting another. Certainly none of the epistemic or cognitive relations has this simple, mechanical character. But as soon as one takes into account varieties of causal mechanisms and causation, the dichotomy becomes unclear and questionable. It seems reasonable to suppose that there are complex and higher-order causal processes that provide us and other living creatures with reliable information about the world. Since they enable us to see how the things are around us, there is every good reason to call them cognitive or epistemic processes. Not really, the defender of the dichotomy, might reply. They are after all brute, non-rational processes that produce in us certain beliefs in the way quite different from the way in which we accept beliefs in 'the space of reasons', where normative considerations apparently play the decisive role, that is, where we come to believe something as the result of realizing that we are justified to do so in light of available evidence, inferential relations holding between beliefs, and the like. Putting aside the precise content of suggestive but elusive talk about 'brute, non-rational processes', this contrast, one may argue, does not seem to be right. The outcome of causal perceptual processes is also rationally assessed and in some cases undercut by appeal to a body of supposedly well-established evidence and a background theory.

If this is indeed so as the above considerations suggest, then, arguably, Putnam has no choice but to adopt the second strategy, by saying that between the external world and our experiences only causal relations obtain, because what we are immediately aware are the occurrences in our minds, and not the external objects. But then S1 becomes wholly dependent in its justification on S2. Thus the crucial question is whether they are any plausible ways of establishing the truth of S2 in general. I believe that the answer is simply 'no'. From the obvious fact that our perceptual experiences take place in our minds/heads it by no means follows that what I am immediately aware in perception are merely certain mental/brain events, or, as Putnam sometimes puts it, 'affectations of our subjectivity', that according to Cartesianism *cum* materialism amount to 'alterations of our brain states' (Putnam 1994b: 454, note 24). It does not follow, one can claim, because we are not only immediately aware of the fact that we are perceiving, that is having certain perceptual experiences, but also of what is perceived, that is the content of those experiences. And there is no obvious reason why this content cannot present to us the way the external world is. Briefly, it looks perfectly coherent to hold that our perceptual experiences are in general caused by the external world, and that in virtue of their content they represent the world as being a certain way.

Let us recapitulate what has been said so far. Putnam wants to defend the claim that any form of the causal theory of perception is incompatible with direct or natural realism. There seems to be two general strategies of supporting that claim. However, both are faulty. Thus there is nothing incoherent in the idea of a theory combining a causal account of perception with direct realism. Indeed, there are a number of such theories. One of them can be found in the writings of Peter F. Strawson.

Strawson's account of perception

Strawson begins his account of perception with an attempt to give a faithful phenomenological account of our perceptual experience.[3] The first thing to note, he claims, is that if we don't want to distort or misrepresent the character of the perceptual experiences we usually enjoy, we have to describe their content in terms of concepts referring to the external world's objects, properties, etc. For example, in response to the request of giving an accurate description of our perceptual (or, strictly speaking, visual) experience that we enjoy while looking through the window, we would have said the following: 'we have the perceptual experience of seeing a tall tree with green irregular leaves against a red brick building'. If pressed to give a less committal description of it, we would presumably answer: 'we have the perceptual experience that we normally have while looking at a tall tree with green leaves against a red brick building'. Under no circumstances, or under very special and rare ones, we would be inclined to produce the description of our perceptual experience in terms of our internal sensations or 'affectations of our subjectivity', that is to say, in terms of colours, patches and patterns. This, Strawson holds, entitles us to claim 'that the employment of our ordinary, full-blooded concepts of physical objects is indispensable to a strict, and strictly veridical, account of our sensible experience', and to conclude 'that mature sensible experience (in general) presents itself as, in the Kantian phrase, an *immediate* consciousness of the existence of things outside us', provided that 'immediate' does not mean here 'infallible' (Strawson 1979: 46–7).

There are a few important conclusions that can be drawn from the above description. The most important amounts to the following: it is inappropriate to claim that when we make judgments about the external world we somehow go beyond the content of our perceptual experience. To put it in a slightly different way, what we say about the external world does not usually have the status of something inferred from the content of perception, the status of a theory in relation to the evidence provided by perceptual experience. The reason for that seems to be simple: in order to regard something as a theory in relation to some data or a body of evidence, it must be possible to describe the latter in terms that do not presuppose or make heavy use of the theory for which they are supposed to constitute evidence. But that condition cannot be satisfied when we have, on the one

side, perceptual experiences and, on the other side, ordinary claims about the external world. The latter seem to be present, although very often implicitly and inchoately, in the former. As Strawson puts it:

> Sensible experience is permeated by concepts unreflective acceptance of the general acceptability of which is a condition of its being so permeated, a condition of that experience being what it is; and these concepts are of realistically conceived objects.
>
> (Strawson 1979: 45)

However, drawing this conclusion, one should notice as well that neither it nor any other element of the phenomenological description of perception furnishes us with an incontrovertible argument against scepticism, or phenomenalism, or indirect realism. What we are justified in claiming is only that all of this strongly suggest that our natural and unreflective, but faithful, description of perception make those philosophical views highly incredible, and thus the initial onus of proof rests with their advocates. Moreover, one should remember that the forgoing description applies only to perceptual experiences that we *usually* enjoy. So it does not exclude the possibility of having in some circumstance such experiences that it would be totally inappropriate to employ the full-blooded concepts of physical objects in characterising the content of those experiences. For example, instead of seeing a tall tree with green irregular leaves against a red brick building, one might, with more or less effort, take a step back, as it were, and see a complex pattern of various lines, shapes and colours set against a background of rectangular red shapes. But this happens rarely, and if it does, we would not be able to give a description of the content of those unusual experiences without knowing how to describe the content of usual or ordinary experiences.

The phenomenological account of perception, or the commonsense view of perception (as Strawson calls it as well) that amounts only to the claim that sensory experience should be conceived as an immediate awareness of the external world would not be complete. In order to make it complete one should incorporate into it also the idea that our perceptual experiences depend causally upon their objects. Although it is very often thought that this claim about causal dependence is a very sophisticated and theoretical addition to the commonsense view of perception, Strawson maintains that this is totally wrong. He writes:

> The idea of the presence of the thing as accounting for, or being responsible for, our perceptual awareness of it is implicit in the pre-theoretical scheme from the very start. For we think of perception as a way, indeed the basic way, of informing ourselves about the world of independently existing things: we assume, that is to say, the general reliability of our perceptual experiences; and that assumption is the same

> as the assumption of a general causal dependence of our perceptual experiences on the independently existing things we take them to be of. The thought of my fleeting perception as a *perception* of a continuously and independently existing thing implicitly contains the thought that if the thing had not been there, I should not even have *seemed* to perceive it. It really should be obvious that with distinction between independently existing objects and perceptual awareness of objects we already have the general notion of causal dependence of the latter on the former, even if this is not a matter to which we give much reflective attention on our pre-theoretical days.
>
> (Strawson 1979: 51)

If the argument contained in this passage is correct, one may wonder why are we so reluctant to admit that the idea of causality is an integral and indispensable part of the natural or commonsense view of perception. According to Strawson, there are two reasons for that reluctance. One arises from the worry that the content of veridical perceptual experience and its object are related in such a way that it would be inappropriate to describe that relation as a causal one. That is to say, it seems that the correct description of a veridical perceptual experience of a certain external object *logically* requires the existence of that object, and that already exclude the possibility of obtaining a causal connection between perception and its object, since only logically distinct items can be causally related. Strawson thinks that this difficulty may be easily overcome by pointing out that there plenty of other cases in which supposedly logical relations presuppose or require some causal component (causal theory of memory and causal theory of reference are good examples here). One should simply notice that a necessary condition of something to be the correct description of a veridical perceptual experience of a given object (that is, the description of the perceptual experience that logically require the existence of that object) is obtaining a causal relation between the object and the perceptual experience. In other words, one cannot have the correct description of a veridical perceptual experience of an object without a causal contribution of that object in producing the experience in question.

The other reason for the reluctance to recognise a causal component as an integral part of the pre-theoretical view of perception is a picture of causality inherited from Hume. According to that picture causality reduces to the regularity of succession of events or other items, and hence to detect that regularity the causally related items must be not only distinct but also independently observable. Of course, the latter requirement cannot be satisfied in the case of any perceptual experience and its object, and thus it does not make sense to claim that perceptual experiences and their objects are causally related. This line of argument could be obviously undermined by rejecting Human picture of causation. But Strawson himself proposes a less ambitious response. He simply points out that the observability requirement

has to be satisfied in the case of causal relations holding between distinct objects of perceptions, but not between perception and its objects. The latter relationship is in some sense unique. That is to say,

> when *x* is a physical object and *y* is a perception of *x*, then *x* is *observed* and *y* is *enjoyed*. And in taking the enjoyment of *y* to be a perception of *x*, we *are* implicitly taking it to be caused by *x*.
>
> (Strawson 1979: 52)

Certainly, those two reasons provide a plausible explanation of one's reluctance to incorporate the causal thesis into our common or pre-theoretical view of perception. But is it really true that the causal thesis is so inextricably connected with the basic, platitudinous truths about perception, as Strawson presents it in the passage quoted before? The argument in the passage seems to consist of two independent, although perhaps mutually supportive, sub-arguments. The first (A) has the following steps:

A1 we think of perception as the basic way of acquiring information about the external world;
A2 we assume the general reliability of perceptual experiences;

therefore

A3 we assume a general causal dependence of our perceptual experiences upon their objects.

One can agree with Strawson that A1 entails A2 (and indeed vice versa). But does A3 follow from A1 or A2, or as Strawson suggest, is A3 really 'the same as' A2? Does the general reliability of perceptual experiences amount to their causal dependence upon appropriate objects? Apparently not, if 'the same as' and 'amount to' means here 'is (strictly) equivalent to'. The only reasonable option then is to say that Strawson has in mind here something much weaker, namely, that the best explanation of the reliability of perception is the causal dependence of perceptual experiences upon their objects. Provided that the causal account is here the only serious candidate for being the best explanation in that case, one can perhaps claim that the assumption of the general reliability of perception amounts in some weak sense to the causal account of it.

The second Strawson's sub-argument (B) can be perhaps formulated as follows:

B1 the idea of perception contains the distinction between perceptual experiences and their objects;
B2 most of the objects in question are taken to be independently existing objects;

therefore

B3 perception of independently existing objects requires a causal dependence of relevant perceptual experiences upon those objects.

The first thing to note about this reasoning is that B2 cannot be taken as following, in any sense, from B1. It is one thing to say that any fully developed thought about perception involves the distinction between having some perceptual experiences and that what is perceived in virtue of having them, and the other thing to claim that what is perceived are usually independently existing objects. Perhaps one could plausibly argue that it would be extremely difficult to make sense and draw the distinction without having the idea of independently existing objects but that does not mean that without possessing this idea it would be impossible to do that. Moreover, B3 does not follow from B1 and B2. However, one can again insist that Strawson should be taken here as arguing that the causal story is the only plausible explanation of how it is possible to perceive independently existing objects, that is, the explanation that does not invoke pre-established harmony, parallelism, or God's miraculous intervention. On the commonsense or pre-theoretical level this causal story reduces essentially to the counterfactual claim 'that if the thing had not been there, I should not even have *seemed* to perceive it'[4] but it certainly can be developed and substantiated at a more advanced theoretical level.[5]

The final and concluding step of Strawson's account of perception is his critical discussion of legitimacy of the commonsense view of perception. That is to say, Strawson tries to meet the challenge that this view gives us only an account of perception as it naturally *appears to us*, but not an account that reveals to us the real nature of perception. The latter – the challenge continues – should be based on the results of science that support the view according to which many of the perceptible properties of the external things, e.g. colour, are subjective, that is, there are not out there in the world. Hence the external objects are in certain respects different from the things as they look to us in ordinary perception. Strawson suggests that the best way out of this conflict between commonsense view of perception and its scientific rival is to recognise a certain relativity in our perception of the world. We very often say, for instance, that a given thing looks red in this peculiar light and maintain that it is green in normal daylight, as well as acknowledge that when appropriately magnified it appears to be blue and yellow (i.e. its surface really consists of blue and yellow dots). These ascriptions are not inconsistent, since they have been made in different circumstances and from different standpoints. In the same vein we may say that the scientific view of perception does not conflict with the ordinary direct realism – it is simply a result of a very radical shift to a viewpoint from which the only qualities or properties ascribed to objective things are those that figure in scientific theories. To use another

example, it seems that the picture of the world suggested by the scientific account does not conflict with the conception of objective things as possessing visual or tactile properties in the same sense in which the statement that blood is in fact almost colourless does not conflict with the statement that it is bright red. So this strategy reconciles the scientific account and the commonsense view of perception by introducing some relativity in our conception of the real properties of external or physical objects: relative to the human perceptual standpoint the ordinary physical objects are visuo-tactile continuants and their phenomenal properties are relative to particular perceptual viewpoints; relative to the scientific standpoint, they have only properties that figure in the scientific theories.

This relativising strategy raises a lot of interesting questions. However, their discussion would undoubtedly lead us far away from the main topic of the paper. Let us close then this section by emphasising that for Strawson the causal story is fully compatible with the direct or natural realism and it seems even to be a fundamental and indispensable component of the latter.

Putnam's criticism again and two kinds of the causal theory

How might Putnam rebut this conclusion? He could argue that Strawsonian account of perception simply trivialises the causal component, and assigns it a minor and subsidiary role. What really does the trick here, he would continue, is the idea of the (intentional) content of experience that is supposed to present the world as being a certain way. If the theory claims that this is not the end of the story, since the notion of intentional content can be further analysed in purely causal terms, then, for sure, it will be the causal theory of perception in the full sense. However, given that, it cannot escape the 'disastrous' conclusion that we are related to the world only by way of cognitively 'blind' causal processes.

This reply suggests that it might be useful to distinguish clearly between two kinds of causal theory of perception: reductive and non-reductive. According to the theories of the first kind the ultimate and exhaustive philosophical account of perception will involve only causal terms. This means that the notion of perceptual experience presenting the external world should be eliminated from the final explanation of perception, that is to say, replaced by some causally affected stimulations of our sense receptors that are subsequently processed in our central nervous system and brain in a way that produces our dispositions to behaviour or actual behaviour itself. In other words, the fundamental explanatory account of perception can safely dispense with ordinary notions of having sensations or perceptual experiences, as well as with philosophical terms of art as intentional content of experience, and proceed by describing in detail the causal chain that begins with some object in the external world and ends with a particular behaviour.

This reductive strategy may be implemented in a radically revisionary manner: as a part of a larger enterprise to replace, supposedly false, ordinary conception of our mind and its relation to the world by, supposedly true, scientific account of those matters. We can easily envisage Paul Churchland, or one of his followers, arguing in the following way: perceptual experiences possessing intentional content, along with contentful beliefs and desires, are of a piece with phlogiston, caloric, and all alchemical essences. We really need an entirely new kinematics and dynamics with which to comprehend human cognitive activity, including perception, one drawn, perhaps, from computational neuroscience and connectionist AI. Our common understanding of ourselves and our cognition could then be put aside in favour of this descriptively more accurate and explanatorily more powerful portrayal of our mind.[6]

However, there are also less drastic ways of executing the reductive strategy that do not dispense with the notion of perceptual experience possessing intentional content but rather try to show how such an experience is constituted by familiar relations between physical items. The proponents of that approach do not think that it is a mistake to invoke in our explanation the notion of intentional perceptual experience, but rather that it is a mistake to assume that this notion cannot be further explained in causal and physicalist terms. To put it in currently fashionable, though hopelessly vague jargon, the project of naturalising intentionality is feasible. A nice example of that approach is the theory of sense experience proposed by Fred Dretske.[7] It combines teleological and information-theoretic ideas. Very roughly, Dretske assumes that in addition to a causal relation obtaining between perceptual experiences and their objects, there is something more that gives them their intentional content, their capacity to represent those objects. This something more amounts to the fact that those experiences have been evolutionarily designed to function as indicators, or providers of information about, the objects. One can say then that possessing by perceptual experiences intentional content, their capacity to present the world as being a certain way, can be fully accounted for in terms of certain correlations holding between our states, or, more broadly, the states of sentient creatures, and the states of the external world, that have been evolutionarily selected. The details of that account are not important in the present context. What is really important is the conviction that:

> By conceiving of mental facts – and, in particular, those about sense experience – as part of the natural order, as manifestations of overall biological and developmental design, one can see where intentionality comes from and why is there. In each case, intentionality is real enough, but it turns out [. . .] to be really something else.
>
> (Dretske 1995: 28)

It should not be overlooked that this passage contains two, strictly speaking, logically independent claims. One is a vague idea that mental facts

with their characteristic intentional content constitute a part of the natural order, a part whose coming into being and function can be explained in terms of evolutionary biology. In other words, there is nothing mysterious and supernatural about mental realm, its intentionality, and the like. The other claim is a more controversial contention that intentionality or intentional content are not basic phenomena; they are real enough but in their essence they are something else, something physical or biological. Briefly, sooner or later they should be explained away as not belonging to the ultimate furniture of the world.

There seems to be a significant number of philosophers quite happy to admit that intentional phenomena, including perceptual experiences, are in some sense a part of the natural world but refusing the reductive idea that ontologically they are not 'deep' enough and in their essence they are something else. Arguably, most of them would be ready to accept a non-reductive causal theory of perception of some kind, that is, the theory according to which our causal interaction with the world (or, to put it more precisely, some specific form of it) gives rise in us to perceptual experiences that have intentional content, that is, present the world as being a certain way. And though the latter relation may to some extent be dependent on, or supervene upon, familiar physical or causal relations it is really something *sui generis* and irreducible to them.

Presumably, there might be some proponents of the non-reductive causal theory of perception who would feel that this picture of perception, although correct in the general outline, is nonetheless a bit too dualistic. Perception does not really consists of two separable components: a some causal relation obtaining between the external world and the human mind, and some unique intentional and epistemic relation holding between our perceptual experiences and the external world. A more accurate picture of perception should display it as a complicated, higher-order process in which causal and intentional components are intimately intertwined and mutually dependent. After all it seems to be a necessary condition of obtaining a perceptually relevant causal relation between a given object *O* and a given subject *S* that *S* has some perceptual experience presenting that object, and it seems to be a necessary condition of having by *S* a veridical perceptual experience of *O* that between it and *S* holds a causal relation of the right kind. So perhaps a better route to a non-reductive causal theory of perception is not by way of emphasising the irreducibility of the intentional but rather by attacking the distinction between causal and intentional, or between causal and epistemic.

Be that as it may, that particular disagreement is not of much relevance here. What is relevant is the theoretical possibility of non-reductive causal theories of perception and the fact that there are advocates of such theories. Peter F. Strawson seems to be one of them. Given that, Putnam's incompatibility claim needs to be drastically revised. That is to say, the strictly general claim that *any* form of the causal theory of perception is

incompatible with direct realism should be replaced by the more restricted and modest statement that *some*, reductive or physicalistic, forms of the causal theory of perception are incompatible with direct realism. And indeed, one or two passages in Putnam's writings suggest that this is what he really has in mind (e.g. Putnam 1994a: 289). Moreover, his detailed criticisms and attempts to support the incompatibility claim are focused on such reductive theories.

The most serious of Putnam's detailed criticisms are directed against the claim that sensory experiences are simply identical with brain states, which is, arguably, an essential part of physicalist causal theories of perception. But identical in what sense? Putnam discusses and rejects two different and widely held answers on that question: (1) the identity in question is the identity of theoretical identifications; and (2) the identity in question is anomalous token identity. The initial plausibility of the first answer is based on many well known cases of successful theoretical identification in science (e.g. identification of light with electromagnetic radiation of a certain kind). But in the particular case that is at stake here, Putnam argues, unlike in many other cases, we have neither a clear idea of the theory in which the ordinary notion of sense or perceptual experience is embedded, nor a precise idea that the theory adequately characterises those physical, or biological, or computational items with which perceptual experiences could be safely identified. Of course, in order to make that contention defensible, one has to make clear that 'having a precise idea' require much more than 'the proffering of promissory notes for possible theories that one does not even in principle know how to redeem' (Putnam 1994b: 481).

The second answer suggests that the required identity can be achieved in a less demanding way by identifying particular perceptual events with particular physical events, while agreeing that more theoretical and general identifications at the level of types of the relevant events or states are doomed to failure. But the supposedly modest proposal assumes that one possesses clear criteria of identity for particular events to be identified, and that assumption raises a lot of problems. For instance, what are the criteria of identity for a particular neuronal event (the firing of a small group of neurons) with which a particular experience of a given blue object is to be identified? If we do not have them, we are left with a criterionless and very peculiar sort of 'identity'.

It is true, one might agree, that most of Putnam's powerful criticisms are directed against physicalist theories of perception. But not all of them. He also argues that early modern theories of perception endorsing usually the causal theory of perception of some kind are in the same way incompatible with direct realism as their recent physicalist successors. And it is *prima facie* implausible to suppose that early modern philosophers were advocating causal theories of perception which could be classified as reductive. After all, most of them were staunch dualists, strongly convinced that mind, including its perceptual experiences or sense data, is immaterial. Hence it

does not seem correct to insist that Putnam's detailed criticisms are confined only to reductive causal theories of perception.

It is still correct, one might respond. Although prevailing reductive causal theories are physicalist ones, it does not follow that by being anti-physicalist and holding that a causal theory of perception is on the right track, one has no choice but to accept its non-reductive version. It should be stressed that the causal theories of perception are divided into reductive and non-reductive not according to their views about physical or non-physical nature of the mind, but according to the way they treat the notion of perceptual content and intentionality. And in that respect, which may sound a bit surprising, early modern philosophers combined very often immaterialist account of mind with the reductive approach to intentionality. That is to say, they regarded sense perception or sense data not as entities possessing intentional content presenting the external world but as immaterial mental items being merely correlated with objects in the external world. This is made particularly clear by those who nowadays want to continue the spirit of that tradition by, among other things, attacking physicalism and defending the sense datum theory. For example, in one of such attempts we find the following description of what the sense data are supposed to be (Robinson 1994: 1–2):

1 they are something of which we are aware;
2 they are non physical;
3 their occurrences are logically private to a single subject;
4 they possess standard sensible qualities as shape, colour, loudness etc.;
5 they possess no intrinsic intentionality, that is, although they may suggest to the mind through habit other things 'beyond' them, in itself they possess only sensible qualities which do not refer beyond themselves.

As far as the notion of intentional content of perceptual experience is concerned, this is certainly a full-blooded reductive position: perceptual experiences do not have intrinsic intentionality and the ability to refer beyond themselves, and the appearance of that arises due to our habit and perhaps some other factors, including causal ones. So the claim that Putnam's detailed criticisms apply only to the reductive causal theories has not been undermined.

To conclude I have been trying to show that Putnam's bold thesis that any form of the causal theory of perception is incompatible with direct realism cannot find support in general arguments that do not essentially depend upon the details of particular versions of the causal theory. His detailed criticisms against some of its versions look more promising, although they seem to be limited in application merely to the reductive causal theories of perception. Non-reductive causal theories can easily avoid them, and thus they are perfectly compatible with direct realism. It is also quite plausible that one might elaborate a causal theory in such a way as

to make it congruous with the non-Cartesian picture of the mind that Putnam currently favour, that is, the picture of the mind as a set of abilities or capacities of human being, that do not constitute a self-standing realm and 'involve' the external world's objects. And by doing that one might even achieve some analytic progress in clarifying what this 'involving' is supposed to mean in that context.

Comment on Tadeusz Szubka's paper

Hilary Putnam

The 'direct realism' (I agree with Austin that the term is unfortunate, which is why I prefer 'commonsense realism') that I defended in my *Dewey Lectures*[8] is not a new scientific theory, nor is it a program for cognitive science; it is a *conceptual reorientation*. If it has consequences for cognitive science, it is only in suggesting that certain approaches have been neglected.[9] What I am attacking is a line of reasoning that ends up with the view as holding that whenever we perceive anything what is really 'present to the mind' is a little picture, and that whenever our perceptions are 'the same', the 'numerically identical' little picture, is present to the mind. In Jerry Fodor's form of the theory, for example, the little picture is the output of a localized assembly of neurons that he calls a 'module'. I have heard him refer to this (hypothetical) neural event as an 'appearance' (i.e. a sense datum). If Fodor were right, it would be possible to have a sense datum in a test tube! In short, the disastrous view is that (1) there *are* sense data; and (2) they are identical with neural events. (Part of what I claim to have shown in my Royce Lectures, Part II of *The Threefold Cord* (Putnam 1999), is that NO neural events have the properties that are ascribed to 'sense data'. In the *Dewey Lectures*, Part I of *The Threefold Cord*, I also claim to have shown that the supposed need to postulate such *objects* as 'sense data' is non-existent.)

But the confused view I am trying to orient us away from begins a long way earlier. It begins, in fact, with the idea that the mind is a *thing*. It is part of our best scientific picture that perception is supervenient on material processes. But it doesn't follow from that that perception is supervenient on process in the *brain*. In fact, I argue that it isn't; perception is *transactional* [the term is Dewey's]. And that is compatible with supervenience, because transactions between the eye and the things 'out there' that we see are also material. Seeing a tree is supervenient on material processes. Why would anyone think that they must all be inside the brain? The answer, I think lies in the assumption that *cognitive* processes are confined to the brain. But why would one think that, unless they assumed that the mind is a thing, and if it is a thing. What can it be but the brain? (The picture that drives this line of thought is that there has to be this *place*, the inner theatre.) On this much, I take it, we agree.

One question you are concerned to raise is whether I was fair to Strawson, whose 'causal theory of perception' I criticized (in Putnam 1994b). Let me try to explain *why* I criticized it.

One traditional objection to what I just called a 'transactional' account of perception is that the object that I am 'directly' given in a perceptual experience can be 'the same' whether the experience is veridical or not. But when the experience is totally non-veridical, there is nothing 'out there' that I am having a perceptual transaction *with*. So the object cannot be 'out there', and hence it must be 'in here', i.e. in the mind/brain. This objection assumes that it makes sense to ask whether *appearances* ('sense datum' is just a fancy term for appearances, after all) are *numerically identical*. But appearances are *distinguishable* or *indistinguishable*, not numerically identical or non-identical. And indistinguishability, which is the notion of 'sameness' appropriate to appearances, isn't a *transitive* relation – which means it cannot be numerical identity.[10] The principle that 'If a veridical and a non-veridical perception are qualitatively indistinguishable, then the "appearances" involved are numerically identical' (or rather, a principle to that effect) has been called 'The Highest Common Factor' principle by John McDowell; my criticism of Peter Strawson's views on perception, in brief, is that he appears to accept the Highest Common Factor Principle.

As I read Strawson, in fact, his theory resemble Reid's eighteenth century theory. In theories of this kind, there is a sense datum which is wholly inside the mind, but our conceptualization involves external objects. When I have the appropriate sense datum (an entity which does not in any way presuppose the existence of, say, *trees*), I form the external-world involving perceptual belief that there is a tree in front of me, or the belief that I see a tree, or some such belief. As both John McDowell and I have argued, this simply makes the referentiality of the belief a magical property. If we are not in genuine cognitive contact with trees in perception, then it is a mystery that we can be in genuine cognitive contact with trees in conception.

Many philosophers (though not Strawson) have tried to 'solve' the problem (a problem created – notice! – by the attempt to combine Cartesianism and materialism) by 'reducing' reference to counterfactuals (in turn explained via 'possible worlds'!), or to statistical correlation [Dretske] or some such shuffle. The strategy of commonsense realism (or 'direct' realism) is very different. It is to say that we have to accept unreduced normative notions, unreduced intentional notions, unreduced cognitive notions generally.

But reductionism is not the only issue here. The other issue is *connection*. It is in general an error to try to reduce one of our language-games to anything that looks on the surface like a very different one. Generally, if they look different on the surface, then they really are different. It is the rare case when that is only an appearance. But it is equally an error to think, 'If these language-games – talk about appearances and perceptions, and talk about neurology, and talk about behavior, and talk about reference – are all different, then there are no connections.' I believe that analytic philosophy,

starting with logical positivism, and perhaps earlier, valorized one kind of connection too much. It valorized strict equivalence: biconditionals, definitions, finding out that *p* if and only if *q*. Such connections are rare. But 'softer' connections – 'When we conceptualize in *this* way, we rely on the availability of this *other* form of conceptualization' – are all over the place. And part of the impression that the only choice is between some reductionist program, on the one hand, or 'the end of philosophy', quietism, saying nothing, is the failure to see any interest in the enormous range of connections, connections between all our different language-games, which are still largely unexplored. For too often, unfortunately, we are still recycling positions in philosophy that were familiar to Kant before he wrote the first *Critique*; and we are only interested in what might support one of *those*.

Perhaps you want to say that I simply have gotten Strawson wrong, that he doesn't really believe in the 'highest common factor' principle. But then I can only say that (unlike McDowell) he has not really provided a clear and coherent account of where he stands on all these issues.

8 Functionalism, realism and levels of being*

John Heil

The writings of Hilary Putnam have played a leading role in shaping current mainstream conceptions of the mind. 'Psychological Predicates' (1967) and the subsequent mass of literature on functionalism, taught us that states of mind are functional states, mental properties functional properties.[1] From 'The Meaning of "Meaning"' (1975b) and *Reason, Truth and History* (1981) followed by an equally massive outpouring of articles and books by others, we learned that certain states of mind, those with 'intentional content', depend on something more than the intrinsic physical character of agents to whom they are ascribed. No one here needs reminding how influential both these doctrines have proven to be.

By the mid-1970s Putnam had turned against the first doctrine, functionalism (see Putnam 1973; 1975a; 1988), largely because of the difficulty of squaring functionalism with the second doctrine, (which I shall call) externalism.[2] This defection did not have the impact Putnam's original endorsement had. If there is today a dominant view in the philosophy of mind – and more broadly in cognitive science generally – it is functionalism in its many guises and permutations.

In contrast to his stand on functionalism, Putnam has not shown any inclination to abandon externalism. On the contrary, he has pushed the externalist program to new levels, levels it is sometimes difficult for us outsiders to distinguish from flat-out Berkeleyan idealism. I am inclined to think that this is where externalism naturally and inevitably leads, and that those philosophers who hope to incorporate an externalist conception of the mind into a more prosaic view of agents and their world as unexceptional material entities are riding for a fall.

In what follows, I shall set externalism to one side. My focus will be on functionalism as it has played out over the thirty years since the appearance of 'Psychological predicates'. This may seem an odd choice. After all, the source of Putnam's disenchantment with functionalism stemmed largely

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from work on semantics and intentionality. My suggestion, however, is that, as in the case of the smoker who gives up tobacco in middle age, by the time Putnam turned his back on functionalism, the damage was already done. Functionalism encouraged a picture of the world that survived its abandonment; indeed, some of the staunchest critics of functionalism are the picture's biggest fans (see, for instance, Baker 1987).

Before going further, I should lay my cards on the table. I am a realist; or maybe a *retro*-realist. A good deal of what I have to say here will seem positively barbaric – or at least quaint – to many of you. So be it. I suspect that realism is unavoidable.[3] If you are an anti-realist about some domain, you are a realist about some other domain. Take Berkeley. Berkeley is an anti-realist about material bodies, but a realist about minds and their contents: minds and their contents are 'mind-independent' in the sense that there being a mind or there being a particular idea need not imply that anyone takes it to be the case that there is a mind or that there is an idea. Your thinking of Des Moines does not imply that you, or anyone else, thinks that you are thinking of Des Moines.

I shall not press the point here. Rather I shall, as did the Putnam of 'Psychological predicates', assume realism about the mind and the world in which minds are located. I shall argue that discussion of minds and their contents has been misdirected by philosophers' allegiance to a particular principle I shall dub Principle (P). Principle (P), like most influential principles in philosophy, is rarely articulated. Indeed, many of those most under its sway would likely disavow it were it presented explicitly. Even so, Principle (P) continues to make itself felt, all the more because its effects are mostly behind the scenes.

I shall say what Principle (P) is in a moment. First, however, it is worth noting that acceptance of (P) underlies, not only a widely-shared conception of the mind but also a certain picture of the world, the layered picture: the world comprises layers of objects and properties, levels of being. Physics tracks the most fundamental level; the special sciences concern higher-level objects, their properties, and laws governing these; commonsense and morality come into play at still higher levels. Although higher-level entities, properties, and laws are in some fashion grounded in those at lower levels, higher levels are not reducible to – are not 'nothing but' – entities, properties, laws at lower levels.

What has this to do with realism? It is widely assumed that realists about a particular domain must accept (P) and regard (P) as satisfied for that domain. This is false. I shall urge abandoning (P), and abandoning, as well, the layered picture. As will become clear, however, the rejection of (P) is not a rejection of realism concerning anything we care very much about. Realists have enough problems without being saddled with those generated by (P).

Principle (P)

Let us begin with a question Putnam poses early on in 'Psychological Predicates': '"Is pain a brain state?" (Or, "Is the property of having a pain at time *t* a brain state?")' (Putnam 1975c: 429). Let me call your attention to the move from talk of pain and pain states to talk of the property of having a pain.[4] Implicit in this move is the idea that, if it is true that you are in pain, then you have a certain property: the property of being in pain. More generally, when a predicate truly holds of an object, it does so by virtue of designating a property possessed by that object and – presumably – shared by other objects to which that predicate truly applies. This is Principle (P). In philosophese:

(P) If a predicate, 'Φ', holds of an object, *o*, at *t*, then 'Φ' designates a property, Φ, possessed by *o* at *t*, and any object of which 'Φ' holds possesses Φ.

The idea is simple. A given predicate applies to diverse objects in virtue of picking out a property shared by those objects. This suggests that, if there is no such property, the predicate must be empty or used in some non-ascriptive way. Consider, for instance, a predicate like 'is good'. Does this predicate designate a property shared by objects to which it applies? Some say yes. These are the moral realists. Some say no. These are the moral anti-realists: error theorists, emotivists, and 'quasi-realists'.

Paul Boghossian, in explicating 'non-factualist' (that is, anti-realist) accounts of a predicate, '*P*', says that what such conceptions have in common is:

> (1) The claim that the predicate '*P*' does not denote a property and (hence)
> (2) the claim that the overall (atomic) declarative sentence in which it appears does not express a truth condition.
>
> (1990: 161)

Note the parenthetical 'hence'.

Why should we accept (P), in particular, why should we imagine that realism about Φ's implies anything like (P)? Perhaps the reason is this. Properties answer to predicates. If a predicate, 'Φ', straightforwardly applies to an object, then it does so in virtue of that object's properties. Think of an object's properties as ways the object is. Distinct – non-synonymous – predicates apply to an object in virtue of distinct properties possessed by that object. Consider an example borrowed from Martin (1980).

1 'the passion fruit is round',

and

2 'the passion fruit is purple',

might hold of a single object. These sentences hold of the object, not (in Martin's words) *holus bolus*, but in virtue of the object's properties. There is something about the object in virtue of which 'is round' applies to it, and something about it – something *else* about it – in virtue of which 'is purple' applies. These 'somethings about' are the object's properties.[5]

Talk of 'sharing' properties or of 'the same' property leads to thoughts of universals. On one natural reading, (P) implies the existence of universals. If objects answering to a predicate must possess the same property, and if 'the same' is taken in the sense of strict identity, then (P) does entail a commitment to universals: entities that can somehow be wholly present in distinct objects at the same time (see Armstrong 1989). This means, among other things, that, if you, an octopus, and an Alpha Centaurian share the property of being in pain at *t*, then, at *t*, the selfsame universal is wholly present in each of you. The trick of being wholly present simultaneously in distinct locations is one managed only by universals and the Holy Trinity.[6]

Many philosophers happily accept this result. It might be possible to endorse (P), however, without accepting the existence of universals. Imagine that when two objects 'share' a color, each is the same shade of purple, for instance, this means only that the objects are exactly alike with respect to color: the purple of one object is exactly similar to the other's purple. In this sense two ordinary people might share a passion for opera or wear the same tie to work. In such cases, talk of sameness is not talk of strict identity. 'Same' can mean, and often does mean, 'exactly similar'. When we speak of objects sharing a property or possessing the same property, then, we might mean only that each possesses a property exactly similar to a property possessed by the other. What should be noted, however, is that, whether we imagine predicates to designate universals or classes of exactly resembling properties, so long as we hold on to (P) we are committed to the idea that objects to which a predicate applies must be exactly similar in some respect.

You may find mention of properties, let alone talk of universals, disagreeable. My point at the moment is not to defend the reasoning behind (P), however, but merely to suggest that something like this might seem close to the heart of what it is to be a realist about a given predicate. Someone, for instance, who thinks that 'is good' does not hold of an object in virtue of some property possessed by that object, but is used instead to commend the object, is an anti-realist about the predicate 'is good'. Similarly, anyone who denied that 'is depressed' designates a genuine property possessed by all and only those creatures to which 'is depressed' truly applies, would seem to be an anti-realist about depression.

Suppose we embrace (P). What follows? Consider, the predicate 'is in pain'. An identity theorist hopes to find some neurological property corresponding to this predicate. In the 1960s, there was much debate over whether it could make sense to identify mental properties with material properties of brains. Putnam's contribution (or one his contributions) to the debate was to point out that these are the wrong issues. Identity theorists, convinced that the alternatives were, on the one hand, anti-realism about

states of mind in the guise of behaviorism, or dualism of the Cartesian sort, argue that states of pain must be a kind of brain state. Putnam points out that the prospects of locating a physical property answering to the pain predicate are dim:

> Consider what the brain-state theorist has to do to make good his claims. He has to specify a physical-chemical state such that *any* organism (not just a mammal) is in pain if and only if (a) it possesses a brain of a suitable physical-chemical structure; and (b) its brain is in that physical-chemical state. This means that the physical-chemical state in question must be a possible state of a mammalian brain, a reptilian brain, a mollusc's brain (octopuses are mollusca, and certainly feel pain), etc. At the same time, it must *not* be a possible (physically possible) state of the brain of any physically possible creature that cannot feel pain. Even if such a state can be found, it must be nomologically certain that it will also be a state of the brain of any extra-terrestrial life that may be found that will be capable of feeling pain before we can even entertain the supposition that it may *be* pain.
>
> (Putnam 1975d: 436)

This, as you will recognize, is the famous 'multiple realizability' argument. Creatures with utterly different physical makeups, creatures possessing very different physical properties, could all be in pain. The thought, then, that the pain predicate names a physical property shared by every creature to which it applies is off base. Unless we are to be anti-realists about pain or, worse, dualists, we must take 'pain' to designate, not a physical property, but some other kind of property. Functionalists contend that the property in question is a functional property.

We can relax. Although the pain predicate (and presumably other mental predicates as well) does not designate a material property, it does not designate an *im*material property either; nor does it fail to designate a property and thereby commit us to an implausible anti-realism about pain. Rather, the pain predicate holds of creatures in virtue of designating a functional property shared by those creatures.

What, exactly, are functional properties, and how are functional properties related to physical properties? Here we must go beyond Putnam for guidance. According to Ned Block, a functional property is a 'second-order' (or, more generally, a 'higher-order') property possessed by a creature in virtue of that creature's possessing some 'lower-order' property (see Block 1980b: 177–81). A particular creature exhibits a particular kind of physical makeup, possesses particular physical properties, and enters into particular kinds of physical state. Certain of these states satisfy functional descriptions associated with pain. A given physical state, although not necessary, could be sufficient for being in pain. In a particular creature, then, a particular state might play a particular kind of role: the pain role. Pain, however, is not the state that plays the role, the role's occupant, but the 'role itself'.[7]

Think of another functional predicate, 'is a vice-president'. This predicate is satisfied by particular individuals in particular organizations who play the right sorts of role in those organizations. If Wayne is a vice-president – Wayne satisfies the predicate 'is a vice-president', possesses the property of being a vice-president – he does so because he is the occupant of the vice-presidential role. Wayne possesses endless complex physical properties and stands in endless complex physical relations. Being a vice-president is identifiable with none of these, however. Indeed, no physical property, however complex, is identifiable with the property of being a vice-president.[8] The property of being a vice-president is a higher-order property: a role, not its occupant.

Now, it is possible to deconstruct Putnam's original question, quoted earlier: '"Is pain a brain state?" (Or, "Is the property of having a pain at time *t* a brain state?")'. The pertinent property is the property of having a pain. The property is a 'higher-order' property in the sense that it is possessed by an agent only by virtue of that agent's possessing some lower-order 'realizing' property. You possess the property of being in pain because you possess neurological property *N* (and the state constituted by your possessing this property is, in your case, the occupant of the pain role). An Alpha Centaurian possesses the property of being in pain in virtue of the Alpha Centaurian's possessing some markedly different property, *N** (and, again, the state constituted by the Alpha Centaurian's possessing *N** is, in the Alpha Centaurian's case, the occupant of the pain role). The lower-order property is the realizer of the higher-order property. The higher-order property is not reducible to its realizer: distinct kinds of realizer can realize one and the same functional property – just as distinct kinds of individual can fill the vice-presidential role.

Causal relevance

Functionalism has many supporters and many critics. Externalism aside, philosophers as diverse as Thomas Nagel (1974) and John Searle (1992) insist that functionalism leaves out the most significant feature of the mind: qualities associated with conscious experiences, the so-called 'qualia'. If mental properties are thought of as functional roles, then the occupants of those roles seem peculiarly colorless – or, at any rate, while a given occupant might possess a host of colorful qualities, these appear irrelevant to its filling the role it fills. What matters, and all that matters, is the occupant's dispositionality, its causal powers. Wayne, the vice-president, might be overweight, balding and blue-eyed, but none of these qualities appears in his job description. Although I believe that both the functionalists and their critics are confused about the relation of the qualitative and the dispositional, I shall ignore this potential difficulty, and concentrate instead on another issue: the problem of causal relevance.

The problem of causal relevance is the Gen-X version of the traditional mind-body problem. The idea, roughly, is this. Suppose some physical

property, *P* realizes some mental property *M*, and suppose further that an agent's possession of *P* is causally operative in the production of some effect, a bodily motion, *B*, for instance. It looks as though *P* preempts any causal clout *M* might be thought to bestow on its possessor (see Figure 8.1).[9]

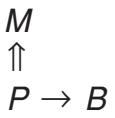

Figure 8.1

Imagine that your desiring to drink a glass of water is a functional state, a state you are in by virtue of being in some physical neurological state. (In Figure 8.1, *M* might be the property of desiring to drink a glass of water, and *P* the neurological realizer of that property.) If you are moved to drink the water, then it appears that any causal clout you might have thought your desire possessed is possessed instead by its realizer, your neurological state. If every mental property is like this, then the preemption of the mental by the physical will be systematic and widespread. More generally, whenever a property is possessed by an object in virtue of that object's possessing some lower-order realizing property, the lower-order realizer apparently undercuts any causal pretensions of the higher-order property.

This way of thinking about higher-order properties has the effect of iterating the problem of causal relevance and spreading it throughout the world. We seem compelled to choose between two unhappy alternatives. On the one hand, we might imagine that only basic-level properties possess causal relevance; the higher-level properties, realized by the basic properties, are epiphenomenal. This option flies in the face of common experience and the special sciences the business of which is said to be that of identifying irreducible higher-level causal properties. On the other hand, we can allow that a property's higher-level status need not impugn its causal standing. If we do this, however, we must abandon the idea that the states and processes described by physics are 'causally closed' or allow that the universe is brimming with instances of systematic causal over-determination.

Why so? Return to Figure 8.1. What causal role might we assign to *M*? Does *M* have a part in producing *B*? If it does, and if the possessing of *P* and *B* are fundamental physical occurrences, it looks as though physics (within the province of which *P* and *B* fall) is not autonomous (Figure 8.2).

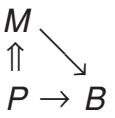

Figure 8.2

Perhaps this is the wrong way of thinking about it, however. Perhaps we should imagine higher-level properties figuring in the production of higher-, not lower-level events (Figure 8.3).

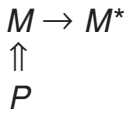

Figure 8.3

The difficulty here is that *M**, a presumed higher-level property, is left 'floating'. Higher-level properties cry out for lower-level realizers. If we supply such a lower-level realizer, however, we must accommodate its lower-level causal antecedents. For simplicity, suppose that *M**'s lower level realizer, *P**, is brought about by *P* (Figure 8.4).

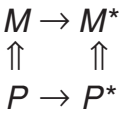

Figure 8.4

Now, however, we encounter a new kind of over-determination or preemption. If *M** is realized by *P**, then *P** suffices for *M**. In what sense can we think of *M** as having been produced by *M*? Although we might be in a position to predict or explain the occurrence of *M** by appealing to *M*, the situation more nearly resembles a case in which we can predict and perhaps explain the occurrence of one event, *E**, on the basis of some other event, *E*, not because *E* caused *E**, but because both *E* and *E** have a common cause, *C* (Figure 8.5).

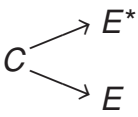

Figure 8.5

If this is right, then we are left with the situation illustrated in Figure 8.6.

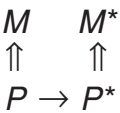

Figure 8.6

Here, *M* and *M** appear epiphenomenal. *M* and *M** are realized by *P* and *P**, and so accompany occurrences of *P* and *P**, but *M* and *M** themselves have no causal impact on the world. Again, we seem faced with a choice between epiphenomenalism, on the one hand, and, on the other hand, some form of reduction.

You may regard the choice as a false one, founded on indefensible assumptions. The idea that physics is causally closed might be a mere reductionist prejudice, and the specter of systematic causal over-determination the result of an excessively narrow view of explanation. Such reactions, however, bespeak a prior commitment to a layered picture of the world. It is time we scrutinized that commitment more closely.

From predicates to property levels

An important by-product of functionalism, I contend, is a conception of property levels – levels of being – that underlies a widely influential picture of the world. The picture has remained influential even among those who reject functionalism. Properties and objects treated in basic physics, it is thought, occupy a lower level than mental properties and minds, which reside at a loftier, 'more abstract' level. Indeed, any given object, mental or not, apparently includes indefinitely many property layers. A ball, for instance, has the property of being crimson. Possession of this property begets a hierarchy of higher-level properties: being red, being colored, having a visually detectable property, having a physical property, and having a property (see Yablo 1992; Robb and Heil, forthcoming).

Talk of property 'levels' or 'layers' might be construed in at least two ways. First, there is an innocuous sense in which properties had by an object are distinct from properties had by its parts. Think of a circular jigsaw puzzle. The puzzle is circular; its parts are not. The parts of a cake are not cakes, the parts of a house are not houses. Part-to-whole property levels of this kind are uncontroversial. We can think of properties of a whole as comprising properties of its parts related in particular ways. In this regard, the properties of the whole are 'supervenient' (in the 'nothing-over-and-above' sense) on properties of the parts.[10]

According to a second very different conception of layers, *one and the same* object can have many different layers of properties. This is so for the crimson ball mentioned above. The properties of being crimson, being red, and the like, are all taken to be distinct and possessed by the very same object, the ball. Similarly, being in pain and being in neurological state *N* are higher- and lower-level properties respectively of a single individual, namely that individual who is in pain in virtue of being in neurological state *N*.

The notion of a higher-order property lies at the heart of the picture of our world as comprising levels of being. Properties form a hierarchy, those at higher levels being irreducible to those at lower levels; those at lower

levels grounding properties at higher levels. What is rarely noticed is how strange the notion of higher-level properties really is. I shall say something about this strangeness and then show how the case for the existence of higher-level properties, hence levels of being, follows from principle (P). In the next section I shall argue that principle (P) should be jettisoned, and with it the layered conception of reality.

On hearing the expression 'higher-order property', anyone unfamiliar with the literature on functionalism and the philosophy of mind might imagine that a higher-order property is a property of a property. A higher-order desire, after all, is a desire for a desire, a higher-order belief, a belief about a belief. But a higher-order property is a property, not of a property, but of an object, the very same object that possesses the higher-order property's lower-order realizer. If you have a headache, you possess both some complex neurological property, *N*, and, in virtue of possessing *N*, you possess the higher-order property of being in pain. According to functionalists, your being in pain is a matter of your possessing a property – *N*, say – that plays the right sort of causal role: the pain role. Although you are in pain in virtue of possessing *N*, the property of being in pain is not identifiable with *N*. *N* is the realizer (in you) of the property of being in pain.

Now, anyone with a little ontological curiosity might be moved to ask here what more there is to your possessing the putative higher-order property, than your possessing its lower-order neurological realizer. Assuming that your *N*-state is the occupant of the pain role, and setting aside the 'qualia' problem, in what sense could your being in pain be anything in addition to your possessing *N*? How are we to understand your being in pain as amounting to anything more than your being in a particular neurological condition? These are the kinds of question functionalists rarely address, in part because they remain content to describe the mind at a high level of abstraction. One advantage of this strategy is that it keeps ontology at arm's length. But at some point even functionalists must come clean ontologically.

It is easy to see how someone committed to (P) might find the idea that some properties reside at higher levels than others attractive. Recall the crimson ball. Assuming (P), the ball has the property of being crimson. If the ball is crimson, it must be red, so the ball has the property of being red. The ball's being crimson suffices for its being red, although it could retain the latter and lose the former. This would be so if, for instance, you painted the ball scarlet.

Considerations of this sort lead naturally to thoughts of hierarchies of properties (Yablo 1992). Some of these hierarchies are metaphysically (that is, logically) mandated, others appear to have a nomic basis. From this, it is but a short step to the recent obsession with supervenience in all its many grades. My suggestion is that none of this would seem remotely plausible without a prior commitment to (P).

Beyond the layered view

I have traced our modern-day infatuation with the layered picture of the world to an implicit acceptance of (P), the doctrine that, if a predicate is truly applicable to an object, it designates a property possessed by that object and shared by any other object to which it applies. If the predicate 'is in pain' applies to you, to an octopus, and to an Alpha Centaurian, then you, the octopus, and the Alpha Centaurian share a property. When we try to imagine what this property could be, we realize that the underlying 'pain mechanisms' are different in each case: what it is in virtue of which a human being is in pain differs from what it is in virtue of which an octopus is in pain, and this differs in turn from whatever it might be in virtue of which an Alpha Centaurian is in pain. The property of being in pain, then, must be a higher-level property, one realized by, but distinct from, its lower-level realizers.[11]

Suppose we abandon (P). Suppose we abandon the idea that, if a predicate truly and straightforwardly applies to an object, it must do so by virtue of naming a property possessed by that object and any other object to which it truly and straightforwardly applies. Does this turn us all into anti-realists or eliminativists with respect to pain? Why should it? From the beginning, (P) has been confused with a weaker principle:

(P*) If a predicate, 'ϕ', holds of an object, *o*, at *t*, it does so in virtue of *o*'s properties.

(P*) has, to my mind, considerable plausibility. Consider the predicate 'is purple'. This predicate applies to objects in virtue of properties those objects possess. But does this oblige us to accept (P), oblige us, that is, to imagine that every object to which it applies shares a property? Why should it? 'Is purple' covers a range of cases. Objects to which it applies no doubt possess salient similarities, but they need not possess the very same property.[12]

We knew this already. Predicates like 'is a game', 'is a joke', 'is a tree' each apply to a range of activities or objects that need have nothing more in common than a certain family resemblance. Does this commit us to some form of anti-realism about games, jokes, or trees? I cannot see that it does – unless, of course, we assume (P). We do better, surely, to regard these, and countless other cases, as counter-examples to (P).[13] The predicates we deploy in the course of describing objects apply to those objects or events in virtue of their properties. This requires only that objects to which a given predicate applies be saliently similar in a sense that includes their bearing family resemblances to one another.[14]

Functionalism again

Suppose this is right, suppose (P) is false. In that case we might regard functionalism not as a theory of mental properties but as a theory of mental

predicates. Thus construed, functionalism holds that mental predicates apply to objects, not in virtue of those objects sharing (in whatever sense) higher-level functional properties, but in virtue of those objects' being dispositionally similar, similar, although not precisely similar, with respect to their 'causal powers'. If you, an octopus, and an Alpha Centaurian are in pain, then you, the octopus, and the Alpha Centaurian are in states similar with respect to their dispositionalities. The dispositionalities are not exactly similar, but they are similar enough for us to count them as instances of pain.

Functionalism interpreted in this way does not tell us that being in pain is a matter of possessing a second-order property; rather being in pain is a matter of possessing a first-order property of the right sort. You could think of 'is in pain' as designating an open-ended class of dispositionally similar, but not exactly similar, properties. To the extent that 'is in pain' is like most predicates we apply to everyday objects and events, this class will have vague boundaries: there will be clear cases and there will be cases that do not clearly count either as cases of pain or cases of the absence of pain.

Once we dispense with the idea that being in pain is a matter of possessing a higher-order property, the problem of causal relevance recedes. We need no longer worry about the preemption of higher-level mental properties by lower-level physical realizers. The realizing relation is transformed into something ontologically benign. Being in pain is multiply realizable just in the sense that many similar-but-not-exactly-similar properties all answer to the predicate 'is in pain'. This is neither reduction nor elimination. The property that satisfies the predicate 'is in pain' when you have a headache on Monday is a genuine, though undoubtedly complex, first-order property. Properties that satisfy the predicate 'is in pain' when you have a toothache on Wednesday, or an Alpha Centaurian has a headache, or an octopus is jabbed by an electric prod, while dispositionally similar, need not, and almost certainly will not, be exactly similar.

Are we now on a slippery slope to an anti-realism about pain? By no means. The predicate 'is in pain' applies truly to many creatures on many occasions. All we have dispensed with is the idea – enshrined in (P) – that if a predicate truly applies to an object, it must name a property possessed by that object and by any other object to which it applies. We have seen that this idea has little to recommend it. Indeed, it is arguably a source of endless problems in the philosophy of mind today, including the problem of mental causation.

You might agree with all this, but doubt that I have addressed the really serious issues. I have, after all, ignored the 'qualia' problem, the problem of assimilating qualities of conscious experiences to a colorless material world. I have ignored, as well, problems stemming from the idea that minds and their contents are not, or are not exclusively, 'in the head'. If I believe that there is water in the glass in front of me, then I must have had the right sort of causal history and be embedded in the right sort of community. In fact, you probably think that I have conceded far too much

to functionalism. My aim, however, has been to attack only a single aspect of a broader range of issues now plaguing the philosophy of mind. I shall be happy if I have managed to convince you that there is something fishy about the idea that mental properties – or perhaps a subset of these – are higher-level properties.[15]

This line of reasoning can be straightforwardly extended to higher-level properties generally, and thus to the layered conception of the world. Take a putatively higher-level property like being a heart. On one popular view, this property is specifically biological. It is not 'reducible' to any physical property, that is, to any property countenanced by basic physics, no matter how complex.

We can agree that there is no prospect of translating talk of hearts into talk of electrons and quarks, no prospect even of giving necessary and sufficient micro-conditions for something's being a heart. But we need not conclude from this that being a heart is a higher-level property, distinct from, but realized by assorted lower-level properties. If we dispense with levels, we can recognize that the predicate 'is a heart' can be satisfied by many different kinds of complex physical configuration. These configurations will be similar in certain respects and, by virtue of these similarities, count as hearts.

But now another worry looms. What remains of the special sciences on a view of this sort? What about higher-level laws and lawlike generalizations? Do these go out the window, replaced by a Democritean picture of the world as a haze of atoms in the void?

Only someone with a prior commitment to the idea that realism requires the satisfaction of something like (P) should be moved by such worries. Consider the special sciences. On the layered view, predicates deployed in biology, or psychology, or sociology designate higher-level properties, properties that figure in laws or lawlike generalizations constituting the subject matter of the science in question. In abandoning levels, we abandon the ontology, but not the laws. Imagine for a moment that predicates in, say, biology apply to objects (or populations of objects) in virtue of dispositional similarities among those objects (or populations). The similarities in question will be mostly approximate, so any law formulated in terms of these predicates will exhibit a measure of imprecision. Objects alike, but not exactly alike, dispositionally, will behave in similar, but not exactly similar ways in broadly similar circumstances. (Although sometimes what might seem to be small dispositional or circumstantial differences can translate into dramatic differences in behavior.) This is what accounts for the *ceteris paribus* nature of higher-level laws and generalizations.

Compare the situation in basic physics. Electrons are not merely similar, but interchangeable: exactly similar. If this means that electrons (in whatever sense) share properties, then it is no mystery that, the behavior of electrons is precisely specifiable. (I am not ignoring the probabilistic nature of physics; I am, however, distinguishing precise or 'exceptionless' statistical

laws from *ceteris paribus* 'hedged' laws.) On the single-level – or better, the no-level – view I am recommending, laws are true generalizations that hold in virtue of the properties. In physics, we strive to locate objects' fundamental properties, hence to frame the fundamental laws. In the special sciences, our goals are more modest. We look for similarities and we are satisfied even when these fall well short of perfection. This suits our interests nicely. Although similarities are objective features of the world, which similarities are salient or important depends largely on us and our interests. We tailor the predicates we make use of to our changeable and varied projects and needs. We do not 'carve' or 'divide up' the world; but we do care about some of the world's divisions more than others.

Conclusion

I have argued that the currently popular picture of the world as comprising levels of objects and properties – levels of being – stems from a tacit acceptance by philosophers of the idea that, when a predicate truly holds of an object, it does so by virtue of naming a property possessed by that object and shared by every other object of which it truly holds. I have suggested, as well, that functionalism has been a contributing factor in the continuing influence of this idea. I do not mean that everyone who accepts Principle (P) – my formulation of the idea – is a functionalist. Rather, functionalist arguments pioneered by Putnam have encouraged a way of seeing the world that can survive the abandonment of functionalism as a theory of mind.

I am not prepared to defend the thesis that Principle (P) is uniquely responsible for the popularity of the layered view, or that the attractiveness of Principle (P) stemmed solely from functionalist arguments of the sort inspired by Putnam. Talk of levels of being had been around long before the advent of functionalism. It is worth noting, however, that commitments to levels of reality urged by emergentists and others, often involved the idea that wholes possess properties not possessed by their parts (see McLaughlin 1992). Earlier I suggested that it is possible to understand part – whole differences without appeal to levels of being of an ontologically promiscuous kind. It is not surprising that a whole might possess a property distinct from any property possessed by its (proper) parts: a whole is one thing, each of its parts is something else. The current layered picture, in contrast, envisages realized and realizing properties as being possessed by the very same individual.

It is important to recognize that you can reject a layered ontology, without abandoning talk of levels of description and explanation. The utility of such talk does not depend on ontological layers, does not entail levels of being. Descriptive levels are founded on our capacity for abstraction, a capacity rooted in the nature of thought and reflected in our language. You can think of or describe an object as crimson, as red, as colored. In so doing,

you are not responding to different properties of the object; you are exercising your capacity for abstraction, a capacity for what Locke called 'partial consideration' (Locke 1690/1975, bk. II, Chap. VIII, §13). You are considering the object in light of its membership in successively larger, more inclusive resemblance classes of objects possessing similar, although not exactly similar, properties.

We can, then, dispense with the layered picture of the world and the ungainly ontology it introduces without thereby abandoning realism about those predicates devotees of the layered picture take to name higher-level properties. We can accommodate levels of description and explanation without commitment to corresponding levels of reality, and we can do so without thoughts of reduction or elimination. It is time we moved beyond the layered picture to something better; it is time we got ontologically serious.

Comment on John Heil's paper

Hilary Putnam

I have only a couple of comments to make. I did not assume your (P) in my arguments, but I do want to defend it. One reason for accepting it is that all of its instances are theorems of what I think of as the only good formal theory of properties (i.e. of predicates in intension) that I know, namely Russell's *Principia Mathematica* or 'ramified type theory' *minus* the Axiom of Reducibility. I think this because I was convinced by Alonzo Church's arguments (in a long paper written late in his life for *The Journal of Symbolic Logic*) (Church 1976).

Apart from that, I think that Kim's discussion is based on the assumption (which was made by my own and other versions of 'functionalism') that *in the case of any one fixed species* there is one and only one property which is the 'realizer' for any given psychological predicate. That assumption motivates Kim's question, 'Why isn't the psychological predicate causally useless?' Part of my response to Kim is to deny that there is any reason to believe that even in my own case, the case of one organism, let alone the case of a whole species, there is *one fixed brain state* which is correlated with the thought that there are churches in Vienna (an example I discussed in *The Threefold Cord: Mind, Body and World*).

As I understand your 'physicalist' position, you hold that thinking about Vienna is being in any one of a number of brain states, and that these brain states are *similar*; they possess a *fuzzy set of similarities*. If that is true, I don't believe that those similarities are properties or relations that physics could discover. So I think the problem of the autonomy of psychology will remain with us even if we move to fuzzy sets of similarities.

9 From alethic anti-realism to alethic realism

*Wolfgang Künne**

In the central second section of this paper I shall discuss Hilary Putnam's move from a certain version of alethic anti-realism to alethic realism. After outlining his interim position and rehearsing his reasons for leaving it behind I shall add, in the final section, a kind of epistemic blindspot argument which refutes all varieties of alethic anti-realism at one stroke. Or so I would like to think.

Two distinctions

The term *'alethic realism'*[1] is not only a very ugly Greco-Latin concoction. It also tends to be mispronounced or misprinted as 'athletic realism', and that is very unfortunate because the doctrine for which I use this title is not a very muscular affair. Its one and only contention is that *truth outruns rational acceptability*: Some true propositions which we are able to comprehend can never be contents of any justified beliefs. In other words, the contention is that *truth is not epistemically constrained.*[2] Hence alethic realism, thus understood, is *not* committed to allowing the possibility of Undetectable Error: It does not imply that even a

> theory that is 'ideal' from the point of view of operational utility, inner beauty and elegance, 'plausibility', simplicity, 'conservatism', etc. might be false.[3]
>
> (Putnam 1978: 125)

(Since it lacks this implication, alethic realism differs vastly from the doctrine Putnam calls 'Metaphysical Realism'.) Furthermore, alethic realism is *not* wedded to the Principle of Bivalence according to which every truth-candidate is either true or false.

* When I read the first version of this paper in Toruń, Hilary Putnam's meticulous and sympathetic reply was very helpful, and so were Sir Peter Strawson's, Sir Michael Dummett's and Jonathan Dancy's comments when I presented another version in Oxford and in Reading. More recently I profited from objections and questions of my audience at the Humboldt University in Berlin.

According to alethic *anti*-realism, on the other hand, truth does *not* outrun rational acceptability: Every truth can become the content of a justified belief (of a cognitively finite being). Truth, alethic anti-realists claim, *is* epistemically constrained. Alethic anti-realists can, and should, concede that, as a matter of contingent fact, many a truth is never believed, with or without warrant, by any finite mind. (Many answerable questions are just so uninteresting that they never get asked, let alone answered.) But alethic anti-realists have to insist that whatever is true *could be* rationally accepted, and they must take this to be a conceptual (necessary and a priori knowable) truth about truth. An advocate of alethic anti-realism can consistently deny that the truth predicate has the same *sense* as any epistemic predicate. If he opts for sameness of sense I shall call him a *definitional* alethic anti-realist. The version of anti-realism which Hilary Putnam upheld for some time is, as we shall see in due course, avowedly *non-definitional*.

Let me try to throw more light on the latter distinction as well as on the implications of calling a claim 'conceptual' by considering William Alston's attempt at refuting all epistemic accounts of the concept of truth. The allegedly lethal weapon used in his argument is the denominalization schema

(**Den**) (The proposition) that p is true ↔ p

(which he calls 'T-schema'). It is commonly thought that advocates of very different accounts of the concept of truth – including epistemic ones – can, with the greatest equanimity, accept as conceptually true (nearly) all propositions expressed by instances of this schema.[4] But Alston disagrees. He contends that 'epistemic accounts of the concept of truth [. . .] are incompatible with an acceptance of the T-schema' (Alston 1996: 217). How does he reach this heterodox conclusion? Basically the argument is this:

> (ALSTON 1) It is true that p if and only if p. [. . .] Any such biconditional is necessarily, conceptually true [. . .]. Since the fact that p is (necessarily) both necessary and sufficient for its being true that p, that leaves no room for an epistemic necessary or sufficient condition for truth. Nothing more is required for its being true that p than just the fact that p; and nothing less will suffice. How then can some epistemic status of the proposition [. . .] that p be necessary and sufficient for the truth of [the proposition that] p? It seems clear that the imposition of an epistemic necessary and sufficient condition for truth runs into conflict with the T-schema.
>
> (Alston 1996: 209)

Since there is no reference to facts in the schema, I assume that talk of facts in quotation (A-1) is just a manner of speaking: As soon as one replaces the connective 'iff' by the dyadic predicate 'is necessary and sufficient for' one has to grope for noun phrases. (Actually it isn't a very felicitous way

of speaking, for if it is *not* true that p, talk of 'the fact that p' is hardly appropriate.)

As Alston recognizes, (A-1) by itself will not yet do: Y's being necessary-and-sufficient for Z hardly prevents X from being necessary-and-sufficient for Y and thereby for Z (ibid.: 211). So, for the sake of the argument, let us suppose that all (or nearly all) biconditionals of the following form express a truth: p if and only if the proposition that p has a certain epistemic virtue. This will allow a partisan of an epistemic account of truth to argue (using 'E' as a nick-name for the relevant epistemic virtue):

(Den) The proposition that p is true iff p.

(E_1) p iff the proposition that p has E.

(E_2) Hence, the proposition that p is true iff it has E.

Now (Den), or rather (almost) each of its substitution-instances, expresses a 'necessary, conceptual, analytic' truth (ibid.: 1). If instances of (E_1) express only *contingent* truths, the same holds of (E_2), but then the latter does not give us an account of the *concept* of truth. Noticing the bracketed modal adverb in the third sentence of (A-1), one might think that the modal strengthening of (E_1) would let the epistemic account off the hook. But Alston rightly denies this. If instances of (E_1) express *necessary but non-conceptual* truths (like the chemical truth that salt is sodium chloride),[5] then the same holds of (E_2), and again we are not given an account of the concept of truth. So a partisan of an epistemic account of this concept must take it to be *conceptually necessary*, for example, that

(e1) sugar is sweet iff the proposition that sugar is sweet has E.

Having driven his opponent to declare (e_1) to be a conceptual truth, Alston believes himself to have shown what he had set out to show, for 'what should we say about that [claim]? So far as I can see, it is totally lacking in plausibility' (ibid: 214). After all, the proposition expressed on the left-hand side of (e1) 'attributes sweetness to sugar. It says nothing whatever about [any epistemic virtue]. It asserts a fact about a substance, a foodstuff' (ibid.: 218).

The assumption underlying this alleged *reductio* seems to be this: A biconditional cannot express a conceptual truth if one side of it 'says something about' something which the other side is silent about. This is debatable, and I shall shortly debate it. But let me first stress that this argument against epistemic accounts of the concept of truth is without any force against philosophers who take truth to be epistemically constrained but deny that the concept of truth is, or contains, the concept of a certain epistemic virtue. Alston himself is keenly aware of this limitation of his argument from the denominalization schema:

> (ALSTON 2) There may be necessary and sufficient conditions for [a proposition's being true] that are not embodied in the concept [of truth]. Having a chemical composition of sodium chloride is necessary and sufficient for a substance's being salt, even though that is different from the conditions embedded in our (ordinary) concept of salt (looking and tasting a certain way).
>
> (Alston 1996: 229f.)

Alston does not accept any non-definitional variety of alethic anti-realism either. But in the end he contents himself with exclaiming that he 'can see no rationale whatever' for such a view (ibid.: 230). If alethic anti-realists of this variety really had to rely on the model Alston uses in (A-2), then one should rather scold them this way:

> A necessary but non-conceptual truth can only be discovered a posteriori. But you never offer empirical evidence for your claim about truth. Hence your contention is just a wild speculation.

Actually alethic anti-realism does not depend on that model. A truth (about truth, or whatever) is either (1) conceptual or (2) non-conceptual, and if it is non-conceptual then it is either (2a) contingent or (2b) necessary. Alston duly registers the difference between (2a) and (2b), but he neglects a distinction within the field of (1). He takes it for granted that a proponent of an epistemic account of truth cannot state a conceptual truth about truth unless the meaning of the epistemic predicate 'has E' in his (E_2)-sentence is a (proper or improper) part of the meaning of 'is true'.[6] In other words, Alston assumes that a conceptual truth about truth has got to be a definitional truth. This explains why he takes it to be an objection against epistemic accounts of the concept of truth that we are not 'saying anything about [any epistemic virtue] when we say that a proposition is true' (unless, of course, that proposition itself happens to be about an epistemic virtue) (ibid.: 214). But a biconditional may very well express a conceptual truth even though on its right-hand side something is said about something about which nothing is said on the left-hand side. Take 'We have 100 graduate students iff we have $1^3 + 2^3 + 3^3 + 4^3$ graduate students', or 'ABC is a Euclidean triangle iff it is a closed plane rectilinear figure whose internal angles sum to 180°': There is no reference to 1^3 in the left branch of the first equivalence, or to a sum of angles in that of the second, and yet both biconditionals express conceptual truths. So alethic anti-realists can claim to articulate conceptual truths about truth without thereby becoming definitional anti-realists.

From moderation to recantation: Putnam's journey

In the 1980s Hilary Putnam had moved from his earlier 'Realism' to a very different position which he was drawn into calling '*Internal* Realism' and

which he would have liked to call 'Pragmatic Realism'. This move caused consternation among many of his followers and made them write articles with titles as 'Realism and the Renegade Putnam'. One strand in his new position was a certain account of truth. According to this account, truth is somehow epistemically constrained. Since I have subsumed all such views under the label 'Alethic *Anti*-Realism', we have to forestall terminological confusion: Henceforth I shall refer to the so-called 'internal realist' account of truth, and to its advocate, as '*Interim Putnam*'. Interim Putnam comes into being in *Reason, Truth and History* (1981). At that time Putnam seems to have thought that without imposing an epistemic constraint on truth one could not break the spell of that many-faced doctrine he called 'Metaphysical Realism', but this alleged connection is not our topic. What *is* highly pertinent to our topic is the way Interim Putnam tried for ten years to protect his account of truth against various misunderstandings.[7] They were only partly due to certain features of his original exposition. Yet in spite of all his efforts at clarification people kept on characterizing his view as follows: 'Putnam, in the tradition of C. S. Peirce, holds that [truth is] warranted assertability in the limit of an ideal science' (thus J. J. C. Smart), and criticizing his view on the basis of such a reading: As to 'Putnam's neo-Peircean [. . .] account of truth [. . .], I cannot imagine my descendants saying: "At last! Inquiry is finally over!"' (thus R. Rorty).[8] As to the view Putnam *really* held in the 1980s, he unambiguously recanted it in his 1992 papers.[9] (As far as I know, no article with the title 'Anti-Realism and the Renegade Putnam' has yet been published.) Since Putnam is a very mobile target, I shall be at pains to document his movements (since 1981) carefully.

According to Interim Putnam, *truth is a kind of rational acceptability*.[10] He rightly refused to identify truth with rational acceptability *sans phrase*. Here is one of his reasons:[11]

(P-1) [i] Truth is supposed to be a property of a statement that cannot be lost, whereas justification can be lost.

[ii] The statement *The earth is flat* was, very likely, rationally acceptable 3,000 years ago; but it is not rationally acceptable today.

[iii] 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.

[iv] In fact, rational acceptability is both tensed and relative to a person.

(Putnam 1981: 55. Numerals in brackets inserted for ease of reference.)

There is a certain oscillation in this passage which threatens to spoil Putnam's point: If a 'statement' cannot lose the property of being true [i], how could one *ever* maintain that a 'statement' was true many years ago but is not true now [iii]? Let me try to rephrase the argument. Suppose that our

sentence 'The earth is flat' once expressed a truth but does not do so now, although both times its linguistic meaning is the same and both times the planet we live on is referred to. From this we could conclude that the earth has changed its shape in the meantime. But this conclusion does *not* follow from the assumption that our sentence (with meaning and reference kept constant) once expressed something which was rationally acceptable but does not now express something that is rationally acceptable. So truth is not the same as rational acceptability *simpliciter*.

Putnam's argument is primarily meant to forestall a too simple-minded conception of an epistemic constraint on truth. Putnam goes on to make a more ambitious claim for his argument:

(P-2) What this shows [. . .] is [. . .] that truth is an *idealization* of rational acceptability. We speak as if there were such things as epistemically ideal conditions, and we call a statement 'true' if it would be justified under such conditions.

(Putnam 1981: 55)

But surely the first statement is an overstatement. The argument in (P-1) hardly *shows* that truth is idealized rational acceptability. At best it shows that this identification is not open to the same objection as the identification of truth with rational acceptability *sans phrase*.

Before asking how the ideality proviso is to be understood, let us register another feature of Putnam's Interim Position:

(P-3) [I]f both a statement and its negation could be 'justified', even if conditions were as ideal as one could hope to make them, there is no sense in thinking of the statement as *having* a truth value.

(Putnam 1981: 56)

This can be spelt out, I think, as follows: A statement is true if and only if it is justifiable under epistemically ideal conditions whereas its negation is not so justifiable. A statement is false if and only if it is not justifiable under epistemically ideal conditions whereas its negation is so justifiable. A statement is neither true nor false otherwise. Now, to take one of Putnam's favourite examples (Putnam 1992b: 365 and note 25), suppose my watch is standing on the end of the table, and we have not stipulated whether that counts as 'lying'. Then neither the statement that my watch is lying on the table, nor what is naturally taken to be its negation (sc. the statement that my watch is not lying on the table), is justifiable under epistemically ideal conditions. So, according to (P-3), the former statement falls into a truth-value gap.

How are we to understand Putnam's talk of ideality when he identifies truth with idealized rational acceptability? Putnam's first attempt at an explanation of the ideality proviso was to become the main source of the most serious misrepresentations of his Interim Position:

(P-4) Epistemically ideal conditions, of course, are like frictionless planes: we cannot really attain epistemically ideal conditions [. . .]. But frictionless planes cannot really be attained either, and yet talk of frictionless planes has cash value because we can approximate them to a very high degree of approximation.

(Putnam 1981: 55)

The contention of (P-4), foreshadowed in the 'as if' – clause in (P-2), that epistemically ideal conditions are not attainable for us is hard to reconciles with other claims Putnam makes on behalf of his Interim Position. Thus he claims for this position a close affinity to Kant:

(P-5) Although Kant never quite says that this is what he is doing, Kant is best read as proposing for the first time what I have called the 'internal realist' view of truth, [i.e. the view that a true statement] is a statement that a rational being would accept on sufficient experience of the kind that it is actually possible for beings with our nature to have.

(Putnam 1981: 60, 64)

If this is what Putnam's Interim Position amounts to, then his appeal to Kant is entirely appropriate. As far as the spatio-temporal world of 'appearances' is concerned, Kant takes truth to be epistemically constrained. Like Putnam's 'internal realism', Kant's 'empirical realism' is a form of alethic anti-realism[12] (Stevenson and Walker 1983). Putnam could have quoted, for example, the following passage from the first *Critique:*

(KANT) Daß es Einwohner im Monde geben könne, ob sie gleich kein Mensch jemals wahrgenommen hat, muß allerdings eingeräumt werden, aber es bedeutet nur so viel: daß wir in dem möglichen Fortschritte der Er-fahrung auf sie treffen könnten.

That there may be inhabitants in the moon, although no human being has ever perceived them, must certainly be admitted. But this only means that in the possible advance of experience we may encounter them (*Kritik der reinen Vernunft,* A 493/B 521).

I take Kant's talk of *us* in this passage to refer to *all* beings with (what he standardly calls) 'a rational and sensible nature'. Now obviously the Kantian position as characterized in (P-5) is incompatible with the view that beings with a 'rational and sensible nature' can never attain epistemically ideal conditions. Thus (P-4) is very misleading, and Putnam was ready to admit this:

(P-6) To think of knowledge as something we never really possess but only 'approximate' is the first step on the slide to scepticism, and my talk of 'idealization' was unfortunate if it suggested such a view.

(Putnam 1991: 421)

Perhaps it was not so much talk of idealization in itself, but rather the comparison with frictionless planes which suggested such a view.

But there is a further reason to avoid talk of idealization here: To readers like Smart, Rorty and many others, this talk suggested a Peircean reading of Interim Putnam. According to this reading there is (or rather, there is destined to be, or there might be) such a thing as an epistemic situation which is ideal for giving a true answer to *any question whatsoever*. Putnam is vehemently opposed to such a view:

(P-7) Many people have thought that my idealization was the same as Peirce's, that what the figure of a 'frictionless plane' corresponds to is a situation ('finished science') in which the community would be in a position to justify *every* true statement (and to disconfirm every false one). People have attributed to me the idea that we can sensibly imagine conditions which are *simultaneously ideal* for the ascertainment of any truth whatsoever. [. . .] I do not by any means *ever* mean to use the notion of an 'ideal epistemic situation' in this fantastic (or Utopian) Peircean sense.

(Putnam 1990b: viii)

The order of quantifiers is all-important here. Interim Putnam does hold, $(\forall\exists)$, that *for every statement s there is a condition c such that if s is true, then c is ideal for justifying the acceptance of s,* but he rejects the contention, $(\exists\forall)$, that *there is a condition c such that for every statement s, if s is true, then c is ideal for justifying the acceptance of s*. The obtaining of epistemic conditions which are ideal for justifying the statement s may actually *preclude* the obtaining of conditions which would be required if anyone is to rationally accept the statement s*. I don't think we have to appeal to quantum mechanics, as Putnam does in the continuation of (P-7), in order to convince ourselves that such a situation may arise. Here is an example inspired by Fellini's 'Roma': In a newly discovered catacomb workers are suddenly struck by the sight of a centuries-old fresco-painting. But, alas, it is so sensitive to light that it is bound to disappear very soon. Let us suppose that it would disappear within seconds if one were to throw so much light on it that one could recognize what it depicts, but that it would stay just long enough for carefully measuring its size if the lighting were to remain as dim as it is now. Then one can either verify a statement to the effect that on that wall there is now a fresco-painting which depicts such-and-such, or one can verify a statement to the effect that on that wall there is now a fresco-painting which measures so-and-so many square centimetres, but one cannot verify both.

Whenever we are in such a predicament with respect to two statements, no epistemic situation will be ideal for justifying their conjunction, and yet that conjunction might be true.[13] If we are to respect the principle that a conjunction is true provided that each conjunct is true, then Putnam's Interim Position has to be revised. Presumably the most reasonable move

would be to say that truth of a conjunction requires only that each of its conjuncts would be rationally acceptable if epistemic conditions were ideal. The revised account would claim that whatever is true either itself complies with the epistemic constraint or it follows from premisses which comply with it.[14]

Of course, sometimes two statements are such that conditions which are ideal for verifying one of them are equally ideal for verifying the other. This, too, makes for a problem with Putnam's Interim Position as formulated in *Reason, Truth and History*. As we saw, Putnam there points out that truth is stable whereas rational acceptability *simpliciter* is not. Now there is a further respect in which Interim Putnam takes these two properties to differ:

(P-8) In addition, rational acceptability is a matter of degree; truth is sometimes spoken of as a matter of degree (e.g., we sometimes say, 'the earth is a sphere' is approximately true); but the 'degree' here is the accuracy of the statement, and not its degree of acceptability or justification.

(Putnam 1981: 55)

Putnam assumes that *idealized* rational acceptability is no longer a matter of degree.[15] But is it really plausible to assume that any two statements justified under epistemically ideal conditions are justified *to the same extent*?[16] Suppose that the conditions for verifying the following statement are now ideal:

(a) There are exactly 333 passengers in this train.

Then surely the conditions are equally ideal for verifying

(b) There are more than 3 passengers in this train.

But isn't (b) justified to a greater extent than (a)?

In the 1980s Interim Putnam came to prefer to put his position like this:

(P-9) [T]o claim of any statement that it is true […] is to claim that it could be justified were epistemic conditions good enough.

(Putnam 1990b, p. vii)

What are better or worse epistemic conditions may vary from statement to statement, and it often does so: Epistemic conditions which are pretty good for justifying the statement that just now somebody is sneezing on the highest floor of the Empire State Building are rather bad for justifying the statement that just now somebody is bellowing out obscenities in a certain pub in Belfast, and no progress science may make in future millennia is likely to lead to an improvement of the epistemic conditions for finding out whether there are now more than three passengers in a certain train.[17]

Now (P-9), like some of its predecessors, sounds very much as if Putnam wanted to identify the concept of being true with the concept of being rationally acceptable under sufficiently good epistemic conditions. It is very tempting to read a formulation like (P-9) as giving a definition of the concept of truth. (Compare: 'To claim of any animal that it is a vixen is to claim that it is a female fox.') But this reading cannot be right, since Putnam quite explicitly rejects definitional alethic realism:[18]

(P-10a) I am not trying to give a formal definition of truth.
(Putnam 1981: 56)

(P-10b) I am not offering a *reductive* account of truth, in any sense.
(Ibid.: 115)

The non-reductive character of Putnam's Interim Position becomes strikingly obvious as soon as we ask what he means by 'epistemically ideal (good enough)'. His answer is:[19]

(P-11) [A]n ideal epistemic situation [for justifying the statement p] is one in which we are in a good position to tell if p is true or false.
(Putnam 1991: 421)

If (P-9) were meant to be an analysis of the concept of truth, (P-11) would debunk it as unacceptably circular, since the diameter of the circle would be very small indeed.

Clearly by accepting (P-9) one is committed to endorse the following universally quantified biconditional which gives us Interim Putnam's Constraint on truth:

(**IntC**) $\forall x$ (x is true $\leftrightarrow$ it would be rational to accept x if epistemic conditions were good enough).

But (P-9) must come to more than to (IntC), since Putnam claims for his conception of truth:

(P-12) The suggestion is [. . .] that truth and rational acceptability are *interdependent* notions.
(Putnam 1988: 115)

Two concepts are interdependent, I take it, just in case one cannot possess either concept without possessing the other.[20] Thus understood, two concepts can be interdependent without being co-extensive. Concepts expressed by lexical antonyms or by lexical complements make up such pairs: *old* and *young, virtue* and *vice,* for example, or the arithmetical concepts *odd* and *even.* (This interdependence is registered by the Aristotelian slogan *'Idem est scientia oppositorum'.*) Now (IntC) does not convey any interdependence message, since it only requires that the concept *true* has the same extension as the

concept *rationally acceptable under sufficiently good epistemic conditions*. Surely one might have the notion *creature with a heart* in one's conceptual repertoire without possessing the notion *creature with kidneys*, and yet (if Quine is to be trusted here) both concepts are co-extensive.

One might hope that prefacing (IntC) by the necessity operator would suffice to capture the point of (P-9):

(IntC$^+$) *Nec* $\forall x$ (x is true $\leftrightarrow$ it would be rational to accept x if epistemic conditions were good enough).

Interim Putnam explicitly endorses the left-to-right part of this biconditional:[21]

(P-13) [My] concession to moderate verificationism [. . .] was the idea that truth *could* never be totally recognition-transcendent.
(Putnam 1994a: 243 [my italics])

But (IntC$^+$) only requires that *in every possible world* the two concepts have the same extension, and this condition, too, could be satisfied even if the two concepts were not dependent on each other. After all, somebody might have the concept *equilateral triangle* without having the concept *equiangular triangle*, and yet both concepts have the same extension in every possible world.

If Interim Putnam does not claim conceptual identity, *what* then does he identify with *what* when he contends that truth is (nothing but) rational acceptability under epistemically optimal circumstances? In a very different context Putnam once proposed a distinction between concepts and properties, which may be helpful here.[22] When a scientist asserts that temperature *is* mean molecular kinetic energy she asserts that temperature and mean molecular kinetic energy are *one and the same property* (physical magnitude), and her assertion is non-trivial, since she picks out this property by using *two different concepts*. Thus understood, concepts are more finely individuated then, and they are modes of presentation of, properties. In this respect the example is helpful indeed. But unfortunately in another respect there is a glaring disanalogy: The alleged identity between truth and a kind of rational acceptability is hardly to be discovered *empirically*.

Now being a village with 100 inhabitants and being a village with $1^3 + 2^3 + 3^3 + 4^3$ inhabitants also seem to be one and the same (demographical) property picked out by two different concepts, and this would be a case of a property identity which is *not* to be discovered empirically. Unfortunately another disanalogy remains. As with the two geometrical notions mentioned in the penultimate paragraph, the two notions representing that demographical property are not interdependent: After all,

possessing the mathematical concept *power* is surely no prerequisite for having the concept *hundred*.

So a perfectly analogous case would have to be a non-empirical property identity statement in which one and the same property is specified by *two different but interdependent concepts*. It would be somewhat suspicious if adherents of Putnam's Interim Position could not offer any example that fits this bill except their own controversial identity statement. So let me offer on their behalf the following example which, I think, can dispel this suspicion: The property of being half-full is the same as the property of being half-empty, the concept of being half-full is different from the concept of being half-empty (optimists tend to apply the former where pessimists are prone to use the latter), and these two concepts are clearly interdependent. So even opponents of Interim Putnam should admit that the sub-class of true property identity statements to which the contention 'Truth is "idealized" rational acceptability', if true, belongs is in any case not empty.

As we saw in (P-13), Putnam calls the verificationism of his Interim Position *moderate* (as compared, for example, with the verificationism Dummett´s anti-realist is committed to). Interim Putnam concedes (a) that there is no such thing as *conclusive* verification, (b) that at any time some truths are *no longer* accessible to human beings and (c) that some truths are even *in*accessible to human beings:[23]

(P-14a) For me, verification was (and is) a matter of degree.
(Putnam 1994c: 461)

(P-14b) I have repeatedly claimed that any theory that makes the truth or falsity of a historical claim depend on whether that claim can be decided in the future is radically misguided.
(Putnam 1992a: 357)[24]

(P-14c) [It] would be absurd to suppose that there could not be intelligent beings so much smarter than we that some of their thoughts could not even be understood by us; and surely [. . .], some of those thoughts could be true. They could also be warrantedly assertable by those beings, say Alpha Centaurians, even if not by us.
(Putnam 1992b: 364)

Yet in spite of the undeniable modesty of his verificationism, Putnam's Interim Position *does* have the following consequence:

(P-15) [E]very truth *that human beings can understand* is made true by conditions that are, in principle, accessible to some human beings at some time or other, if not necessarily at all times or to all human beings.
(Putnam 1992b: 364)

And it is this very consequence which Putnam now, around 1992, declares to be false. His (most prominent) reason is the *Extraterrestrial Objection*. Let me quote at length what I take to be his most perspicuous presentation of the argument:[25]

(P-16) Consider the following pair of statements:

> (1) There is intelligent extraterrestrial life.
>
> (2) There is no intelligent extraterrestrial life.
>
> (1) does not pose a problem for [Interim Putnam], for if there is intelligent extraterrestrial life, then a properly placed human observer could be warranted in believing that there was. But (2) is more difficult. There might, of course, be some physical reason why
>
> (3) There *couldn't* be intelligent extraterrestrial life.
>
> and in that case why should we not be able, in principle, to discover it? But that is not the only way (2) could be true. (2) could just *happen* to be true; that is, it could be the case that, although intelligent life might have evolved on some other solar system, this just never happened. [. . .] What makes us consider (2) a possible truth is not that we have any clear notion of what would make *it* warrantedly assertable [but rather] that *it is the negation of an empirical statement*. Our conception of what is a possible truth is not based only on what we could verify, even in the most generous sense of 'verify'; it is also based on our understanding of *logic*.
>
> (Putnam 1992b: 364)

I want to underline two features of this argument.[26]

First, Putnam takes our comprehension of possible truths like (2) which are beyond justification to be *based on* our comprehension of truths like (1) which can be the content of justified beliefs. I shall return to this point in the next section.

Second, Putnam is careful to say that statement (2) is a *possible* truth. Now remember the two universally quantified biconditionals (IntC) and (IntC$^+$). The Extraterrestrial Objection can only refute (IntC$^+$), the stronger constraint on truth. It can only show that there is a proposition which we can grasp and which *could* be true although it would never be rational to accept it. A more radical attack on Putnam's Interim Position would aim at refuting even (IntC), the weaker constraint. It would try to show that (provided that no omniscient being exists) the concept '*x is true*' and the concept '*x is rationally acceptable under sufficiently good epistemic conditions*' are not even extensionally equivalent. It would attempt to demonstrate that there is a proposition which we can grasp and which *is* true although it would

never be rational to accept it. In the first section of this paper this contention was called 'alethic realism'. In his less careful moments Putnam writes as if the Extraterrestrial Objection had already established alethic realism: Towards the end of his *Dewey Lectures*, for example, he claims to have shown that 'truth *is* sometimes recognition-transcendent'.[27] But can this be shown at all? The final section of this paper is an attempt to do it.

An epistemic blindspot

Every sane opponent of alethic realism will be ready to admit that, as a matter of contingent fact, many a truth will never be the content of a belief, hence a fortiori never be the content of a justified belief (of a cognitively finite being). We (cognitively finite beings) do not bother to find out everything we could find out. Surely, there is a true answer to the question how often the letter A occurs in the first edition of the *Encyclopaedia Britannica*, but presumably nobody will ever care even to guess the number, let alone sit down and start counting. The sanity of sane alethic anti-realists consists in their refusal to embrace what Dummett describes as extremist constructivism:[28]

> (DUMMETT) [To deny] that there are true statements whose truth we do not at present recognize and *shall not in fact ever* recognize [. . .] would appear to espouse a constructivism altogether too extreme.

But alethic anti-realists do maintain that whatever is true *could be* the content of a justified belief. Alethic anti-realism, I shall argue, is demonstrably incorrect.

My argument is an adaptation of an argument which was first published in 1963 by Frederick Fitch,[29] used in passing and then seemingly forgotten by Hilary Putnam in 1969, resurrected by William Hart in 1979, and studied in depth by Richard Routley, Dorothy Edgington, Timothy Williamson and Neil Tennant. In my reconstruction of the *Fitch Argument* (as I shall call it) I aim at maximal explicitness, and I use a format which can facilitate comparison with the anti-anti-realist argument I prefer. The Fitch Argument appeals to two evidently correct rules governing truth ascriptions. In my codification of these rules 'T [. . .]' is short for 'The proposition that . . . is true':

Truth induction

$$\frac{\Gamma: \quad A}{\Gamma: \quad T[A]}$$

Truth elimination

$$\frac{\Gamma: \quad T[A]}{\Gamma: \quad A}$$

Two further rules are concerned with ascriptions of propositional knowledge. The first one allows us to go from a premiss of the form: 'Someone knows that both *p* and *q*' to the conclusion: 'Someone knows that *p*, and someone knows that *q*'. Reading 'K [. . .]' as 'The proposition that . . . is at some time or other the content of someone's knowledge', we can say that this rule allows us to distribute 'K' across the connective '&':

Distributivity

$$\frac{\Gamma: \quad K[A \,\&\, B]}{\Gamma: \quad K[A] \,\&\, K[B]}$$

I shall not dispute this principle.[30] – The second K-rule registers an entirely uncontroversial feature of our concept of propositional knowledge. It allows us to go from 'Someone knows that things are thus and so' to 'Things are (in fact) thus and so':

Factivity

$$\frac{\Gamma: \quad K[A]}{\Gamma: \quad A}$$

The argument aims at showing that the anti-realist principle that every truth *can in principle* be known,[31] i.e. (using '**Poss**' as short for 'It is in principle possible that'):

(1) $\forall x(Tx \rightarrow \mathbf{Poss}\ Kx)$

is incompatible with the reasonable assumption that at least one truth is *in fact* never known:

(2) $\exists x(Tx \,\&\, \neg Kx)$

The argument runs as follows: Let 'P' abbreviate the true answer to a decidable question which is so tedious that nobody ever cares to find out the answer, in other words: let us assume a substitution instance of the matrix in (2):

(2*) $T[P] \,\&\, \neg K[P]$

Applying *Truth Elimination* to the first conjunct in (2*) we get

(3*) $P \,\&\, \neg K[P]$

From (3) we derive, in accordance with *Truth introduction*,

(4) $T[P \,\&\, \neg K[P]]$

By applying Universal Instantiation and Modus Ponens we obtain from (1) and (4):

(5) **Poss** K[P & ¬K[P]]

Assuming that *Distributivity* can be applied within the scope of the modal operator, we move from (5) to

(6) **Poss** (K[P] & K[¬K[P]])

Assuming that *Factivity* can also be applied within the scope of 'Poss', we apply it to the second conjunct of (6) and derive:

(7) **Poss** (K[P] & ¬K[P])

This tells us that a contradiction might be true, which is absurd. So from (1) and (2) we have derived an absurdity. If we keep premiss (1), the anti-realist principle of knowability, we must give up (2) and say that there is no truth which is never known. But the negation of (2) is (classically) equivalent to the statement that every truth *is* known. So by accepting the apparently harmless principle of know*ability* one incurs a commitment to what Fitch calls a 'very silly' form of verificationism. Hence we'd better give up that principle.

Since we followed Putnam´s variations on truth rather closely in the last section let me report here a surprising discovery. Long before he adopted his Interim Position, Putnam used an abbreviated version of the Fitch Argument against Logical Empiricism:[32]

(P-17) [T]he claim [. . .] that having a truth value is the same as being verifiable is [. . .] untenable. The sentence

> (3) There is a gold mountain one mile high and no one knows that there is a gold mountain one mile high.
>
> is, if true, unverifiable. No conceivable experience can show that both conjuncts in (3) are simultaneously true; for any experience that verified the first conjunct would falsify the second, and thus the whole sentence. Yet no one has ever offered the slightest reason for one to think that (3) could not be true in some possible world.
>
> (Putnam 1975d: 443)

Obviously Putnam's (3) is a counterpart to (3) in the Fitch Argument, and Putnam's argument is a reflection on (5). If somebody were to know that P (that there is a gold mountain one mile high), he or she would be a living counterinstance to the statement that ¬K [P] (that no one ever knows that

there is a gold mountain one mile high). But a conjunction cannot be a content of knowledge if the first conjunct's being such a content entails the *falsity* of the second conjunct. Due to the peculiarity of the chosen example, (P-17), unlike the Fitch Argument, does not show that some proposition which is true *in our actual world* is knowledge-transcendent. And due to the fact that (P-17), like the Fitch Argument, uses the notion of knowledge, it is unclear whether it can also be used as a weapon for fighting Interim Putnam. (I shall soon come back to the second point.)

My own epistemic blindspot argument differs in several important respects from the Fitch Argument: It does not centre around the notion of *knowledge* (but around the weaker notion of justified belief), it employs no distinctively *classical* principles which are rejected by intuitionist logicians, and it abstains from substitution into *modal* contexts. These were the very features of the original argument which provided partisans of alethic anti-realism with various escape routes.

Moderate alethic anti-realists maintain that every truth can in principle be the content of a *justified belief*. Now if they are right, then for every true proposition the assumption that it is true and the assumption that it *is* the content of a justified belief must at least be compatible. (If all sugar-lumps are water-soluble, then being a sugar-lump must not exclude being about to dissolve.) This gives us a Common Denominator of all varieties of alethic anti-realism, including the most reasonable one, Interim Putnam:

(**ComDen**) *There is no true proposition such that the assumption that it is both* true *and the content of a* justified *belief implies a contradiction.*

Notice that the first occurrence of 'true' in (ComDen) is not redundant. Every logically inconsistent, hence necessarily *false* proposition is such that the assumption that it is (both) true (and the content of a justified belief) implies a contradiction. The contingently *false* proposition that there are no believers is also such that the assumption that it is (both true and) the content of a justified belief implies a contradiction, because if a proposition is the content of a belief then there is at least one believer. But the fact that some *false* propositions cannot consistently be assumed to be both true and justified cannot be held against alethic anti-realists. After all, their contention is that all *true* propositions can be justified.

If this common denominator of all varieties of alethic anti-realism is demonstrably incorrect then alethic anti-realism is refuted. Let me ride my attack on (ComDen) on a concrete example. According to the Gospel of St Matthew (10: 30), 'the very hairs of [my] head are all numbered', but let us suppose that the Gospel, taken literally, is wrong here. Now consider these two propositions:

(Σ_0) The number of hairs now on my head is *odd*, but nobody is ever justified in believing that this is so.
(Σ_E) The number of hairs now on my head is *even*, but nobody is ever justified in believing that this is so.

In order not to be distracted by vagueness worries, let us make for the sake of the argument the (sadly counterfactual) assumption that whatever grows on my head is a paradigm case of a hair. Then we can say with good philosophical conscience that either the first conjunct of Σ_0 or the first conjunct of Σ_E is true. Now *as a matter of contingent fact*, nobody ever bothers to count. But in the case at issue justification depends on someone's counting. Hence nobody is in fact ever justified either in believing that the number in question is odd, or in believing that it is even. Therefore either Σ_0 or Σ_E is *true*, and as in the case of the *Encyclopaedia* every sane adherent of an epistemic view of truth concedes that this is so.

Let's see whether either of these propositions can also be the content of a *justified* belief. Apart from &-Elimination and -Introduction my argument for alethic realism uses two further elimination rules. The first one does not stand in need of explanation, let alone defence. (It was also used in the Fitch Argument. 'T [. . .]' is again short for 'The proposition that . . . is true'.)

Truth elimination

$$\frac{\Gamma: \quad T[A]}{\Gamma: \quad A}$$

The second rule permits us to move from a premiss in which justified belief in a conjunction is ascribed to a conclusion in which justified belief in one of the conjuncts is ascribed.[33] Using '$\mathfrak{J}$ [. . .]' as an abbreviation for 'The proposition that . . . is at some time or other the content of a justified belief' we can formulate the second rule thus:

&-elimination under $\mathfrak{J}$

$$\frac{\Gamma: \quad \mathfrak{J}[A \,\&\, B]}{\Gamma: \quad \mathfrak{J}[A]} \qquad \frac{\Gamma: \quad \mathfrak{J}[A \,\&\, B]}{\Gamma: \quad \mathfrak{J}[B]}$$

At this point I cannot do much more than try to evoke your consent by means of a rhetorical question: How on earth could somebody, who wasn't entitled to believe a certain proposition, at the same time be entitled in believing a conjunction containing this proposition?[34] How could one entirely lack evidence for one of the conjuncts and yet be in possession of evidence for the conjunction (and not only for the other conjunct)?[35] Often a conjunctive belief is inferentially due to prior beliefs in the conjuncts, and in such cases there is of course no justified belief in the conjunction without justified belief in the conjuncts. But there are also other ways of obtaining

a justified conjunctive belief: It may owe its justification to testimony received for the conjunction as a whole, or its justification may be due to an inference from (A & B) ∨ C, and ¬C, where these two premisses are rationally believed.[36] Or perhaps a perceptual encounter provided the subject with an opportunity to realize at a glance that (A & B). So we cannot legitimize our acceptance of *&-elimination under* ℑ by referring to something like a canonical way of obtaining a conjunctive belief. We should rather say that this rule is legitimate because one cannot be justified in believing a conjunction without *thereby* already being justified in believing the conjuncts.

Now let 'O' abbreviate the first conjunct of Σ_0, i.e. 'The number of hairs now on my head is *odd*'. Then the argument for alethic realism I promised can be set up like this:

1	(**1**) T [O & ¬ ℑ[O]]	Assumption
1	(**2**) O & ¬ ℑ [O]	1, Truth Elimination
3	(**3**) ℑ [O & ¬ ℑ [O]]	Assumption
3	(**4**) ℑ [O]	3, &-Elimination under ℑ
1	(**5**) ¬ ℑ [O]	2, &-Elimination
1, 3	(**6**) ℑ [O] & ¬ ℑ [O]	4, 5, &-Introduction

Thus in the case of Σ_0, being true, line (1), and being justified, line (3), *do* exclude each other. As regards Σ_E the argument runs on the very same lines, of course. Hence each of these two propositions is such that the assumption that it is both true and (the content of a) justified (belief) implies a contradiction. But admittedly one of these propositions *is* true. Hence there is a proposition which falsifies (ComDen) and thereby all versions of alethic anti-realism. Truth is not epistemically constrained. Some truths are necessarily beyond justification. Alethic realism is vindicated.

A super-human verifier, too, cannot verify Σ_0 or Σ_E. But, of course, if he surpasses us so much that he knows *everything* then 'the very hairs of our heads are all numbered' and both Σ_0 and Σ_E are *false*. But that is quite another matter.

Of course, after the model of our two Σ-propositions one can easily construct countless structurally similar examples. What is more interesting, by thinning 'ℑ' out, so to speak, one gets counter-examples to common denominators of all positions opposed to alethic realism, which are yet smaller than (ComDen). If a truth can be the content of a justified belief, then a fortiori it can be the content of a belief – and of a (committal or non-committal) thought. These weaker predicates certainly distribute under conjunction: One cannot believe or merely entertain a conjunctive

proposition without thereby believing or entertaining its conjuncts. Hence if in the argument from (1) to (6) '[. . .] is at some time or other the content of a *justified belief*' is replaced by '[. . .] is at some time or other the content of a *belief*' or by '[. . .] is at some time or other the content of a *thought*', we can again derive a contradiction. You can move along the same path if you replace justified belief, belief, and thought by their manifestations in speech. Then you get from '[. . .] at some time or other *warrantedly asserted*' via '[. . .] at some time or other *asserted*' down to '[. . .] at some time or other *uttered* (expressed)', and in each case you can derive a contradiction, since these predicates, too, distribute under conjunction.

In a discussion note on the Fitch Argument, Joseph Melia contends that it is quite harmless for alethic anti-realism (Melia 1991: 341f). If he were right against Fitch he would also be right against my argument. Applying his reasoning to the latter, it runs like this: The argument is unproblematic for alethic anti-realists, since although Σ-propositions cannot be verified, they can be falsified. The answer can be equally brief. To be sure, Σ-propositions *are* falsifiable, but this is irrelevant here: What alethic anti-realists maintain is that all true propositions can be verified.

More recently, Neil Tennant, in his detailed and highly instructive analysis of the Fitch Argument, proposes to disarm it by restricting the claim of the alethic anti-realist. Tennant's anti-realist would escape my argument as well, for he contends only that all those true propositions which do not have the kind of reflexivity to be found in Σ-sentences are justifiable (Tennant 1997, Chapter VIII, esp. p. 274). But this is really an evasion. First we are told:

> Before he even considers what is peculiar to any discourse, the anti-realist will be committed to the tenet that truth is in principle knowable. That is, he will reject Knowledge-Transcendence across the board. [. . .] In every discourse the notion of truth will be epistemically constrained. (Ibid.: 50)

In the end we are given only a defence of the claim that all true propositions, lacking that property which was fatal for the original tenet, are knowable.[37]

One of our two Σ-sentences expresses a recognition-transcendent truth, but its conjuncts are *not* recognition-transcendent. One gets into the position of verifying the first conjunct by making a careful count. As for the second conjunct, consider the following scenario: I am alone in the desert, and I am well aware of this fact. In a fit of desperation I have just pulled out a bunch of my hair, I am presently going to do so again, and in the meantime I do not seize the opportunity to determine the number. Then I am justified in believing that nobody is ever justified in believing that the number of hairs now on my head is odd [even]. Thus, by any standards, the significance of the conjuncts is beyond doubt.

What about a Σ-sentence as a whole? *Are* Σ*-sentences comprehensible?* After all, the conviction that one understands a sentence is not infallible. Remember Wittgenstein's thought-provoking example (Wittgenstein 1953: §350):

(S) It's now 5 o'clock on the sun.

No doubt, Elizabeth Anscombe's translation preserves the sense, i.e. the linguistic meaning, of Wittgenstein's German sentence. The senselessness of (S) becomes apparent on another level of understanding: There is *nothing which could be said* in an utterance of (S). Equally my Σ-sentences can be translated into impeccable German, but this is irrelevant. The problem is: How can one defend Σ-sentences against the imputation of (propositional) senselessness which might be directed against them by the friends of an anti-realist conception of sense?

It seems to be easy to do so. Doesn't it plainly follow from the fact that the conjuncts of a Σ-sentence are significant that the conjunction is also immune against the charge of senselessness? How could the conjunction of two significant declarative sentences lack significance? How could one fail to understand a conjunction if one understands the connective and both conjuncts?[38] But a slight modification of Wittgenstein's example shows that this *Internal Compositionality Argument* is worthless. Consider

(S*) It's now 5 o'clock where I am, and the sun is where I am.

Both conjuncts of (S*) are significant: Each could be used to make a statement. ('In principle', I hasten to add, for in the second case one would need quite a bit of asbestos for making a true statement.) But if (S*) were significant it would entail (S), hence (S) would have to make sense, too, which it plainly doesn't. Hence (S*) is not significant either. The Internal Compositionality Argument just doesn't work.

The *External Compositionality Argument* gives us what we need. Surely we understand the *negation* of Σ_0. I can be justified in believing what I say when uttering the negation of Σ_0: Perhaps I took the trouble of making a careful count, and the number I arrived at was even. So the truth of the proposition I express by 'It is not the case that' + Σ_0 is not recognition-transcendent. But the negation operator cannot perform semantic miracles: It cannot transform a senseless string of signs into a sentence we can understand. (The result of applying this operator to 'It's now 5 o'clock on the sun' is just another senseless string.) So Σ_0 is significant: We do not suffer from an illusion when we think we understand Σ-sentences.

Although the Internal Compositionality Argument could not establish the significance of our Σ-sentences, it remains true that we could not understand such sentences if we did not understand their conjuncts and the connective 'and'. So in a restricted form the epistemic conception of *meaning* remains intact. *Our ability to understand sentences which express recognition-*

transcendent truths or falsehoods is not a free standing ability: It rests firmly on our ability to understand certain other sentences which express recognizable truths or falsehoods. The very same contention is also supported by Putnam's 'extra-terrestrial' counter-example to his Interim Position:[39]

(P-18) [I]f we had no grasp of what made

(1) There is intelligent extraterrestrial life

warrantedly assertable, we would not be able even to understand

(2) There is no intelligent extraterrestrial life.

(Putnam 1992b: 365)

Our grasp of propositions which are beyond justification depends on our grasp of certain other propositions which are justifiable.

Comment on Wolfgang Künne's paper

Hilary Putnam

This is a beautiful paper, and I shall really keep my comments short. I hope the following answers some of your questions:

I have had three different reasons for being interested in intuitionist logic, and it is important to distinguish them. One reason was purely mathematical, and I shall not go into it today. A second was that I was interested in using the axioms and rules of intuitionist logic (but not the verificationist interpretation!) as a way of trying to formalize inferences containing vague predicates.[40] But the most important reason was that (in my 'internal realist' period) I was inclined, like Dummett, to think of intuitionist logic as, so to speak, the *default* logic. The idea that verificationism (a form of which motivated Dummett's idea that intuitionist logic is all-important metaphysically) is the default position is not hard to understand. The idea is that *understanding a sentence* is just possessing the capacity to recognize verifications, and any other notion of 'understanding a sentence' then looks magical. It seems to me more and more that we need to reject the idea that verificationism is the default position, and that the burden of proof is on the anti-verificationist.[41] Of course, a lot of our reasons for being attracted to it have to do with the whole epistemological tradition after Descartes.

Two more brief points:

1 It is obviously possible to engage in a normative practice without having the word 'justified', or any synonym, in one's language. (If we exclude modern coinages, I am not aware of any word that has exactly the same meaning as 'justified' in Hebrew, for example.) Yet there is a sense in which anyone who engages at times in debate about the credentials of a belief has an implicit notion of justification, and that seems to me the important sense.

2 Re the connection between justification and truth: I do not think that one can grasp the content of such ordinary 'observation sentences' as 'This is a chair', 'I see the mountain', etc., without implicitly grasping certain justificatory norms. Although truth is not the same as justification (or even the same as idealized justification) it is certainly connected with justification.[42]

10 Truth and trans-theoretical terms

Gary Ebbs

Introduction

One central theme in Hilary Putnam's work is that there is a deep connection between truth and trans-theoretical terms – terms such as 'energy' and 'gold', whose references have remained the same despite fundamental changes in our beliefs.[1] Putnam points out, for instance, that

> just as the idealist regards 'electron' as theory dependent, so does he regard the semantical notions of reference and truth as theory dependent; just as the realist regards 'electron' as *trans-theoretical*, so does he regard truth and reference as trans-theoretical.
>
> (Putnam 1975d: 198)

Noting these connections, some philosophers embrace the thesis that reference is trans-theoretical because they have strongly realist intuitions about *truth*. Such philosophers typically assume that their intuitions about truth are in principle *independent of* our actual linguistic practices. In contrast, as I see it, Putnam's criticism of idealism – in particular, his criticism of logical positivism – starts with the methodological idea that our understanding of truth and reference is *rooted in* our actual practices of agreeing, disagreeing, evaluating assertions, and resolving disputes. If we embrace this idea, then *to understand truth we need an account of reference that makes sense of actual cases in which we take ourselves to agree or disagree*.

Putnam's most persuasive argument against positivism rests on actual cases in which speakers who accept very different theories apparently use the same terms to make incompatible assertions. He points out that the positivists' proposals prevent them from accepting that the speakers in these cases genuinely disagree, and concludes that the positivists don't understand truth. He observes, for example, that we disagree with some of the assertions which we take Niels Bohr to have made in 1911 by using the term 'electron', including the assertion that electrons have at each moment a determinate position and momentum. The positivist theories of truth and reference that Putnam opposes imply that the reference of our term 'electron' is different from the reference of Bohr's term 'electron' in 1911, so when we assert that electrons don't at each moment have a determinate position

and momentum, we aren't really disagreeing with an assertion Bohr made in 1911 by using his term 'electron'.[2] Putnam rejects this conclusion, and recommends instead that we accept the identifications of agreements and disagreements between speakers that we actually make in the midst of our everyday and scientific inquiries. He points out that to accept these identifications, and, in particular, to accept that we disagree with Bohr about electrons, is to accept that some of our terms, including 'electron', are trans-theoretical[3] (Putnam 1975d: 197).

I will explore this connection between truth and trans-theoretical terms by examining what I regard as Putnam's central objection to W. V. Quine's deflationary theory of truth and reference: that it leads to the absurd conclusion that two speakers cannot genuinely agree or disagree with each other. I will argue that the best way to see what is wrong with Quine's theory of truth and reference from Putnam's perspective is to recast this objection as a criticism of Quine's treatment of trans-theoretical terms. In a series of papers published between 1983 and 1993, Putnam claims that his central objection to Quine's deflationary view of truth shows that truth must be a substantive property of some kind.[4] In his *Dewey Lectures*, published in 1994, he criticizes the idea that truth is a substantive property, but still maintains that 'deflationism . . . cannot properly accommodate the truism that certain claims about the world are (not merely assertable or verifiable but) *true*'[5] (Putnam 1994b). What Putnam's central argument against Quine's deflationism shows, however, if we reconstruct it in the way I will suggest, is that an account of truth and reference is satisfactory only if it accords with the identifications of agreements and disagreements between speakers that we actually make in the course of our inquiries. I will sketch a new kind of deflationism about truth and reference that meets this condition and accommodates the truism that some claims about the world are not merely assertable or verifiable but true.

Quine's deflationary view of truth and denotation

Quine's philosophy starts with scientific naturalism, 'the recognition that it is within science itself . . . that reality is to be identified and described' (Quine 1981: 21). He counts logic among the sciences, but argues that there are no propositions, so the laws of logic must be formulated schematically, using Tarski-style definitions of truth.

Quine's objection to propositions is an expression of his scientific naturalism. He reasons that

> If there were propositions, they would induce a certain relation of synonymy or equivalence between sentences themselves: those sentences would be equivalent that expressed the same proposition. Now my objection is . . . that the appropriate equivalence relation makes no objective sense at the level of sentences.
>
> (Quine 1986: 3)

That 'the appropriate equivalence relation makes no objective sense at the level of sentences' is Quine's notorious thesis of the indeterminacy of translation, according to which a speaker's language can be mapped onto itself (and any other language that it translates can be mapped onto it) in a variety of inequivalent ways, each of which preserves the net association of sentences with sensory stimulation. Quine thinks that such a mapping preserves the net association of sentences with sensory stimulation just in case the mapping would allow for 'fluency of dialogue', described behavioristically. He assumes that the objective empirical content of any given sentence is exhausted by the behavioral dispositions that link it to sensory stimulation. He argues that these dispositions don't uniquely determine translation – different 'translations' would pass a behavioristic test for 'fluency of dialogue' – so translation between sentences is not an equivalence relation, and (given that if there *were* propositions, translation between sentences *would be* an equivalence relation) there are no propositions.[6]

If there are no propositions, the truth predicate does not apply to propositions. Instead, according to Quine, the truth predicate is 'a device of disquotation' that applies to sentences (Quine 1986: 12). In its application to particular sentences, it follows the disquotational pattern

(T) '____' is true if and only if ____ .

But there is no *advantage* to saying, for instance, that 'Alexander conquered Persia' is true; it is easier and more direct to say that Alexander conquered Persia. So if the only use for the truth predicate were in application to sentences that we can directly affirm, one by one, then we could do without it.[7]

In Quine's view we need a truth predicate to formulate the laws of logic. Since there are no propositions, he reasons, we can't formulate the logical law of excluded middle, for example, by saying that for every proposition p, either p or not p. To formulate such laws without quantifying over propositions, we need a truth predicate.

> When we want to generalize on 'Tom is mortal or Tom is not mortal', 'snow is white or snow is not white', and so on, we ascend to talk of truth and of sentences, saying 'every sentence of the form 'p or not p' is true', or 'every alternation of a sentence with its negation is true'. We ascend only because of the oblique way in which the instances over which we are generalizing are related to one another.
>
> (Ibid.: 12)

Quine concludes that logical laws are schematic generalizations that can be formulated only by using a truth predicate.

The pattern (T) is a promising first step toward defining a disquotational truth predicate that can be used to state logical generalizations. But it is well known that applications of (T) must be restricted if we are to avoid

the liar paradox. One way to avoid paradox is to adopt Alfred Tarski's approach to defining truth for particular formalized languages.[8] The approach requires that the language to which our logical schemata apply be properly regimented. A regimented first-order fragment of English, for instance, may include such sentences as '(Alexander conquered Persia) $\vee$ $\neg$(Alexander conquered Persia),' '$\forall x((x$ is mortal) $\rightarrow$ (x is mortal))' and '$\exists x \forall y(x$ loves $y) \rightarrow \forall y \exists x(x$ loves $y)$'. These sentences are instances, respectively, of the logical schemata '$\mathrm{p} \vee \neg \mathrm{p}$', '$\forall x(\mathrm{F}x \rightarrow \mathrm{F}x)$', and '$\exists x \forall y \mathrm{G}xy \rightarrow \forall y \exists x \mathrm{G}xy$'. We can use these schemata to state logical laws, by saying 'every sentence of the form "$\mathrm{p} \vee \neg \mathrm{p}$" is true', 'every sentence of the form "$\forall x(\mathrm{F}x \rightarrow \mathrm{F}x)$" is true', and 'every sentence of the form "$\exists x \forall y \mathrm{G}xy \rightarrow \forall y \exists x \mathrm{G}xy$" is true'.

To understand these generalizations, we need a precise characterization of what counts in our language as a sentence of one of these forms, together with a clear and consistent characterization of what it means to say of any one of these sentences that it is true. The former need is met by well-known *syntactical* criteria for admissible substitutions of regimented English sentences and predicates for schematic letters,[9] and the latter need is met by Tarski's method of defining truth for particular formalized languages.

This method depends on the idea of *satisfaction* of a predicate by a sequence of objects. When the metalanguage contains the object language, a Tarski-style account of satisfaction for those predicates can be disquotational. Suppose all the variables of the object language are numbered sequentially, and let the ith variable in this sequence be called var(i). A *sequence* of objects is a function from positive integers to objects; for any such sequence s, let s_i be the ith object in s. Then if the metalanguage contains the object language, we can say, for example, that for every sequence s, s satisfies 'red' followed by var(i) if and only if s_i is red, s satisfies 'loves' followed by var(i) and var(j) if and only if s_i loves s_j, and s satisfies 'between' followed by var(i), var(j) and var(k) if and only if s_i is between s_j and s_k.[10] Satisfaction is closely related to denotation.[11] For instance, we can say that for every sequence s, 'red' followed by var(i) denotes s_i if and only if s_i is red, 'loves' followed by var(i) and var(j) denotes the ordered pair $<s_i, s_j>$ if and only if s_i loves s_j, and 'between' followed by var(i), var(j) and var(k) denotes the ordered triple $<s_i, s_j, s_k>$ if and only if s_i is between s_j and s_k.[12]

A first look at Putnam's objection

Putnam's central objection to Quine's deflationary view of truth and denotation is that it prevents Quine from seeing that speakers can agree or disagree with each other. As Putnam sees it, Quine thinks his naturalistic account of our dispositions to assent to or dissent from sentences under various prompting stimulations says all there is to say about language. Against this, Putnam argues that

> if all there is to say about language is that it consists in the production of noises (and subvocalizations) according to a certain causal pattern; if the causal story is not to be and need not be supplemented by a normative story; if there is no substantive property of *warrant* connected with the notion of *assertion*; if truth itself is not a property (the denial that truth is a property is, in fact, the central theme of all disquotational theories); then there is no way in which the noises we utter (or the subvocalizations that occur in our bodies) are more than mere 'expressions of our subjectivity'.
>
> (Putnam 1994a: 321)

The noises we utter count as *assertions*, hence more than mere 'expressions of our subjectivity', only if in making them we can *agree* or *disagree* with other speakers. But, Putnam argues, if Quine's naturalistic account of linguistic behavior is complete from a philosophical as well as a scientific point of view, then

> we cannot genuinely disagree with each other: if I produce a noise and you produce the noise 'No, that's wrong', then we have no more disagreed with each other than if I produce a noise and you produce a groan or a grunt . . . if I produce a noise and you produce the same noise, then this is no more *agreement* than if a bough breaks and then another breaks in the same way.[13]
>
> (Putnam 1994a: 322)

Putnam concludes that 'we have to recognize that there are some kind of objective properties of rightness and wrongness associated with speaking and thinking . . . ' (ibid.). In his view, truth *must* be more than a device for disquotation, since we *do* actually make and evaluate assertions, agree and disagree with each other.

A reply on Quine's behalf

Many of the sentences that we *use* to make statements contain no expressions that *mention* (refer to) linguistic expressions. For example, when we use 'Alexander conquered Persia' to state that Alexander conquered Persia, we do not mention (refer to) linguistic expressions at all. To describe the dispositions that link a speaker's sentences to impacts at her nerve endings, however, we must mention (refer to) those sentences. Hence Quine's naturalistic descriptions of linguistic behavior always mention (refer to) the sentences whose links to sensory stimulation are being described.[14]

The use-mention distinction enables Quine to make sense of disagreement or agreement in terms of logical incompatibility. If we are only describing the dispositions that link speakers' sentences to impacts at their nerve endings, the question of whether an utterance of 'Alexander conquered Persia'

is logically incompatible with an utterance of '¬(Alexander conquered Persia)' will not arise. But we can conjoin these sentences to construct the sentence '(Alexander conquered Persia) ∧ ¬(Alexander conquered Persia)', and then *use* this sentence to express the inconsistent statement that (Alexander conquered Persia) ∧ ¬(Alexander conquered Persia). The inconsistency of the statement that (Alexander conquered Persia) ∧ ¬(Alexander conquered Persia) comes down to the inconsistency of the sentence '(Alexander conquered Persia) ∧ ¬(Alexander conquered Persia)'. To say that the sentence is inconsistent is to say that it has the form 'p ∧ ¬p' and that every sentence of this form is false.[15] Let us say that two statements (expressed in the same language) are *logically incompatible* if the conjunction of the sentences used to express those statements is inconsistent. Quine could then say that two statements (neither of which is by itself inconsistent) express a *disagreement* if they are logically incompatible, and that they express an *agreement* if the conjunction of the sentence used to express one of the assertions with the negation of the sentence used to express the other assertion is inconsistent. Finally, Quine could say that two *speakers* agree or disagree if they make statements that express an agreement or a disagreement.

Quine should also reject Putnam's claim that in Quine's view, all there is to 'understanding' is stated in his naturalistic description of linguistic behavior. Quine should reply that his naturalistic account of linguistic behavior is part of his theory of objective empirical content, not a replacement for or analysis of the methods of particular disciplines, such as logic, mathematics, physics, biology and psychology. In Quine's view, there is no better way to answer questions about methods for evaluating assertions than to immerse oneself in the details of particular sciences. Quine has explored and clarified methods for evaluating assertions in mathematical logic and set theory. His central works in these areas – *Mathematical Logic* (1940), *Methods of Logic* (1952) and *Set Theory and its Logic* (1963) – are not part of what he calls naturalized epistemology. They are attempts to use the vocabulary and methods of mathematical logic and set theory to clarify well-known aspects of these disciplines, and to propose new methods for them. Such immersion in the details of particular sciences, however, does not yield an epistemology that is independent of or more general than the particular sciences themselves.

We can now see how misleading it is to say that in Quine's view truth is not a property. To say that a predicate 'expresses a property', for Quine, is just to say that the predicate is clear and meaningful, not that there is some property it expresses. He thinks the truth predicate is clear and meaningful. It applies to 'Alexander conquered Persia', for instance, if and only if Alexander conquered Persia. We believe that Alexander conquered Persia, but we might discover that Alexander did *not* conquer Persia. The truth predicate is not simply a way of affirming a sentence, since it may not apply to a sentence even if we think it does:

> We should and do currently accept the firmest scientific conclusions as true, but when one of these is dislodged by further research we do not say that it had been true but became false. We say that to our surprise it was not true after all. Science is seen as pursuing and discovering truth rather than as decreeing it. Such is the idiom of realism, and it is integral to the semantics of the predicate 'true'.
>
> (Quine 1995: 67)

Trusting in the methods of particular sciences, we distinguish in practice between truth and even our firmest scientific conclusions: if we discover a mistake, we conclude that despite our best efforts, we were wrong.

These considerations show that from Quine's perspective, Putnam's objection wrongly presupposes that we can draw the use-mention distinction only if truth is a property in some sense that goes beyond the observation that the truth predicate is clear and meaningful. A related mistake is to assume that if there are methods for evaluating statements, we must be able to describe these methods from a perspective independent of the particular sciences within which they are displayed and used.

A reformulation of Putnam's objection

Although Putnam certainly *seems* at times to suppose that we can draw the use-mention distinction only if if truth is a property in some sense that goes beyond the observation that the truth predicate is clear and meaningful, there is a version of Putnam's central objection to Quine that does not rest on that supposition. The basic idea is that even if we grant Quine the use-mention distinction, his indeterminacy thesis leads him to conclude that there are no genuinely trans-theoretical terms, and thereby undermines his attempts to make sense of agreement and disagreement between speakers.

To appreciate this second version of Putnam's objection, it helps to distinguish between in*tra*subjective and in*ter*subjective relations of agreement and disagreement between assertions. An intrasubjective relation of agreement and disagreement between assertions can be captured in terms of logical inconsistency in the way sketched above. Each speaker can settle for himself whether or not two of his assertions *disagree* by determining whether the conjunction of the two sentences that he used to express those assertions is inconsistent. This in turn is accomplished by determining whether the conjunction is a sentence of the logically inconsistent form '$p \wedge \neg p$'. The indeterminacy thesis does not undermine this account of disagreement between assertions made by using sentences of a single idiolect. Even though each idiolect can be translated into itself in a number of inequivalent ways, negation is translated in the same way for each manual according to Quine,[16] so each mapping of a speaker's idiolect into itself that satisfies Quine's behavioristic criterion for 'fluency of dialogue' will attribute the same incompatibility relations to pairs of assertions made by using sentences of that idiolect.

In some *apparently* intrasubjective cases, however, the indeterminacy thesis undermines the commonsense assumption that the relation of agreement or disagreement between assertions is independent of our choice of a manual of translation. The reason is that, according to Quine, *nothing settles whether a speaker's idiolect at one time is the same or different from his idiolect at another time*. Strictly speaking, for Quine, nothing settles whether assertions made in a speaker's idiolect at one time agree or disagree with assertions made in his idiolect at another time. Such judgments must be made *relative* to a manual of translation between the speaker's earlier and later idiolects.

In this respect, according to Quine, translation between earlier and later idiolects of a single speaker is no different from translation between two idiolects of different speakers. You may assert '¬(Alexander conquered Persia)' and I may accept 'Alexander conquered Persia', but this doesn't yet settle whether we disagree, because it doesn't settle whether your sentence '¬(Alexander conquered Persia)' should be translated into my idiolect as '¬(Alexander conquered Persia)'. Our identifications of agreements and disagreements between assertions made by different speakers, or within different idiolects of the same speaker, depend on our choice of a manual of translation that settles how sentences are mapped to sentences, and terms are mapped to terms. Bob may sincerely utter his sentence 'electrons have at each moment a determinate position and momentum' and I may assert that electrons do not have at each moment a determinate position and momentum; this does not determine that we disagree, even if we are both competent English speakers, since our idiolects may be mapped onto each other in different ways compatibly with all our speech dispositions. One mapping is the homophonic one, according to which Bob's sentence 'electrons have at each moment a determinate position and momentum' is translated into my idiolect as 'electrons have at each moment a determinate position and momentum'. Relative to this translation, we disagree about whether electrons have at each moment a determinate position and momentum. Yet there are other translations that don't treat 'electron' as the same word in both our idiolects. Relative to some of these alternative translations, the assertion that Bob expresses by using his sentence 'electrons have at each moment a determinate position and momentum' does not disagree with my assertion that electrons do not have at each moment a determinate position and momentum.

We may summarize these points by saying that for Quine the translation of both sentences and terms is indeterminate.[17] Since the facts don't determine that the homophonic translation is the correct one, the facts don't support our judgment that 'electron' is a trans-theoretical term. What *look* in practice like trans-theoretical terms are simply terms that we translate homophonically, but that we might just as well have translated non-homophonically.

We can now reformulate Putnam's objection as follows: Quine's indeterminacy thesis implies that our actual identifications of agreement and disagreement are dependent on *arbitrary* choices between equally acceptable

translations between idiolects. This undermines our confidence in our actual identifications of agreement and disagreement, and thereby threatens to sever the vital link between our understanding of truth and our actual practices of agreeing, disagreeing, evaluating assertions, and resolving disputes.

According to this reformulation of Putnam's objection, Quine's theory of the relation between idiolects calls into question the practical perspective from which we typically take each others' words at face value, and thereby threatens to undermine our trust in the practices that constitute our best grip on how we evaluate assertions, and when we agree or disagree. By insisting that our practice of taking some terms at face value reflects a merely subjective preference for one kind of translation manual over another, Quine discredits our practice of treating some terms as trans-theoretical.

With this reconstruction of Putnam's objection in mind, let's look again at Quine's claim that truth is independent of belief. As we have seen, Quine claims that the distinction between truth and belief is 'integral to the semantics of the predicate "true"' (Quine 1995: 67). But from Putnam's perspective, Quine's account of the relation between idiolects prevents him from understanding the realist semantics of the predicate 'true'. If the relationship between earlier and later uses of a term is always mediated by a choice of a manual of translation, then so is our understanding of the claim that what we accept now may be false. For Quine the claim that what we accept now may be false amounts to the claim that we may *discover* that we were wrong. To make sense of such discoveries, we must imagine a translation from earlier utterances to later ones. But if attributions of truth to earlier utterances are always made relative to a *choice* of a translation manual, truth is not a fully *objective* property of those utterances.[18] Hence Quine's thesis of the relativity of our ascriptions of truth to our own past utterances prevents him from understanding the realist semantics of the predicate 'true'.

Putnam's reasons for rejecting all deflationary views of truth

Quine's deflationary view of truth is a consequence of his naturalistic theory of linguistic behavior, which leads him to reject propositions, and to recommend that we use a disquotational truth predicate to state the laws of logic. All the deflationary views of truth that Putnam criticizes – those of Paul Horwich, Richard Rorty and Michael Williams, among others – combine behavioristic, functional, or inferential descriptions of linguistic activity with a disquotational account of truth and denotation.[19] What these deflationary views have in common, according to Putnam, is that they derive the conclusion that truth is not an objective property from incomplete or inaccurate theories of linguistic activity.[20]

Putnam rejects all deflationary views for essentially the same reasons that he rejects Quine's deflationary view. Even though few of the other deflationists embrace indeterminacy, they each adopt their own theories of

linguistic activity. Putnam urges us to reject all of these deflationary accounts of linguistic activity, because he thinks they prevent us from trusting our practical identifications of agreement and disagreement between speakers. Ultimately, then, Putnam's objection to deflationary views of truth and denotation has fundamentally the same structure as his objection to positivism: deflationists and positivists both make theoretical assumptions that prevent them from trusting our practical identifications of agreements and disagreement between speakers.

First sketch of an alternative deflationary view of truth and denotation

My reconstruction of Putnam's objection to deflationary views of truth hints at the possibility of a deflationary view of truth and denotation that fits with our practical identifications of agreement and disagreement. To explore this possibility, I propose that we start by agreeing with Quine that the main reason we need a truth predicate is to state the laws of logic, and for this purpose all we need is a Tarski-style definition of truth and denotation for sentences and predicates of regimented languages we can use. To make sense of our practical identifications of agreement and disagreement between speakers, I propose that we put aside Quine's behavioristic descriptions of language use, and start instead with the observation that speakers of the same natural language typically take each other's words at face value without reflecting about whether they are justified in doing so. If I say, 'Electrons have at each moment a determinate position and momentum', you say, 'Electrons do not have at each moment a determinate position and momentum', and we both take each other to be minimally competent in the use of these words, then without thinking about it, we will take each other's words at face value – you'll take me to have asserted that electrons have at each moment a determinate position and momentum, and I'll take you to have asserted that electrons do not have at each moment a determinate position and momentum. As a result we'll take ourselves to *disagree* about whether electrons have at each moment a determinate position and momentum. In this case, if I'm not too stubborn, and we consult the right books or scientists, I'll come to agree with you.

In my view, our practice of taking each other's words at face value is integral to our understanding of truth because it is integral to our understanding of *satisfaction* and *denotation*. To see why, consider the following disquotational patterns:

(S) For every sequence s, s *satisfies* '____' followed by var(i) if and only if s_i is ____.

(D) For every sequence s, '____' followed by var(i) *denotes* s_i if and only if s_i is ____.

In principle, at least, each speaker can apply these disquotational patterns to his own words. For instance, if I affirm the results of writing 'electron' in the blanks of (S) and (D), I assert that for every sequence *s*, *s satisfies* (my predicate) 'electron' followed by var(*i*) if and only if s_i is (an) electron, and (my predicate) 'electron' followed by var(*i*) denotes an object s_i if and only if s_i is (an) electron.[21]

If I affirm the result of writing my word 'electron' in the blanks of (D), I can see that when I take another English speaker's word 'electron' at face value, I in effect take for granted that his word 'electron' denotes s_i just in case s_i is an electron, and so his word 'electron' has the same *denotation* as my word 'electron'. This is what I call a *practical judgment of sameness of denotation*. If I take another English speaker's word 'electron' at face value while I am talking to him, I make what I call a *practical judgment of sameness of denotation* ***at a given time***. If I take another English speaker's word 'electron' at face value while I am reading a sentence he wrote some time ago, I make what I call a *practical judgment of sameness of denotation* ***across time***.

Speakers of the same natural language typically take each other's words at face value without any special inquiry into whether they are justified in doing so, but they don't *always* take each other's words at face value in this way. For instance, if another English speaker uses a word we don't understand and can't use, we can't take it at face value. And sometimes another English speaker's use of an expression is so different from our use of it that we are not even tempted to take it at face value when he uses it.

We also sometimes revise and correct our unreflective ways of taking other English speaker's words. When such revisions and corrections are combined with the disquotational pattern for specifying denotations, they amount to revisions and corrections of our unreflective assumptions about the denotations of other speaker's words. That is why I call these unreflective assumptions ***judgments*** *of sameness of denotation*.

We can *describe* our practical judgments of sameness of denotation without thereby committing ourselves to any *theory* of what makes these judgments true or false. Beginning with this simple observation, I propose that we adopt a deflationary account of denotation, according to which our only grip on denotation is rooted in our practical judgments of sameness of denotation.

This alternative view contrasted with Quine's

Recall that according to my reconstruction of Putnam's central objection to Quine's deflationary view of truth, even if we accept that Quine can distinguish between the use and mention of linguistic expressions, his indeterminacy thesis implies that talk of agreement or disagreement between two speakers makes no sense unless it is relativized to a subjective 'choice' of how to 'translate' between their idiolects. This undermines our confidence in our practical identifications of agreement and disagreement

between speakers, and thereby conflicts with our robust *practical* distinction between belief and truth.

In my view our understanding of agreement or disagreement is *not* relative to a subjective 'choice' of how to 'translate' between idiolects. Together with our applications of the disquotational pattern (D), our practice of taking some of our fellow English speakers' words at face value sets the parameters for our judgments about whether we agree or disagree with them. These parameters are our practical judgments of sameness of denotation. They are revisable, but nevertheless 'ultimate', in the sense that there is no criterion for agreement or disagreement (or for sameness and difference of denotation) that is *independent* of all of them.[22]

If we accept that our practical judgments of sameness of denotation set the ultimate parameters for our understanding of sameness of denotation, we can make sense of the possibility that a conclusion we now firmly accept is false. To make sense of this possibility it is enough to imagine circumstances in which we take ourselves to have made a discovery that undermines our previous belief without undermining our practical judgments of sameness of denotation across time. This is how we can make sense of our disagreement with earlier assertions about electrons, for example.

Like Quine, I hold that the central reason we need an account of truth and denotation is to formulate the laws of logic schematically, and that for this purpose all we need are disquotational Tarski-style definitions of a truth predicate for sentences we can use. Unlike Quine, I propose that we build our practical judgments of sameness of denotation, and our practical identifications of agreement and disagreement between speakers into our disquotational understanding of truth and denotation. My alternative avoids the distortions of Quine's indeterminacy thesis without committing us to an inflationary theory of truth and denotation.

Why has this alternative been overlooked?

Like many others, Putnam takes for granted that a deflationary theory of truth must be motivated by a commitment to scientific naturalism, which inevitably casts doubt on the practical perspective from which we identify agreements and disagreements between speakers.[23] Quine has shown that scientific naturalism is a compelling and systematic motivation for deflationism about truth. But it is not the *only possible* systematic motivation for deflationism about truth. The alternative deflationary account of truth that I recommend begins with our practice of taking each other's words at face value and describes how this practice is connected with our understanding of truth and denotation.

Putnam might reply that to make sense of our linguistic practices of agreeing, disagreeing, evaluating assertions, and resolving disputes we need more than just a *description* of these practices; we also need an account of how our statements can be *right or wrong*.[24] It seems to me, however, that

we will feel the need for such an account only if we think that to accept a deflationary view of truth is to commit oneself to a linguistic idealism according to which 'the world' is merely a collection of sentences that we affirm. To rule out linguistic idealism, we may feel tempted to say such things as, 'When we assert a sentence such as "Alexander conquered Persia", our assertion is substantively right or wrong, independent of what we believe', 'Reality is more than a collection of sentences held true', or 'Not everything is text'. But these remarks amount to misleading attempts to elucidate aspects of the use-mention distinction for which there can be no independent argument or explanation. The use-mention distinction does not presuppose a substantive account of how it is *possible* for our statements to be true or false independent of what we believe; that we can use our sentences to make statements that are true or false independent of what we believe is an *unargued given* of any plausible *description* of our linguistic practices.[25]

Truth in other languages

The deflationary view of truth that I propose combines disquotational specifications of satisfaction and denotation for expressions of our own language – expressions we can directly use – with our practice of taking other speaker's words at face value. This deflationary view of truth is designed to fit with and make sense of our practices of agreeing and disagreeing. The motivating insight is that agreements and disagreements are typically identified in contexts in which speakers take each other's words at face value. But this insight apparently makes sense of truth only for sentences of our own language. How can this deflationary view of the connection between truth and our actual identifications of agreement and disagreement be applied to our identifications of agreements and disagreements we may have with speakers of other languages, such as French or German?

On any disquotational view of truth, a person can apply the truth predicate only to sentences that she can use. So all disquotational views of truth face a problem similar to the one I just sketched for mine. The problem is to explain how a person can apply a disquotational truth predicate to sentences of languages other than her own.

The best solution to this problem is due to Quine. His idea is that for any sentence of a foreign language, such as French, we can learn how to use it, and simply extend our own language to encompass this new sentence. Take 'La neige est blanche' for instance. Once we learn to use this sentence, and the words that it contains, we are in a position to accept that

(t) 'La neige est blanche' is true if and only if la neige est blanche;
(s) For every sequence s, s *satisfies* 'blanche' followed by var(i) if and only if s_i is blanche;
(d) For every sequence s, 'blanche' followed by var(i) *denotes* s_i if and only if s_i is blanche.

These specifications of truth, satisfaction and denotation for French words are given in a mixed language that includes the French words 'La neige est blanche'.[26]

Quine's solution does not show how truth is connected with our practical identifications of agreement and disagreement. But this crucial connection is secured by the fact that just as we take utterances of English at face value, and thereby make practical judgments of sameness of denotation for expressions of English, so we take utterances of *any* expressions we can use at face value, and thereby make practical judgments of sameness of denotation for those expressions, whether or not they are parts of English.

We can make sense of applying a truth predicate to sentences of languages that we can't now use, if we know that we are capable of learning to use those sentences. For if we know that we are capable of learning to use a given sentence, then we know that we could someday be in a position to apply a disquotational truth predicate to it. If we can't make sense of the possibility of learning to use a given sentence, however, then we can't imagine ever being in a position to apply a disquotational truth predicate to it, and so, on the view of truth we are now considering, we can't make sense of applying a truth predicate to it.

It also makes sense to extend the application of one's own disquotational truth predicate to the sentences of a foreign language by means of a syntactical *correlation* between the sentences of the foreign language and sentences of one's own idiolect. But the plausibility of extending the application of one's own truth in this way depends on the plausibility of the correlation. For instance, as I argued on pages 176–7, Quine's criterion for such correlations undermines our practical identifications of agreement and disagreement, even between speakers of the same natural language. We should not talk of *truth relative to a correlation* unless the correlation fits with our practical judgments of sameness of denotation.[27]

But just as we have a vital practice of identifying agreements and disagreements between speakers of the same natural language, so we have a vital practice of translating between languages. Translations yield identifications of agreements and disagreements between speakers of the languages translated. Hence we may say that a sentence S of a foreign language is true if and only if a sentence of our own idiolect that translates S is disquotationally true. In practice we take established translations between sentences of two languages for granted in the same unreflective way that speakers of the same language take each other's words at face value. Even in the home case, two expressions may count as the same if there are differences between them, so long as the differences are not relevant in the context. For instance, in English the predicate 'WHITE' is the same as the predicate 'white' and '*white*' when it comes to applying disquotational patterns for specifying denotation and satisfaction. We can extend this abstract idea of sameness to handle cases in which we have translations of one language into another. Relative to the accepted translation, for instance, 'blanche' is the same predicate as 'white'. This is not to say that this translation relation is

determined by facts about the how these expressions are used. It is simply to observe that *in practice they are taken as the same predicate*. The translation of 'blanche' by 'white' is so entrenched that our judgment that French speaker's predicate 'blanche' denotes an object *x* if and only if *x* is white is just as unreflective as our judgment that a fellow English speaker's predicate 'white' denotes an object *x* if and only if *x* is white.[28]

Could 'snow is white' have been false?

Putnam has raised another important objection to a Tarski-style deflationary view of truth. The heart of the objection is that the correct application of 'is true' – as that predicate is pre-theoretically understood – depends crucially on how speakers *use* the sentence to which it is applied.[29] The connection between truth and use that Putnam has in mind is highlighted by such counterfactual claims as

(C) 'snow is white' might have been used in such a way that it meant that grass is red.

This counterfactual raises an apparent difficulty for a deflationary Tarski-style definition of truth. In the circumstances described by (C), it seems natural to say that 'snow is white' is true if and only if grass is red. But according to the deflationary definition, 'snow is white' is true if and only if snow is white, no matter *what* 'snow is white' means or *how* it is used.

The deflationist has a straightforward answer to this objection: (C) amounts to the stipulation that there is (may be) a language similar to English in which the sentence 'snow is white' is to be translated by our English sentence 'grass is red'; since 'grass is red' is true if and only if grass is red, we can say by extension that the new sentence 'snow is white' of the stipulated language is true if and only if grass is red. This does not conflict with the disquotational scheme for 'snow is white', provided that we keep track of the different languages and sentences.

If (C) were part of a language we could learn, we could imagine learning to use the new sentence 'snow is white', and thereby extending our application of the truth predicate to include that sentence. But the example is fictional, so we would never be in a position to apply the truth predicate to the sentence in this disquotational way. We must rely instead on the bare *stipulation* that the sentence 'grass is red' in *our* language *translates* the sentence 'snow is white' whose use is stipulated by (C).

Now our old sentence 'snow is white' must be distinguished from the new sentence 'snow is white' that is part of the language stipulated by (C). We can keep track of these different sentences by using subscripts.[30] The words 'snow' and 'white' of the language stipulated by (C) can be rewritten as '$\text{snow}_{(C)}$' and '$\text{white}_{(C)}$', respectively. Thus the apparent absurdity of saying that in the circumstances described by (C), 'snow is white' is true if and only if snow is white, is just the disquotational truism that our familiar

sentence 'snow is white' is true if and only if snow is white. This does not conflict with our stipulation that the sentence used in the counterfactual language – 'snow$_{(C)}$ is white$_{(C)}$' – is true if and only if grass is red, nor does it conflict with the sentence ' "snow$_{(C)}$ is white$_{(C)}$" is true if and only if snow$_{(C)}$ is white$_{(C)}$' that we *would* be in a position to affirm if we *were* able to use and understand 'snow$_{(C)}$ is white$_{(C)}$'.

These considerations show that we can use a deflationary view of truth to make sense of the situation stipulated by (C), without providing a theory of the relationship between truth and use or meaning. One still might think that our pre-theoretical understandings of truth and use are essentially interconnected, so Putnam is right to criticize the deflationary view for not fully capturing the pre-theoretical understanding of truth. But this is a problem only if we suppose that the task of an account of truth is to capture all aspects of our pre-theoretical understanding of truth. I doubt that there is a single underlying concept of truth that fits with all our pre-theoretical assumptions about truth. Given that we can make sense of the counterfactual situation described by (C) without any account of the relationship between truth and use, I see little remaining critical force to the observation that there may be some aspects of our pre-theoretical understanding of the relationship between truth and use that the deflationary account does not capture.[31]

Couldn't there be a more substantive account of truth and denotation?

I have presented a disquotational account of truth and denotation that makes sense of our practical identifications of agreement and disagreement between speakers without committing us to a substantive account of truth or denotation. I will now sketch my reasons for rejecting two initially attractive strategies for constructing substantive accounts of truth or denotation. My purpose in sketching these reasons here is to give some hint of why my view of truth and denotation is deflationary, not to prove that it is. At best, the arguments I will sketch can help to motivate a methodological deflationism according to which we should trust our practical judgments of sameness of denotation, and doubt that there is a substantive theory that explains or grounds these judgments.

Recall that my account of truth is disquotational in the sense that it defines truth in terms of an inductive definition of satisfaction that is rooted in applications of disquotational patterns such as (S) and (D) to words of regimented languages we can use. When combined with our practice of taking other speaker's words at face value, our applications of pattern (D) result in what I call practical judgments of sameness of denotation.

My descriptions of language use build in all of the practical judgments of sameness of denotation that Putnam appeals to in his arguments against positivism and Quine's deflationary view of truth. It is tempting to think

that these practical judgments of sameness of denotation should not be trusted unless there is a substantive account of how our use of language determines the denotations of our words. But if there were such an account, it would undermine my deflationary view of truth and denotation.

I used to think that there *must be* a substantive account of how our language use, described in non-semantic terms, determines the denotations of our words. I now think that if our practical judgments of sameness of denotation are taken as our ultimate parameter for judging whether individuals' words have the same denotations, then no non-semantic description of our use of a word determines what it denotes. I became convinced of this after I constructed a number of thought experiments that challenge the assumption that the denotations of our terms are determined by the way we use them, where our 'use' of a term T is understood very broadly to include the non-semantic relations we bear to other speakers who use T, the non-semantic relations we bear to things in our environment to which we apply T, and the physical constitution of those things. Together with the methodological assumptions of my view, the thought experiments show that there is no criterion independent of our evolving linguistic practices for determining when two speakers agree or disagree, and which of their terms are trans-theoretical.[32] If we trust our actual practical judgments of sameness of denotation more than we trust the metaphysical thesis that use, described in non-semantic terms, determines denotation, we will conclude that truth is not a property that sentences have or lack depending on how they are used.

Even if you accept this conclusion, however, you might think, as Putnam once did, that a sentence S is true if and only if (in ideal conditions) we would be justified in asserting S. When we can give substantive *reasons* for a particular belief, we may say that it has grounds that 'make' it true – that in an epistemological sense it 'corresponds' with an independent 'reality'. Formulated for sentences, the claim is that to say that a sentence is true is to say that (in ideal conditions) we can justify the belief that we use that sentence to express. For example, if I claim that there are at least three typographical errors in a particular manuscript, you challenge me to justify this claim, and I point out three typographical errors in the manuscript, one might say that these three errors 'make' the sentence 'There are at least three typographical errors in the manuscript' true.[33] Should we conclude that to say that a sentence is true is to say that (in ideal conditions) we can justify the belief that we use that sentence to express? If this generalization were true, it would amount to a substantive epistemological account of truth.

The three typographical errors 'make' the sentence 'There are at least three typographical errors in the manuscript' true in the situation just described only *relative* to a background of beliefs and judgments that we take for granted in that situation. As Wittgenstein emphasizes in *On Certainty*, an epistemological sense of 'correspondence' does not apply to sentences

we use to express judgments that are so fundamental to our inquiries that we can't now make sense of doubting or justifying them.[34] For instance, if we are to agree on what counts as a typographical error, we must take many unreflective judgments for granted. Among these are our practical judgments as to when two ink marks are tokens of the same letter type, which ink marks count as words, and our practical judgments of sameness of denotation. Even if unreflective judgments such as these are challenged, and we find we are unable to justify them, we may still take for granted that they are true. In this sense, truth is not a property that sentences have if and only if (in ideal conditions) we can justify the beliefs that we use them to express.

If we revise some previously entrenched belief, we don't always say that the sentence we used to express the belief has changed in truth value as a result of our revision. It may then appear that even for sentences we use to express our unreflective judgments, truth is a substantive goal of inquiry that we can grasp and understand *independently* of any of our beliefs or methods for evaluating assertions. But to describe examples that highlight the crucial distinction between truth and belief we must always take some of our beliefs and methods for evaluating assertions for granted. In principle, any particular belief can come up for review, but not all beliefs can be reviewed at once. Truth is one thing, belief is another, but our understanding of truth always presupposes some background or other of unquestioned beliefs.

Conclusion

As I reconstruct it, Putnam's central objection to Quine's deflationary view of truth is that it prevents Quine from properly acknowledging actual cases of agreement and disagreement. I have explained why I think that the structure of this objection to Quine is similar to the structure of Putnam's objection to positivism. Neither objection establishes that we need an inflationary theory of truth. To show why, I sketched a deflationary view of truth and denotation that incorporates all the practical judgments of sameness of denotation that Putnam relies on in his objections to standard deflationary views of truth, and thereby also accommodates the realist semantics of the predicate 'true', without committing us to an inflationary theory of truth or denotation.

The moral of Putnam's central objection to Quine's deflationary view of truth and denotation is not that 'deflationism . . . cannot properly accommodate the truism that certain claims about the world are (not merely assertable or verifiable but) *true*' (Putnam 1994b: 501),[35] but that to make sense of our practical identifications of agreement and disagreement, we need to incorporate our practice of taking other speakers' words at face value into our understanding of what counts as a word of our language, and of what our words denote. This practice embodies our commitment to the existence of trans-theoretical terms in our language. I have argued

that to make sense of our practical identifications of agreement and disagreement, and of our corresponding practical commitment to the existence of trans-theoretical terms in our language, we need to trust our practical judgments of sameness of denotation. Once we make this shift in descriptive resources, we are in a position to develop a new kind of deflationary account of truth that incorporates our practical judgments of sameness of denotation and accommodates the truism that some claims about the world are not merely assertable or verifiable but true.[36]

Comment on Gary Ebbs's paper

Hilary Putnam

I liked this paper very much, as I very much admired your book (Ebbs 1997). I only want to add some further remarks about Quine.

In the passage you quoted, I agree with you that the behaviorist story makes no real sense of practices of agreement and disagreement.

What bothered me, of course, was not just the issue of behaviorism but the conjunction of behaviorism and deflationism that we find in Quine. I think that, apart from the issues about agreement and disagreement, both diachronic and synchronic agreement and disagreement, that you rightly raise, the thesis of the indeterminacy of translation derives basically, and I think honestly, from Quine's willingness to face squarely the fact (as Skinner was not) that there is nothing in the behaviorist's story to fix a determinate reference for any of our words. Of course, Quine did *not* conclude that he had to give up the behaviorist's story.

Part of what I was pointing out in 'A Comparison of Something with Something Else' is that it is part of Quine's story that a (Quinian) Martian scientist looking at my linguistic behavior would see nothing that he could call a 'relation of reference' between any of my words and anything external to my nerve endings. For Quine, belief in such a relation is akin to belief in witches or in phlogiston; in this respect Quine is an 'eliminativist' with respect to reference.

Another way to make the same point: call something 'fully objective' if a scientist who didn't speak my language could discover it. Then Quine is denying that there is any fully objective relation of reference.

Two more remarks:

1 There is an interesting change in Quine's view: in the first edition of his volume in the Library of Living Philosophers series (1986), he still thought that observation sentences had determinate meaning *holophrastically*. Thus 'gavagai' has the same holophrastic meaning as 'A rabbit [is] over there'. It is only the reference of the parts, that is indeterminate. But as wholes, the two sentences are, so to speak, *equivalent*. But by

1993 at the latest (Quine 1993), Quine admitted an indeterminacy affecting even the holophrastic meaning of observation sentences.

2 If, like Frege, one takes the vehicle of truth *not* to be a 'sentence' (in Tarski's sense), but the *content* of a sentence (or the content in a particular context), then the idea that 'p is true' is equivalent to p, becomes something quite different from what is today called 'disquotation'.[37] I don't have time to go into this here, but I will just say that neither Tarski's story nor Frege's require one to think that judging is the same thing in all cases, or even that describing is the same thing in all cases, even though it is true in all cases that judging that p is equivalent to judging that the judgment that p is true. But the difference between Tarski and Frege is that the notion of content plays no role in Tarski's theory (as opposed to his informal remarks), whereas it is essential to Frege's whole philosophy. I don't think that one can say what it is for a sentence to have content in a purely behaviorist way or a reductionist way.

11 What laws of logic say

Charles Travis

Suppose I said, 'Is blue has mange'. Suppose none of my words did anything other than what, in English, they are for doing. In English, 'is blue' is for speaking of some indicated object as coloured blue. It can do that only where something indicates what has been said to be that way. In English, 'has mange' is not for that. Nor, in the present case, is there any other such device. So 'is blue' cannot have performed that function here. Nor, by hypothesis, did it perform any other. Similar remarks apply to 'has mange'. So I did not say anything as to how things are. The words I used performed no function at all; a fortiori they said nothing.

The point here transcends English. It is also about thoughts; more generally, representations. A representation may represent some object as coloured blue. But it can have that feature only if it has a further one: for some object, it must have the feature of representing that object as being coloured blue. If there is one thought according to which some given thing is coloured blue, there are many. One such thought is distinguished from others, *inter alia*, by *what* it represents as blue. There is such a thought only if there *is* something it is thus about. So while there may be such a thing as representing Pia's cat as blue, there is no such thing as 'representing is blue as having mange'. There may be a thought that Pia's cat is blue. But there is no such thing as 'the thought that is blue has mange'.

If we consider severally all those features that distinguish some thought from others, only certain combinations of these are jointly features of what might be a way of representing things: only some combinations could identify a thought. A given such feature can be a feature of a thought only in certain combinations. So, it seems, thoughts come in certain forms. Whatever is a thought has one or another form that there is for a thought to have. Only certain forms are ones a thought might have.

That idea combines naturally with two others. The first is this. A representation of things as thus and so answers to the way things are: it is correct or not, or, perhaps, neither, according to the way things are. It is so evaluable because it at least purports to represent things as a certain way. What does not so purport is no representation, so not thus answerable to how things are. By the initial idea, there are limits to ways of intelligibly so

purporting, fixed independent of anything the would might teach. What is, and what is not, a *possible* representation is decided independent of experience.

The second idea is that logic is an artefact of the forms of thought: the forms there are decide what logic must be. Predication can be done only where an object is, or objects are, its subject; true predication only where *they* are as represented. Hence existential generalization. Combine this idea with the last, and laws of logic are distinguished from other generalities about the way things are. For they are in no way answerable to the way things are. In the same way that it makes no sense to suppose that, contrary to what we always thought, 'Is blue has mange' really does express a thought, it makes no sense to suppose that such and such law of logic might prove false.

Such is a picture with a powerful appeal. But points we owe to Hilary Putnam also make it suspect. Putnam's core point, for present purposes, is that our concepts are, on the whole, at least, world-involving. The world plays its role, not just in supplying things that fit them and things that do not, but also, crucially, in determining, by being the way it is, what it would be for something to fit, or not to fit, any one of them – what would so count – sometimes even whether there is such a thing as fitting them. For the world to do that is for it to show something about the forms it is possible for a thought to take. If time travel is possible, for example, then thoughts about before and after cannot take the forms we thought. So, it seems, the forms of thought are not independent of experience. Perhaps there is a fixed point at which the world's effects run out. Perhaps that is the point where logic starts. But why should one believe that?

No one sees better than Putnam why the picture is suspect. Still, it is hard not to feel its pull. Resolving that tension is Putnam's project in *Rethinking Mathematical Necessity*. There he finds a qualitative difference between laws of logic and other generalities. At the core of that difference is the fact that 'logical truths do not have negations we (presently) understand.'[1] On the other hand, we should resist thinking that laws of logic are guaranteed immune from proving wrong. We should reject, as he puts it, 'the idea of a nature of thought (or judgment, or ideal language) which metaphysically guarantees the unrevisability of logic.'[2] That, in fact, he tells us, is another idea we cannot understand.

Putnam is right. But there is more to say. It is what logic *says* that leaves little, though not no, room for them to prove wrong. What follows develops that idea. It retains the idea of logic as an artefact of forms of thought, but examines how, and in what sense, a thought might have a form. I will take more seriously than Frege did his idea that a thought has a structure only relative to an analysis. The idea will be that we see thoughts as with given structures, and, correspondingly, apply logic in given ways, for particular purposes. We are not free to go in for such things in just any way we please. On the other hand, a thought itself dictates no one particular way of assigning it structure, and logic no one way of applying it to thought.

The picture of logic that will emerge is found in Wittgenstein's *Investigations* (1953: §§96–131). I will refer to those passages in developing it. It is a very different picture from the conventionalism of which Wittgenstein is sometimes accused.

Making sense

If someone suggests that laws of logic have negations we cannot presently understand, or that a present denial of a law of logic would lack a definite sense, some might suppose that that talk of sense, and understanding, cannot be fully literal: 'lacks sense' here can only mean preposterous, or something of the sort. For such English sentences as 'Some contradictions are true', or 'Snow is white and snow is not white', are perfectly meaningful. So, one might think, there is a definite way things are according to them: some contradictions are true, snow is both white and not white, and so on. Is there such a thing as the way things would be if such a statement were true? Deadpan disquotation alone cannot answer that. Putnam's point here is serious.

Putnam contrasts negations of laws of logic with other propositions which, no matter how preposterous, he thinks we can understand. As an example, he suggests the (or a) proposition that the moon consists of Roquefort cheese. But it is none too easy to see what such a statement would assert. Suppose that tomorrow you unfold your morning paper and read the headline, 'Scientists discover that the moon consists of Roquefort cheese.' What could that mean? 'Roquefort' is an *appelation contrôlée* for a ewe's milk cheese aged in certain specific caves in southeastern France. How might that have got to the moon? Is this a hitherto secret part of French agricultural policy – some desperate attempt to deal with the European cheese mountain? Or is the point, perhaps, that the moon is made of a substance which, while lacking the official seal of origin, is phenomenally indistinguishable from Roquefort cheese? Or is it merely in some sense chemically the same thing, though perhaps phenomenally easily distinguishable? (Compare a statement, of a diamond, that it is really just coal.) Or has it been discovered that our current theory of elements is really quite wrong: there are really five *Urstoffe*, including water, fire, etc., and, most surprisingly of all, a stuff which has been known, up to now, in its pure state, only in the form of Roquefort cheese?

The above conjectures do not merely represent different ways in which the moon might consist of Roquefort cheese, or different reasons scientists might have for saying so. They also represent different understandings one might have of what it would be for the moon to be made of Roquefort. A statement describing the moon as made of Roquefort might bear any of these, among others, as the proper understanding of how things are according to it. According as it bore one or another of them, it would be true under one or another set of conditions. For example, on some of these

understandings, but not others, such a statement might be true, even though the composition of the moon made no contribution to French agricultural policy. So if someone describes the moon as made of Roquefort, and we do not know more about why he would be saying that about the moon, so about what would make the moon the way he said, then we really do not know what it would be for things to be the way he said, so when the way things were would count as things being as he said. And we do not know that despite the fact that the English he produced is perfectly meaningful English, and we, being English speakers, know what the words he used mean. We have no adequate grasp on when his statement ought to count as true. Such a grasp must derive from further facts as to what he was doing in so describing the moon.

Now suppose someone said, 'Sometimes both a statement and its negation are true', or 'Snow is white and snow is not white'. As with statements about the moon and Roquefort, we would not, as things stand, know what was meant. Here not knowing that means not knowing when what was said was true. If there is no knowing that, then there is no such thing as 'the conditions under which what was said would be true'. So no definite statement would have been made at all. In a case such as this, we would not know what was meant without some further story, parallel to the story that might have appeared under the headline about the moon and Roquefort. And now Putnam's point can be seen this way. While, with a bit of fancy, we can see what an adequate further story about the moon and Roquefort might be like, we presently have no idea of what a further story might be like for a statement negating some law of logic, nor of what such statements might be used to describe as so. It is not that a claim that some statement and its negation are both true is preposterous. Such a claim does not get so far as being preposterous. For as things stand, there is no answer to the question just what way it is preposterous to suppose things are. To see Putnam's point in this way is to see that it needs to be taken seriously.

A problem about what sense the denial of a law of logic makes is in part a problem about what sense the law makes. One solves *that* problem by saying what laws of logic do – just how they connect with what we think. That is the present project.

Frames and games

What, if anything, it would be for logic to prove wrong depends on the commitments, if any, that logic makes. If logic is committed to the world being thus and so, then one thing it would be for it to be wrong would be for the world not to be that way. But, on a widely held view of logic, it has *no* such commitments. What logic is committed to depends on what it is about. In some way or other it is about many things. In *some* way, it is about language and thought, and, specifically, about certain sorts of relations between statements, or thoughts – ones in terms of which *some* correct

inference can be defined What matters, though, is in just *what* way it is about those things. (If logic is to be an artefact of forms of thought, it matters just how, or in what sense, a thought may have a form.) This section begins to develop Wittgenstein's answers to these questions.

In *Investigations*, Wittgenstein speaks of 'the subliming of all of representation' through

> [t]he tendency to assume a pure intermediary between the propositional *signs* and the facts. Or even to try to purify, to sublime, the signs themselves.
>
> (Wittgenstein 1953: §94)

The remark looks back on the main work of the *Investigations* up to that point. The idea, in brief, is this. Suppose I call a certain tomato red. When I would speak truly depends on what one should understand by a tomato's being red. The mere fact that I called it red does not by itself decide what it would be for things to be as I represented them. By contrast, if my words had specifiable representational features which added up to the expression of a 'pure intermediary' (what Wittgenstein elsewhere called a 'shadow'), then those features in themselves, independent of further considerations, decide all that is decided as to when things would be as I represented them. The *Investigations* through §88 has been an extended argument against the idea of such pure intermediaries. Whatever it is that makes *our* representations right or wrong, Wittgenstein has argued, it is not their having some representational identity which, on its own, decides when the world agrees with them, and when not.

The point so far can be seen as the atomistic form of an idea also with holistic implications. On the atomistic side the rejected idea is that a representation has a structural identity which determines all that is so as to when it would have represented truly. The counter idea is that any structure – any spelled-out constraint on representing truly – admits of understandings. The holistic idea concerns a range of representations. The idea is that that range is organized in *one* particular way into a system of connections, such as entailments, between its elements; and that each element has a structure which fully determines its place in the system, so that it is just these structures, collectively, that determine all that is determined as to where such connections hold. The counter idea is that there is no one way such ranges are so organized – no one system of connections – and no one structure in the elements on which, alone, their import depends.

In *Investigations* §97 Wittgenstein states the holistic idea of a pure intermediary as follows:

> Thought is surrounded by an aura. – Its essence, logic, presents an order; in fact the a priori order of the world, that is, the order of *possibilities*, which must be in common to thought and the world. But this

> order, it seems, must be *utterly simple*. It is *prior* to all experience, must run through all experience; there must be no empirical cloudiness or uncertainty about it.

Thoughts (or statements), and so the facts they represent, stand in one particular order; notably, in one particular set of inferential relations. The task of logic thus becomes to locate thoughts, or statements, within this order. Describing ways one thought may relate inferentially to others becomes describing *the* ways thoughts and statements relate. Logic could do such a thing only by being sensitive to specifiable features that thoughts and statements have intrinsically. A thought must thus have, intrinsically, features adequate for logic to be sensitive to; a particular form or structure which decides its logical properties, so far as they are decided. Logic says what such a structure must be. That idea of forms of thought began this essay. Wittgenstein flags it as an illusion.

In §93, Wittgenstein warns that 'the forms that we use in expressing ourselves about propositions and thought' may engender 'a misunderstanding of the logic of language', one that makes us think 'something extraordinary must be achieved by propositions'. I have just described the misunderstanding. On engendering he says this:

> The ideal is unshakable. You can never get outside it . . . There is no outside; no air to breathe out there. – Where does this idea come from? It is like a pair of glasses on our nose through which we see whatever we look at. It never occurs to us to take them off.
>
> (§103)

> We predicate of the thing what lies in the method of representing it. Impressed by the possibility of a comparison, we think we are perceiving a state of affairs of the highest generality.
>
> (§104)

> (*Tractatus Logico-Philosophicus* 4.5): 'The general form of a proposition is: This is how things are.' – That is the kind of proposition that one repeats to oneself countless times. One thinks that one is tracing the outline of the thing's nature over and over again, and one is merely tracing round the frame through which we look at it.
>
> (§114)

In representing (rightly) we may structure what we represent. The structure in our way of representing may be mistaken for structure intrinsic to what we represent. That would be so if there were other equally right ways of representing as so the very thing that we did that did not structure it in that way – even if each, perhaps, structured it in some way or other. It might also be that what we represent as structured in a certain way

may be rightly so represented only given the conditions of our representing it; if the world were otherwise, in ways we can imagine, then, though we would still be representing the same thing as so, it would not be representable as structured in that way. (Something, perhaps, may be seen, for certain purposes, but not for others, as structurable, in some given way.)

Different maps of a given city may divide it into different neighbourhoods, or draw the boundaries between neighbourhoods differently; some may divide it, not into neighbourhoods, but merely into quadrants. Some may divide it into a north and a south side, and different such maps may draw that division differently. It may well be of some such set of maps that no one map is, for such reasons, right (wrong) where the others are wrong (right). None of the maps, perhaps, misrepresents the city, though for each some of the way it represents the city as structured lies in its method of representation, rather than in the city itself. Some methods of representation would, of course, cease to be ways of representing how the city is if circumstances were very different than they are. If the city rotated twice a day around some axis, we may be unable to represent it rightly as with a north side and a south side. If its bits continually rearranged themselves like a kaleidoscope, we may be unable to think of it (correctly) as dividing into neighbourhoods, or even into quadrants.

The idea here was broached by Frege, who suggested that, though any expression of a thought (an *Aussage*) structured it in some one way, the thought itself was structured only relative to an analysis (Frege 1892: 199–200). The same thought, he suggested, may predicate such and such of such and such on one way of structuring it, but predicate different things of different things on another. It might even be singular on one way of structuring it, general on another. (Frege does not seem to have suggested that whether a particular way of structuring a thought is available at all may depend on how the world is.)

In representing something we may structure it in *one* way it is structurable. The point applies only where we *represent* the world. That is not the only way we view it. Sometimes we just look or listen. In doing that we see, or hear, some of how things are. To do that is not to *represent* things as some way.[3] Nor is it to see things as structured in any one particular way. If Pia saw the petals falling from the rose, that report of what she did may have, or be seen as having, a certain structure – one naturally also seen in the sentence 'The petals fell from the rose'. But that encounter with the world is also describable (equally well modulo the point of the description) in a multitude of other ways. She saw the incidence of petals in the vicinity of the rose's centre on the decrease. She saw the centre of mass of a collection of rose petals shifting groundwards. And so on. No one such description exhibits *the* structure of what Pia saw in a way in which the others do not. In that sense, the world is structured in no one way; no one order is *its*.

One might think that representing the world to oneself as thus and so just *is* structuring it in some one particular way; if one has done the former then, *ipso facto*, for some particular structure, one has structured things in *that* way. But that is not correct. Suppose Pia *thinks* that the rose has lost its petals. So she represents the world to herself as one in which things are that way. One might say: she represents the rose to herself as (newly) petalless. As with seeing, that account of what she thinks structures it in a particular way – or is naturally seen as doing so. But the question that needs asking is: How else might one (on occasion) say her to think just that? Might we (at least sometimes) equally well say her, for example, to think that gravity has robbed the rose of its petals, or that the petals, moved by gravity, are now elsewhere? Might there not be indefinitely many ways of saying what she thinks, each of which structures it differently? If so (as, on reflection, seems so), then taking things to be thus and so is not structuring them in any one particular way.

In describing we structure. That point is of particular concern to Wittgenstein where what we represent are our representations, or representings, themselves. For, he says, 'the forms that we use in expressing ourselves about propositions and thought' may lead us to misunderstand 'the logic of language' (§93). Our ways of saying what it is that was said, by so and so, in such and such words, or what so and so thinks, may lead us to attribute structure to such things that is really only in our ways of representing them. What might that point come to in the case of representing language, or particular uses of it to say things? The words in which a statement is made seem really to have a particular structure, which is not just in some way of representing them. The sentence, 'The petals fell from the rose', is rightly understood as structured in a particular way. So what structure is it that we might wrongly see as in what is said itself, rather than just in a particular way of representing it? We can get an idea of (some of) what this might be if we follow up another, earlier, idea of Wittgenstein's.

In January 1930, Wittgenstein said to Schlick and Waismann that it only makes sense to think of a proposition as structured if we think of it as part of a system of propositions within which that structure plays some definite role. To think of a proposition as structured, we must think of it as part of some system (Waismann 1979: 90). In the *Investigations* that point takes on new significance. For we now drop the idea that there is some one system which is *the* one a proposition belongs to. Consider describing the colours of objects. Suppose I describe some tomato as red. Then what I say about it – the content of my claim – depends on what I have excluded – on the fact, if it is one, that I excluded its being green, or blue, or purple or orange. For example, I may or may not be distinguishing between being red and being orange (or maroon, or burgundy). I may or may not have been making that distinction. I will have said one thing about the tomato if I was invoking that distinction, another if I was not. That point could be put this way: the content of my description depends on the place it has, or

should be understood as having, within some system of descriptions of the colour of a thing. One might even see a content for it as fixed by a place for it in some such system.

With that rough idea in mind, let us describe a simple system for describing the colours of objects. Let the system provide this set of possible descriptions: 'It's red', 'It's blue', 'It's yellow', 'It's green'. Let the constituent words, 'red', 'yellow', etc., name the obvious colours. We need not elaborate on what it is for them to do that. What needs to be fixed is what way, within this system, one describes an object as being in describing it as coloured a given one of these colours. To fix that, we will say how the system is to be used. In using it one is to make certain suppositions. (If these cannot be made, then the system cannot be used.) First, suppose that, for a large range of objects, each is correctly described, within the system, by one of the descriptions it provides. Not all objects need be describable within the system. For example, none of its descriptions may fit a sufficiently variegated object. Second, suppose that no object is correctly describable within the system by more than one of its descriptions. Third, suppose that how an object is describable within the system is something one can see just by looking, without otherwise interfering with anything. The standard for correct description is as follows: an object is correctly describable by some one of these descriptions just in case, on the above suppositions, and on the supposition that it is correctly describable in some one of these ways, it is more reasonably counted as describable by that description than by any of the others within the system. So, for example, a tomato that is a uniform deep red on the surface is more reasonably describable with 'It's red' than with 'It's blue', or 'It's green'. If the tomato were mottled so that equal amounts of its surface were red and green, then it would be as reasonable, but no more so, to call it red as to call it green. So such a tomato would have no correct description within the system.

Where this system is committed to the world being, or not being, certain ways rather than others, it is liable to be mistaken. But finding such commitments is no simple matter. It might be, for example, that nothing is correctly describable within it: all objects the world could produce are so variegated that none is ever more reasonably describable as some one colour rather than various others. That would make the system useless. But being useless is not quite being mistaken. We do not yet have commitment.

The system has other notable non-commitments. Nothing within, or about, the system tells us that it is the only system for describing the colours of things. Nor is there anything about it that tells us what any other system would have to be like in order to be a system for describing colours. It is not even so that whatever is correctly describable as green, or red, or etc., in this system would be correctly so describable in any system for describing the colours of things. No plausible system could make such claims. To begin with the simplest case, imagine a system just like our original one, but with

an enlarged set of possible descriptions, including 'It's brown'. Now consider a rennet apple, mostly encrusted with brown but which is, say, green wherever there is no brown crust. In the original system, this apple is correctly describable as green. For if one had to choose some one thing to call it from among the options the system provides, then green would be the most reasonable option. In the enlarged system, though, there is a more reasonable description: the apple may be described as brown. In the enlarged system, as in the original, that description is correct only if no other, including 'It's green' is. So what was a correct description in the original is incorrect in this one.

The sort of apple just described is sometimes correctly describable as green, or as red, and sometimes not as that, but rather as brown. So each system captures a sometimes – possible way of talking about the colours of things. Other things sometimes describable as green, or red, are not correctly so describable in either system. Nor is either system committed to there being no such cases. We sometimes distinguish between red and yellow melons by their interiors, so not by a feature to be seen *just* by looking (at an intact one). A rotten apple, no longer correctly describable as red within either system may nevertheless be, for some purposes, a rotten red apple. Watching the sun set over Dagenham one might remark, 'Look how red the sun is!' There are systems for describing colours (ways of doing that) in which that is a correct description, though viewed from Quimper, or Bath, the sun may not look red at all. Such systems are not our sample one; but nor are they ruled out by it.

Consequent on the above non-commitments there is another. Within the original system (enlarged by suitable devices for conjunction) there is no such thing as a correct description, 'It's both red and green (all over).' Necessarily, any such description of an object, *given within this sort of system*, is false. But the system is not committed to being the only one for describing the colours of things. Nor does it tell us what other such systems might be like. No system could do that. So, while the principle 'Nothing is red and green all over' necessarily holds within the system, the system does not tell us that it holds of *all* systems for describing colour – of all sometimes right ways of thinking of objects as coloured. The structure of a particular system does not confer necessity of that sort.

Our simple system provides a way of understanding some actual descriptions of the colours of objects. These can be understood as saying what such a description would. Which descriptions are correctly understood in that way? English cannot be our guide here. It provides the means for saying what colour something is. But the very fact that there are many systems for describing *colours*, each differing from others in its standards of correctness, shows that *English* makes no one of these *the* one in which English descriptions of colour are given. Any way of thinking of an object's being coloured would be a right way of thinking of what some English description said. Nor need *anything* about a description make some one system *the* one to which it belongs.

To view a description as within the system is to see it as subject to certain standards of correctness. That may be illuminating. Whether it depends on how that description is rightly understood. It may be an illuminating way of viewing my description if, in whatever cases matter, I will have represented rightly just in case I represented rightly by the standards of that system: things will be as I ought to be understood to have said them to be just in case that description of them within the system is correct. That, in turn, is decided by the perceptions of those competent to understand it – those sufficiently *au fait* with the circumstances of its giving (so, *inter alia*, with English) and with normal human sensibilities.

Whether a description can be seen as within a given system also depends on how the world is – on what cases need deciding to settle whether things are as thus described. Max called an apple red, answering Pia's question about what sort he put in her lunch box. The apples there were for him to call that fall unproblematically into two sorts, only one of which is reasonably called red on any way of viewing being coloured. Then it may be illuminating to see Max as operating with our original system. If relevant apples are more peculiar – some reaching bitter brown maturity only within a box, others more stably red-skinned – that may give reason to see Max's words as part of a different system.

Our original system, for example, purports to be a system for describing the colours of objects. Now imagine the system modified as follows. In the system an object is correctly describable as such and such colour just in case your Aunt Ida would call it that. Being red and being what your Aunt Ida would call red are not the same thing. So this is not a system for describing the colours of things. It wrongly purports to be that. The system would also prove mistaken if the world conspired to make it so that the colour of an object is never something one can see just by looking. Perhaps, for example, there proves to be no such thing as how an object, in relevant respects, looks – it all depends on where you are standing, or on the day of the week, or on what you ate for lunch; or, perhaps, how an object will look on the next observation is always entirely unpredictable from how it looked on past ones. There may still be ways of thinking of objects as coloured on which some are. Our sample system would not then provide one such way. (We are particularly indebted to Putnam for making us aware of cases where notions that seemed to have coherent applications to the world in fact fail to do so.)

Perhaps we can only see how thoughts relate to the world in seeing them as structured, or formed, in some way or other. One reaction to that fact is to see thoughts as all part of some one system of forms of thought. Wittgenstein suggests that we are encouraged to that reaction by our ways of describing what is said and thought. He advises against it in pointing out that structure, or form, may lie in our ways of representing thoughts rather than in the thoughts themselves. Our brief look at systems for representing things, and at what such systems may accomplish, shows something

that idea may come to. First, a given system for describing such and such – colours, for example – does not exclude there being other systems, whose standards of correctness conflict with it, that are also systems for describing that. Nor does it show what such other systems must be like. A given system for describing colours makes no claims about what the possible form of any colour description must be. Second, if a given system provides a correct way of viewing given actual descriptions, that does not exclude there being other substantially different systems that also provide correct views. Two such systems may be mutually incompatible. So if some element of a given system is structured in a certain way by its place in that system, and if some *actual* description, given by someone on an occasion, is viewable as an instance of that element – as functioning as that element does – it does not follow that that actual description is *per se* (uniquely) so structured. Third, a system that provides a correct view of given descriptions, or thoughts, does so only given suitable occasions and circumstances for viewing them. In imaginably different surroundings it might have failed to do so.

Objects of comparison

Wittgenstein treats language games and calculi as of a piece. In §81, for example, he says,

> in philosophy we often *compare* the use of words with games and calculi which have fixed rules, but cannot say that someone who is using language *must* be playing such a game.

We can use language games, or calculi, to model some of what we say and think. But,

> we can avoid inaccuracy or emptiness in our assertions only by presenting the model as what it is, an object of comparison – as, so to speak, a measuring rod; not as a preconceived idea to which reality must correspond.
>
> (§131)

That is Wittgenstein's response to the idea of logic as exhibiting 'the one essential order in common to thought and reality' (*vide* §97). The system of the last section shows what it is to think of a language game as an object of comparison. A language game is defined in terms of definite rules. We have seen in what sense those may be the rules governing actual things we say. If language games and calculi are relevantly of a piece, then those same features of an object of comparison should show up in logic's application to what we say and think. This section is about how they do, and how that matters to the question how a logic might be wrong.

Suppose we see logic as about language and/or thought. Then how is it about that? Logical calculi are one way of expressing logic and its laws. So

one way to pursue our question is to ask what such a calculus says. A given calculus trades in given forms. One might see it as about specific items – thoughts or statements, say – which are of those forms. But if we think that structure is read into these items from the frame through which we view them – that such an item has one or another specific structure only on a way of viewing it – then it would be better to see the calculus as simply about the forms themselves. A calculus so seen provides a view of specific collections of thoughts or statements – one view, perhaps, among many – as a map provides a view of a city by structuring it, say, into neighbourhoods.

A calculus, so viewed, defines a system for thinking about the world. Thoughts or statements may be seen as within that system, just as a colour statement may be seen as exploiting some given system for colour description. Just as the latter system confers a particular sort of content on a colour description so seen, the calculus, viewed as a system, confers a particular sort of content on thoughts seen as placed within it. A thought, when properly so seen, counts as having the content thus conferred. That does not rule out other ways of seeing it.

No system within which given thoughts might fit can, as a part of what it is, exclude there being other systems within which those same thoughts fit, and which relate them differently. Nor can any system tell us what such other systems *must* be like. It is thus no part of logic's content, on this idea of it, that such and such thoughts are of such and such forms, thus related in such and such way. Rather, a logical system only provides *forms*, related in such and such ways. For those forms to be so related is just for the system to be the one it is. To deny that any such forms were so related would be to deny that there is any such system; any such forms for thought to take. There is thus an absolute hardness to the 'must' by which these forms *must* be so related; a hardness internal to the system. Some thoughts, perhaps, may be seen as of those forms – usefully, not inaccurately, *for certain purposes*. That means neither that they *could* not be viewed otherwise, nor that they could be viewed in that way no matter what. It is not for logic to pronounce on that. The hardness of the logical must does not extend so far.

Consider the simplest case: a classical propositional calculus. Such a calculus deals in truth-functional forms. It tells us how any of these forms relates inferentially to any others. Roughly, a truth-functional form is a form a statement would have if its truth value were a function of the truth values of other things which, in some suitable sense, occurred in it. Depending on how we think of things, these other things might be truth-evaluable words used in the making of the statement, or things some of the statement's words said or expressed. All that matters for the moment is that they are things that can recur – not just occur in some one statement whose truth value they determine, but also, *ad lib*, alone, or in combination with any other such things, in further statements. For the moment we will suppose they have a truth value independent of any particular occurrence of them. Let us call

these things statements. Then the calculus is about all the forms a statement might have, or be seen as having, definable by ways its truth value might be determined by the truth values of the statements that occur in it.

The present idea is that the calculus is simply about those forms. That is an idea about what it does not say, on its own at least, about actual statements. What it does not say, it cannot be wrong about. First, it says nothing about English. It does not claim, for example, that such and such bit of English – 'or', say – is a truth-functional connective, nor of any English that it is of such and such truth-functional form. That is good, since it is not a logical truth that, for example, 'or' is truth-functional. Second, it does not say of any statements made in English that they have a truth-functional form, or are truth-functionally related to such and such others. Suppose there is some statement, in perfectly proper English, in words 'P or Q', which is not true even though what that 'P' says is true. That does not show classical logic mistaken.

One might still think that the calculus relates to language in this way: for any actual statement, or even for any English sentence, and for any form within the ambit of the calculus, either that statement (or sentence) is of that form, or it is not, *tout court*. If it is, then the statement must have whatever properties the calculus assigns to that form. So, for example, one might think that any statements in words 'If . . . then . . .', if those words meant what they do mean, is of a certain truth-functional form ('material implication', as it is usually called), or that none is, or that such and such ones are and such and such ones are not. It only remains to discover which of these possibilities are facts of English. On the present idea, though, we need not, and often should not, think in such ways. Instead, we might say this of a conditional: viewing it as subject to the calculus in the obvious way sometimes provides a correct view of some of the inferential relations it may sometimes count as bearing to some other statements. Perhaps that is the right view of most conditionals. It allows us to acknowledge what anyway seems right: there are clear insights to be gained, on occasion, into what a conditional says through the sort of exercise in symbolizing that we learn in elementary logic; but few if any conditionals have all the properties of something of that obvious truth-functional form.

Suppose we view each of some arbitrary collection of conditional statements as of the obvious truth-functional form, which we might write '. . . mc . . .'. Relying on our intuitions as to which antecedents and consequents say the same as which others, we replace each by some letter of the alphabet, using precisely one letter for each thing that some antecedent or consequent says. So we might see one statement as of a form, A mc B, and another as of the form relative to it, B mc C. The calculus tells us that material implication is transitive. So, when so viewed, a statement of the form A mc C will follow from the first two. There are two general points about this scheme for viewing collections of conditionals.

First, to see a particular collection in this way is to assign each conditional in the collection a particular understanding, where, normally, that is only

one of many understandings such a conditional might bear – so where that understanding may or may not be correct. Suppose, for example, that one conditional is some statement, 'If Pia leaves early, she will catch her train', a second is some statement, 'If Pia catches her train, it will be late' and a third, some statement, 'If Pia leaves early, her train will be late.' Does the third follow from the first two? It does if the calculus applies to the collection in the way just envisaged. But whether it in fact follows depends on the right way of understanding each of the first two conditionals. The second, for example, might have been offered as a remark on Pia's tardy ways. If so, there is a way of understanding it on which it might be true even though if (unthinkably) Pia did leave early, then she would catch her train, even if it were on time. Similarly, the first may bear an understanding on which its truth requires that she would catch her train even if it is on time. In that case the conclusion does not follow. The two conditionals do not, so to speak, mesh with each other so that transitivity applies (even though their antecedents and consequents match in the right way). There are other possible ways of understanding such conditionals on which they do so mesh. (Understanding them as meshing may just *be* one such way.) Where those other ways are, or count as, right, the calculus applies. Crucially, though, there are various ways of understanding conditionalization, for given antecedent and consequent. A classical calculus does not, and no calculus could, capture all of them in any one set of inferential rules.

A second point now emerges: whether a given set of conditionals counts as meshing may depend on how the world is. It may also depend on the point in counting those conditionals as meshing or not. It may even sometimes be a matter of choice. Here is an illustration. Wine affects Max badly. So Max seldom drinks it. But he occasionally succumbs. A dinner is in the offing, about which Pia remarks, 'If Max drinks wine, he will have a hangover.' Suppose there were an effective hangover-blocking drug. Suppose Max discovered it and took it before the dinner. Then he might drink wine without a hangover. That mere possibility does not show Pia's remark false. In speaking of this drug, we are talking fantasy, not describing what might happen.

We may know that Max is resolved not to drink wine at this dinner. He has already had, he reckons, one hangover too many. So we may tell the host to count Max out when it comes to calculating how many bottles will be needed. A fanciful observer might speculate on what would happen if Max came upon a hangover-blocking drug. Exasperated, we may allow, truly, that if Max discovers such a drug, then he will drink wine. As things stand, understanding Pia's conditional in the above way is understanding it so as to fail to mesh with what we would thus say. For if it did mesh, we would get the result that if Max discovers such a drug, then he will get a hangover, the falsity of which would show Pia's conditional false. But Pia's conditional is not thus shown false.

Suppose that, counter to our belief, there really is a hangover-blocking drug, Max does find it, takes it, drinks wine at the dinner, and does not

get a hangover. Then, at least for many purposes, it would be a fair understanding of Pia's remark on which we could correctly point out that she proved mistaken. Let us try a weaker supposition. There is such a drug. Max might well have discovered it, but by chance did not, and did not drink wine. If we take the possibility of his discovering it seriously enough, then we have good grounds for counting Pia's remark false. The view that we thus take of her conditional is one on which we may well be able to count it, correctly, as meshing with our further conditional above. Change the facts as to how the world is, and we may also change what Pia's remark might count as meshing with.

When is the possibility of Max's discovering the drug serious enough for us to be able to view Pia's remark correctly in this last way? An answer need not follow simply from the circumstances of her speaking. The point in taking the possibility seriously, or not, may make the difference for what it is right for us to say. Or perhaps we can simply choose how seriously to take it. We might, accordingly, view Pia's conditional as meshing with our own, or as not. Either view may be sometimes correct, or at least permissible.

We apply a calculus to trace inferential relations between sets of statements (or thoughts). But which inferential relations in fact hold, or count as holding, between a given statement and others may depend on how the world is. It may also depend on the circumstances in which we would count given relations as holding or not. Which is to say that the applicability of a given calculus to a given discourse also depends on these factors. Particles such as 'if-then' exhibit here a feature Putnam has always insisted on for any sort of language *we* could use. The content of given conditional statements, like the content of statements about water, or colours, or weights, depends not just on some understanding of them that we might have had no matter how the world was, but rather on what understandings the world makes intelligible. The world plays a substantive role, not just in questions of truth, but in questions of content. It decides what contents are possible.

No point made so far begins to show that a classical propositional calculus is mistaken. Such a calculus does not claim of any particular conditional that it has such and such form of which the calculus speaks, nor even that a conditional must either have such a form *tout court*, or lack it *tout court*. Nor does it claim of any set of conditionals that they must mesh, or even that they must either mesh or fail to mesh *tout court*. So far we have only been discussing ways a calculus may be applicable or not. The point has been that this calculus may provide a correct way of seeing some discourse, or may fail to, in just the ways our system for describing colours may be, or fail to be, applicable.

We have yet to speak of laws of logic. But we have reached a crucial point at which Wittgenstein and Putnam intersect. Suppose that the colour descriptions *we* can give are such that we could never describe anything truly as red and green all over. What kind of fact is that? For later Wittgenstein, the fundamental fact is that, within a given system for

describing the colours of things there is no such true description. We may regard that sort of fact as a hard, non-negotiable, necessity. Perhaps, too, as things stand, no colour description we gave would be correctly viewable as part of any system in which such a fact failed to hold. But neither of these facts entails that there could not be a system which both counted as a system of *colour* description, and in which there was such a thing as a true description of something as both red and green all over; nor that our actual descriptions could not *turn out* to count as part of such a system.

That is a way of formulating for colour descriptions a point Putnam emphasizes for logic in the essay now under discussion. Our present understanding of colour descriptions does not allow for true descriptions of a thing as both red and green. But the world can teach us understandings we cannot now imagine, so cannot now have. We cannot *now* entertain the possibilities that would allow for. But if two descriptions could be conjoined intelligibly into one possibly true one, it would not automatically follow that they were not of, respectively, things as being red, and things as being green. Here, then, Putnam and Wittgenstein are one (and not just lately). It remains to see how these ideas apply to logics, and to laws of logic.

How logics may be wrong

In this Wittgensteinian idea of a logic as a frame through which we may look there is a familiar Putnamian theme: it is not as if the meaning of a particle selects some logic as *the* one that applies to it; nor as if, conversely, there is some logic, or specific set of inference rules, such that for that logic, or those rules, to apply just is for the particle to mean what it does. Meaning is just not that sort of thing. It is not as if *whenever* we viewed words as governed by other inference rules we would *ipso facto* be viewing them as meaning something other than what 'if-then' does. That fails to capture what we are prepared to recognize as to words meaning what they do. The point is the basis of his opposition to Dummett's ideas on capturing the *meanings* of connectives in terms of introduction and elimination rules, and of his opposition to Christopher Peacocke's related ideas about 'individuating' such concepts as conjunction or conditionalization in terms of 'possession conditions' (Putnam 1992d).

One way of viewing this core point is: meaning leaves room for circumstance – *inter alia*, the way the world is – to show what logics are usable, or best, for viewing given discourse. One thing that might mean – an idea that has at times appealed to Putnam – is that the world might show that one or another logic – classical predicate logic, say – or, again, some law of logic – excluded middle, say – is wrong. But within the present framework we need to ask what it could mean to call a logic, or a logical law, wrong. If laws of logic are features internal to particular logics, then they are not open to counter-example, just as a principle that nothing is both red and green all over, viewed as a constitutive feature of some particular

system for describing colours, is not open to counter-example. Constitutive features of the frames through which we view things do not have *that* sort of content. On the other hand, it might be that a particular logic, seen as such a frame, is not one in terms of which given discourse is even possibly viewable. That logic would be wrong for that discourse at least in the way that an architectural design may be wrong for the neighbourhood, or pliers the wrong tool for extracting teeth.

A purely hypothetical situation brings us closer to a way a logic can be wrong. Putnam's current view, as I understand it, is that quantum mechanics *could* have confronted us with such a situation, but does not. In the hypothetical case there are triples[4] of propositions, A, B, C, with this feature: it is true that A and either B or C; but it does not follow – in fact is not true – that either A and B or A and C. For such triples, classical logic would not apply. Not only need they not be viewed through that frame; they cannot be: it provides no correct view of them. It is thus wrong *for* them. That does not make them a counter-example to classical logic. One might suppose such triples merely to show that the English 'and' and 'or' do not always behave truth-functionally (and similarly for other natural languages). Who would ever have thought otherwise? And, of course, no proposition of *logic* asserts anything about what English connectives mean. But the difficulty runs deeper. Suppose we tried to introduce two new connectives, 'et' and 'vel' into English. By stipulation these are to behave truth-functionally (in the obvious way). Then, in the imagined situation, our stipulations will have failed. For, though 'A et (B vel C)' may very well express a truth, '(A et B) vel (A et C)' cannot. So 'et' and 'vel' cannot always behave truth-functionally (if that is what truth-functional behaviour requires). Classical logic cannot be forced to apply to propositions such as A, B and C by introducing new connectives into the language. Why, then, are they *not* counter-examples to it?

The answer is that nothing *in* logic itself asserts that it is applicable to absolutely any thought whatever. Distributive laws, since they are (partly) constitutive of classical logic, hold wherever it does apply. But the logic does not itself say where it applies. That answer is correct on the present Wittgensteinian view of what logics say. There is more to say about the case in hand. Triples such as A, B and C, if we were forced to recognize them, would show something about our intuitive notion of a proposition. As conceived in the hypothetical case, each, singly, is a coherent description of the world. 'B vel C' is also a coherent description. So is 'A et (B vel C)'. But 'A et B' and 'A et C' are not.[5] If we discovered such triples, it would certainly be a surprise. We intuitively suppose that coherent descriptions can always be built up, *ad lib*, truth-functionally into new, more complex, *coherent* descriptions. The discovery is that sometimes they cannot. So, importantly, *propositions* are not always quite what we supposed.

But, earth-shaking as that news may be, as soon as things are put this way we see why we have, so far, no counter-example to classical logic. A

logic, viewed as about thoughts, is a system for viewing, describing or representing some inference relations between thoughts (which ones depending on the logic). It is *not* a system for describing relations between thoughts and non-thoughts, since none of these *are* inference relations. What has turned out, in the hypothetical case, is that there are no such thoughts as 'the thought that A et B', or etc. So with such monsters we leave the realm of logic – at an unexpected place to be sure. Nor is there any good reason to see classical logic as claiming that wherever there *is* a thought X et (Y vel Z), there is also a thought X et Y, and one X et Z. There is no reason to see laws of logic as saying such things.

Mistaken logic

Systems for colour description *are* liable to be mistaken. A given such system does not claim to be the only one for describing colours, nor to be universally applicable, nor that some principle that holds, with the hardest possible necessity, within it, must hold in any other system for describing colours. But a given system does invoke certain notions. And it does claim at least to be coherent. Even if, perchance, no colour description we have occasion to give fits within the system, at least we can see how there could be descriptions that did fit. A given system's pretensions to be coherent *may* turn out to be bogus – for example, in ways such as those sketched for colours above. If, as I have suggested, such systems model the situation for a logic, then it should be conceivable that a logic – classical logic, say – should be mistaken in this sense too; that it should have pretensions to coherence that turn out to be bogus. That would parallel the sort of possible failure Putnam has detailed for systems for describing space or time.[6]

The last section's discussion of the compositionality of coherent description provides a hint of what such failure might be like. Classical logic appeals to a certain notion of a proposition, or truth-evaluable item, where it is an imaginable discovery that there is no such thing. The truth-evaluable items this logic trades in have two features. First, each is free to occur in combination with any others as constituents of some more complex truth-evaluable thing. If A, B and C are three such things, then for any (truth-functional) way of expressing a thought that involves the expression of three others, there is such a way of expressing a *thought* – a way that actually succeeds in expressing one – that involves the expression of all of A, B and C. Second, for any such proposition, there is just one truth value which it has on any occurrence, whether in isolation, or as part of a complex. When we evaluate the truth value of a truth-functional whole, on this conception, we may ask after the truth values of the constituents full stop. We need not ask after their truth values *as they occur in that whole.*

Though we may not otherwise have noticed, notions such as *thought*, or *proposition*, turn out to be cluster concepts in the sense Putnam has made familiar.[7] As Putnam has emphasized, when a concept is presumably subject

to a number of independent constraints – when we take all those constraints to fix the concept we use – the world may show that those constraints *de facto* form an incoherent whole; they cannot jointly govern any concept. In the present case, it is the strands of the cluster that, on inspection, formed our intuitive conception of a proposition, or a thought, that, in this hypothetical situation, unravel. If all of this is what it takes to be a proposition, and if '_ et _' is a context n which propositions must be free to occur, then neither A, B nor C are propositions. For they cannot have both of the above two features. There is a perfectly good sense in which A, say, says the same, or represents things as the same way, on all of its occurrences. In a perfectly good sense, it speaks of, or is about, the same objects and properties throughout. But if it represents one element in all the above combinations, then it cannot be taken to have a truth-value independent of the combination in which it occurs. Conversely, if we assume that it has the same truth value wherever it occurs, then we ought not assume that it occurs in all the mentioned combinations. If a thought must have a truth value, then there is a thought for it to have expressed in the one combination, but none for it to have expressed in the other. (If 'A et B' does not describe a genuine, coherent, way for things to be, then neither, in that combination, does either 'A' or 'B'. It is no longer a disproof of that that 'A' would describe such a way if it occurred on its own.)

A logic tells us that there are certain forms for thoughts to take (whether or not such and such given thoughts take those forms). Classical logic speaks of forms whose ingredients are propositions, on that cluster-concept which we have just imagined unravelling. It would not falsify that claim if there were, here and there, thoughts that could not be ingredients in such forms. But suppose that, systematically, there could be no thoughts to be ingredients in such forms; our cluster concept has unraveled on a grand scale. (All thoughts, perhaps, turn out to be like the triples imagined above.) Then there are no such forms for a thought to take. In that case classical logic will have been committed to something that is not so.

At a grand enough level of abstraction, we have now imagined what it would be like for classical logic to be mistaken. That does not yet take us very far. It is not as if we have yet been able to make sense of these presuppositions of logic failing in such a wholesale way. So far, we had better remain with Putnam: it would be rash to say that there is no such thing as logic proving mistaken; but we have no adequate understanding of how that might happen.

There is a further parallel with Putnam's view. It may be a feature of a given system for describing colours that within it there is no such thing as something's being red and green all over. That feature may be essential to the system. What the system cannot tell us is what other systems for describing colours must be like. Whether all of these must contain that principle depends on what would be recognizable as a system for describing *colour*. Similarly, it may be an essential feature of a given logical system that

such and such principle holds within it: without that feature, we simply would not have that system. There is all the hardness to that necessity that one might wish. But the system cannot speak to other systems. It cannot rule out ones in which the principle does not hold. In using the system we accept the principle as necessary in any application we thus make. That is not to say that it is a principle that could never rationally be given up, or even that there could never be a compelling case for doing so. With Putnam, though, we may say that there are limits to the systems we can presently conceive of; and with that may go principles we cannot presently conceive of being false. If there are such, there is nothing intelligible for us now to say in denying them.

This essay has presented a particular view of how logic is about language and thought. It is a view in step with Putnam in that it grants what logic says a special status. On it, truths of logic, insofar as there are such, do not confront experience in just the same way as, say, truths of physics, or even truths of geometry. The view carves out a restricted space in which it is not guaranteed that logic should not prove mistaken. But, by making logic's commitments minimal, it makes that space minimal as well. More argument would be needed to establish that this view is right. It was, anyway, Wittgenstein's (last) view. It provides one way of seeing just how deeply Putnam is right.[8]

Comment on Charles Travis's paper

Hilary Putnam

I think you have put forward two important ideas, which I shall think about for a long time: one about how to understand what formal logic is, and one about how to understand Wittgenstein's term 'language games'. As I understand the first idea, you propose that formal logic is not a set of 'laws' of anything (thought, or reasoning, or reality), but an *idealized model* of how a part of our language (e.g. the part consisting of certain inferences involving the so-called 'logical connectives') works. On your view, the question is not whether some particular laws of logic are 'necessary', but whether this model is or is not appropriate to any given stretch of discourse. (I take it, however, that you are not denying that *in a discourse which fits the model*, the substitution-instances of what we call 'valid schemata' are true, and that there is a good use of 'logically necessary' in which they can also be called 'logically necessary'.) The point is that we should not think that, say, the so-called 'Law of the Excluded Middle' actually has only true substitution-instances in a natural language. It doesn't. When someone says, 'Either you are in favor of my proposal or you aren't', what they are saying may well be false in a particular context. (If my memory serves me right, a classical paper by Ernest Nagel called 'Logic Without Ontology' defended a similar view, which has unfortunately been completely neglected.) And as I understand the second idea, it is important to realize that Wittgenstein's 'language games' are not *parts* of which a language consists, but idealized models of parts of a language. (Wittgenstein called them 'objects of comparison', I believe.) Thus, there is a similarity between systems of formal logic (including the so-called 'deviant logics') and Wittgensteinian language games.

Since you mentioned the topic, I only want to add a few remarks about quantum logic. My purpose in proposing quantum logic was to propose a *realist* interpretation of quantum mechanics. Others who were attracted to the idea of interpreting quantum mechanics with the aid of one or another 'deviant logic' were guided by a very different motive; *their* guiding idea was that 'true' means 'verified by an experiment', or something like that. In present day philosophical parlance, their quantum logical interpretations were *antirealist*. My (attempted) realist interpretation was based on the following 'proportion':

QUANTUM MECHANICS IS TO MODULAR LOGIC[9] AS GENERAL RELATIVITY IS TO GEOMETRY OF VARIABLE CURVATURE.

In other words, just as one cannot understand what it means to accept the theory of General Relativity unless one is able to accept the idea that the space (or more precisely, the space-time) in which we live is a non-Euclidean geometry of variable curvature, so (I claimed) one cannot understand what it means to accept quantum mechanics unless one is able to accept the idea that the laws of logic – by which, in view of your paper, Charles, I had better explain I meant *not* the model of some part of our *language*, but the principles of the logic that *physical reality requires for its description* – are the non-Aristotelian laws of modular logic.

The most common criticism of quantum logic was (and probably continues to be) that it 'merely changes the meanings of the logical words' (i.e. of 'or', 'and', etc.) The above proportion also explains why I was not impressed by this objection. For exactly the analogous objection was made in the case of non-Euclidean geometry at one time! Those who made this objection claimed that what we have here is simply case in which the *words* (i.e. the phonetic shapes) 'triangle', 'right angle', 'straight line', 'plane', 'finite', 'unbounded' (and perhaps 'space'?) are given to new and different meanings. When we are told that straight lines can behave in these 'non-Euclidean' ways, the old grammar is not being contradicted but simply abandoned; in fact, the concept of a straight line has been altered. Perhaps it has been; but not *arbitrarily* altered! For to assimilate these cases to cases in which there is a *mere* change of meaning, was quite wrong. As I pointed out in 'It Ain't Necessarily So', what one should ask anyone who takes *this* line is: 'Pray, then, which are the straight lines *in the old sense*.' What was literally inconceivable prior to the invention and application of non-Eucliedean geometry was not only that straight lines, properly so-called, should not exhibit Euclidean behavior; it was equally inconceivable that there should be *no straight lines*, in that sense, in space. The moral I drew and continue to draw,[10] is that although there are propositions that we have the right to call 'conceptually necessary' at a given time, there is no such thing as a metaphysical guarantee that we will never find a sense in which such a principle is false, or a guarantee that such a sense will not come to seem to us the one we *must* attach to our words if we want to remain true to the scientific (or other) enterprise. Thus the focus on the question 'Does quantum mechanics change the meaning of the logical connectives?' (as opposed to the question: *Does physical reality allow us to retain the old way of using them?*) seemed to me misguided.[11]

I have, as you know, given up quantum logic. The approach failed, for complex and technical reasons.[12] But I am still appalled at the frequency of appeals to the 'meanings' of the logical connectives as a way of ruling out the approach without any serious examination.

Notes

1 Taking pragmatism seriously

1 Richard Rudner, who was a Churchman student, later published a famous article explaining this connection: 'The Scientist *Qua* Scientist Makes Value Judgments' (Rudner 1953).
2 Ruth Anna Putnam's papers on this topic include: 'Perceiving Facts and Values' (1998); 'The Moral Life of a Pragmatist' (1990), 'Weaving Seamless Webs' (1987); and 'Creating Facts and Values' (1985).
3 Our joint articles include 'Education for Democracy', *Educational Theory* 43, no. 4 (1993): 361–76; 'Epistemology as Hypothesis', *Transactions of the Charles S. Peirce Society* 26, no. 4 (1990): 407–33, 'William James's Ideas', *Raritan* 8:3 (1989): 27–44. All of these are collected in Putnam (1994a).

2 Pragmatism and nonscientific knowledge

1 In fact, in his response to my ' "Degree of Confirmation" and Inductive Logic' (Putnam 1963), Carnap backs away significantly from the hopes for an algorithm that would enable us to reproduce the judgments of an ideal inductive judge he expressed in *Logical Foundations of Probability* (Carnap 1950), his only booklength treatment of inductive logic. For a proof that Carnap's project could not do *that*, see the just-cited paper.
2 Although the view is much older, it was influentially put forward by Quine in his celebrated 'Two Dogmas of Empiricism', collected in Quine (1953).
3 The refutation of Whitehead's theory was the work of Will (1971).
4 It is also worth pointing out that Popper repeatedly claims that the famous eclipse experiment was an *experimentum crucis*, and thus illustrates the superior 'falsifiability' of Einstein's general relativity. In fact, the experiment produced *four* sets of results; depending on which of the (poor quality) photographs one trusted, one got Einsteinian deviation, Newtonian deviation and even *double* Einsteinian deviation! Really solid experimental confirmation of General Relativity came only in the 1960s. (For an account of this confirmation, see Misner *et al.* 1973, Part IX.) That General Relativity was accepted *before* there were decisive experiments in its favor of course contradicts completely the whole Popperian account, which can be characterized as mythological.
5 For a devastating critique of this idea, and of the way it has infected cultural anthropology since the days of Herder, see Moody (1997).
6 See Goldman (1986). I thank Jamie Tappenden for suggesting I discuss this alternative.
7 This objection to reliabilism was suggested to me by Ernest Nagel's objection to Reichenbach's views on the justification of theories (views which were, themselves, of a 'reliabilist' character). See Nagel (1939a and 1939b).

8 It might be claimed that judgments of reasonableness are carried out according to an unconscious algorith built into our brains. This presupposes the success of a computationalist account of scientific rationality. For a criticism of this presupposition, see my *Representation and Reality* (Putnam 1988). It is also not clear why such an account of how our brains work should yield a factorization of the various arguments we accept into 'methods' of the kind required by reliabilist epistemology.
9 By 'statements' what I mean here are *things that are said on particular occasions*, not 'sentences' in the abstract.
10 Cf. Leiter (1995): 21.
11 Cf. Coleman (1995): 56.
12 I myself succumbed to the temptation to turn objectivity into a metaphysical notion, it now seems to me, with the 'continuum' model of objectivity that I espoused in *The Many Faces of Realism* (Putnam 1987) and retained as recently as 'Are Moral and Legal Values Made or Discovered?' (Putnam 1995c). I owe thanks to Jim Conant, who pointed out to me that speaking of ethical values as having an 'in between' sort of objectivity is already accepting a contrast with some sort of 'greater' objectivity which they lack.
13 See my 'Pragmatism' (Putnam 1995a).
14 I neglect the possibility of someone's learning the word 'mountain' by having it defined in terms of other notions which have observational import – ultimately our concepts must connect to what we can observe if our thought is to have bearing on reality at all.
15 As John McDowell remarks in McDowell (1994), it is not clear that Plato himself was a rampant Platonist!
16 Cf. my *The Many Faces of Realism* (Putnam 1987), but note the change of view mentioned in n. 14 above.
17 The idea that it is was, of course, eloquently defended by Max Weber. See, for example, his 'Science as a Vocation' (Weber 1958).
18 On this, see McDowell (1995).
19 For a discussion of this psychology, and its survival in both linguistic philosophy and existentialism, see Murdoch (1971). The American pragmatists were early critics of just this psychology.
20 See, for example, Chapter 9, 'The Construction of Good', in Dewey (1929).
21 The fullest statement of Dewey's account is his *Logic: The Theory of Inquiry*. A terse statement is his *The Theory of Valuation*, collected in Dewey (1991). See also H. Putnam and R. A. Putnam, 'Dewey's *Logic*: Epistemology as Hypothesis', collected in Putnam (1994a).
22 In addition to the paper with R. A. Putnam cited in note 21, see Putnam (1990a), and H. Putnam and R. A. Putnam 'Education for Democracy' in Putnam (1994a).
23 See my 'Pragmatism and Moral Objectivity', in Putnam (1994a).
24 'The Fixation of Belief' is reprinted in Hartshorne and Weiss (1965).
25 See my 'The Last Logical Positivist', in Putnam (1990b).
26 Reprinted in Putnam (1990b).

3 Pragmatism and legal reasoning

1 'Cohen versus California', *United States Reporter*, no. 403 (1971), Carol Stream, Ill.: West Publishing, p. 15.
2 *Federal Reporter*, *Second Series*, 467 (1972), fourth circuit, p. 341. [Hereafter *Escamilla*].
3 *Model Penal Code*, §2.02(2)(d), American Law Institute, American Bar Association, New York, 1985.
4 I argue that reasons are not always comparable, and that this fact has legal significance in Warner (1998).

5 The reasons in question are reasons other than the merely prudential reason of avoiding punishment by the state.
6 Of course, I don't accuse Quine of actually endorsing or drawing this conclusion!
7 My present view is explained in 'Mathematical Necessity Rethinking', collected in Putnam (1994a).

4 Pragmatics and pragmatisms

1 It is important not to confuse the general distinction between Wittgensteinean/Tarskian with specific, more or less reductive versions of them: e.g. language use as modeled on tool use, content as modeled on representation.
2 Not, oddly, also anaphoric expressions such as pronouns. I think this is for largely historical reasons (the assimilation of anaphoric pronouns to bound variables, which are treated in the strictly semantic part of the theory) and that this commitment has led to various sorts of distortions and misunderstandings – particularly of the role of deictic expressions. I discuss this issue in Chapter 7 of Brandom (1994b).
3 The phrase is often used in other ways, as it is for instance in Nicholas Rescher's book of that name (Rescher 1977).
4 Which is not to say the *sole* source. Semantic theory might well supply additional, purely internal, criteria of adequacy: simplicity, compositionality, computability and so on.
5 One who accepts the methodological pragmatism governing the argumentative strategy, but rejects the conclusion, is Wilfrid Sellars. He responds by pointing to a feature of the use of expressions that he thinks is usefully talked about in terms of the distinction between claims true (or inferences good) in virtue of relations among concepts and those only to be explained by appeal to matters of fact. His candidate is the difference between counterfactually robust claims, and those that are not: All the coins in my pocket are copper. It does not follow that if that nickel were in my pocket, it would be copper, while it does follow that if this penny were not in my pocket it would still melt at 1,083°C.
6 This is a challenge that David Lewis responds to directly, in 'Languages and Language', reprinted in Lewis (1983).
7 This is a delicate point. I follow Sellars (see Sellars 1997: 79ff., 162–6) in taking the distinction between theoretical and observable entities to deal not with the kind of thing they are, but only with our mode of access to them. A concept counts as theoretical at a given time if its only conditions of appropriate application (according to the practices that govern it at that point in time) are inferential: it cannot be applied in the making of a report noninferentially elicited from an observer by the perceptible presence of the state of affairs in question. But what is theoretical in this sense at one time can become observable at another: Pluto was originally postulated inferentially, but later became observable. It did not alter its ontological status thereby, but only its epistemic relation to us. One can be a realist in this sense about theoretical entities, and still maintain that the *point* of postulating merely inferentially accessible entities is to explain the antics of observable ones.
8 Here is a representative passage:

> [M]ost philosophical observations about meaning embody a claim to perceive . . . a simple pattern: the meaning of a sentence consists in the conditions for its truth and falsity, or in the method of its verification, or in the practical consequences of accepting it. Such dicta cannot be taken to be so naive as to involve overlooking the fact that there are many *other features of the use of a sentence than the one singled out as being that in which its meaning consists*:

> rather, the hope is that we shall be able to give an account of the connection that exists between the different aspects of meaning. One particular aspect will be taken as central, as constitutive of the meaning of any given sentence . . .; all other features of the use of the sentence will then be explained by a uniform account of their derivation from *that feature taken as central*.
>
> (Dummett 1973; 456–7, italics added)

9 The author of Brandom (1994b), for instance (who might be expected to know better), does not clearly distinguish between these two sorts of methodological commitment.

10 Notice that according to the pragmatist theses, other claims about use will have consequences for semantics (besides just the issue of what vocabulary one is allowed to use in specifying use). For instance, if one believes that speech acts are the fundamental unit of the use of language, then the semantic interpretants associated with expressions whose utterance can be used to perform a speech act will have a certain kind of priority over the interpretants associated with expressions whose utterance is in principle only ever significant as part of the utterance of a compound expression that can be so used. (The priority of the propositional would be one consequence one might come to in this way, given some further auxiliary hypotheses.)

11 See Dreyfus (1991) and Brandom (1983).

12 See Richard Rorty's 'Overcoming the Tradition: Heidegger and Dewey', pp. 37–59 in Rorty (1982).

13 In Dreyfus (1972), and the papers collected in Haugeland (1997).

14 I do not mean to be denying that earlier philosophers – such as Herder and Hegel – subscribed to this view.

15 'Thought and Talk' in Davidson (1984): 157–70.

16

> Standing by a river one often sees eddies in the water. Now would it not be absurd to claim that such an eddy of water was sound or true? . . . they [the phantasms that pass the mind of the typhus victim] are simply processes, as an eddy in the water is a process. And if we are to speak of a right, it can only be the right of things to happen as they do. One phantasm contradicts another no more than one eddy in water contradicts another.
>
> (Frege '1897 Logic' in Frege 1979: 144)

17 One might question whether James is a linguistic pragmatist. I take it to be pretty clear that Peirce and Dewey are (though one might want to put Peirce in some such broader category as 'semiotic pragmatist').

18 For present purposes, we need not be concerned with the details of the later steps in the argument that warrant a move from this account of taking-true to an account of truth, and then further to an account of content in terms of conditions of truth in that sense.

19 Dewey, at least, was aware of this distinction, and makes much of it in his writings on value. But I believe that he never thought through its consequences for the foundations of his approach.

20 I discuss the application of this thought to a sophisticated contemporary version of the pragmatic idea in Brandom (1994a): 175–8.

21 *Making it Explicit* (Brandom 1994b) consists (among other things) of an extended argument for linguistic pragmatism of a broadly Davidsonian sort. In outline, it goes something like this: Conceptual content is unintelligible as such except as involving a representational dimension. But when that representational dimension of semantic content is properly understood, it is seen to be a function of the *social*

perspectival character of the *inferential* articulation of deontic statuses. And that amounts to requiring specifically *linguistic* practice for conceptual content.

22 Though it does *not* follow that a good way to think about those uses is as serving purposes!

23 Accordingly, I find a major tension in Rorty's thought, between his robust appreciation of the transformative potential of new vocabularies and his continued appeal to instrumental models for thinking and talking about them.

24 The very last footnote in Brandom's paper reads:

> Accordingly, I find a major tension in Rorty's thought, between his robust appreciation of the transformative potential of new vocabularies, and his continued appeal to instrumental models for thinking and talking about them.

25 See my introduction to Peirce's final lecture in Peirce (1992). (The volume is edited by Kenneth Lane Ketner, with an introduction by both of us, and introductions to the individual lectures by me.)

26 See Putnam (1995a); for the way in which Peirce regarded logic itself as dependent on the theory of value see Hookway (1992). See also Hilary Putnam and Ruth Anna Putnam, 'Dewey's *Logic*: Epistemology as Hypothesis', collected in Putnam (1994a).

27 In *Pragmatism and Pragmaticism*, Peirce writes:

> In order to understand pragmatism, therefore, well enough to subject it to intelligent criticism, it is incumbent upon us to understand what an ultimate aim, capable of being pursued in an indefinitely prolonged course of action can be.
>
> (Hartshorne and Weiss 1965: 135)

The 'ultimate aim' referred to turns out to be simply scientific knowledge. See also Hookway (1982).

28 Reprinted as *Reasoning and the Logic of Things* (Peirce 1992).

29 See James' *The Meaning of Truth*, 270ff. The edition I am citing is the one-volume James (1978).

30 Perry (1935), Vol. 2: 591.

31 *Pragmatism*, in James (1978): 96.

32 Cf. Chapter VIII of *The Meaning of Truth*, 'The Pragmatist Account of Truth and its Misunderstanders', James' reply to what he calls the fourth misunderstanding, 270ff. The 'fourth misunderstanding' is 'No pragmatist can be a realist in his epistemology.'

33 As Dewey himself puts it:

> To say that something satisfies is to report an isolated finality. To say that it is satisfactory is to define it in its connections and interactions. The fact that it pleases or is immediately congenial poses a problem to judgment. How shall the satisfaction be rated? Is it a value or is it not? Is it something to be prized and cherished, *to be* enjoyed?
>
> (Dewey 1929: 260–1; 1991).

34 For one thing, these kinds of pragmatism are explained in terms of a 'semantics/pragmatics' distinction that I find suspect, for reasons well laid out by Charles Travis in a series of publications. See, in particular, Travis (1989, 1991, 2001).

35 Moreover, even when James does equate truth with 'expediency' it is expediency 'in the long run' that counts, and the long run extends far beyond the agent's lifetime (James 1978: 107. For a discussion and interpretation of this passage, see my 'James Theory of Truth' in Putnam 1997).

36 Cf. James (1978): 117.
37 All quotations in this passage are from James (1978): 118.
38 Moreover, the idea that success or failure in any enterprise, practical or theoretical, is measured by whether it achieves *antecedent* ends is criticized by Dewey early and late. 'Ends' are themselves subject to revision and criticism; an enterprise may be successful precisely because it *rejected* the 'antecedent ends'!
39 This letter will appear in the forthcoming volume of *The Correspondence of William James* (Charlottesville, VA: The University of Virginia Press), which includes the 1903 letters, with an introduction by me.

5 Knowledge of the truth in pragmatic perspective

1 The ensuing discussion will return to with this issue.
2 This may well be deliberately so. As his *Dewey Lectures* indicate (Putnam 1994b: 457), he regards clear solution as a 'quick fix' to philosophical problems and inclines to the idea that real problems admit of no such fixes.
3 This position is set out in greater detail in Rescher (1977).
4 This circumstance did not elude Niels Bohr himself, the father of complementarity theory in physics:

> In later years Bohr emphasized the importance of complementarity for matters far removed from physics. There is a story that Bohr was once asked in German what is the quality that is complementary to truth (*Wahrheit*). After some thought he answered clarity (*Klarheit*).
>
> (Weinberg 1992: 74, footnote 10)

5 'Pragmatism and Moral Objectivity', collected in Putnam (1994a: 151–82).
6 See my 'The Diversity of the Sciences', in Putnam (1994a: 463–81, for a discussion of the methodological differences between different sorts of theories, some of which do and some of which do not admit of being verified in the standard positivist cum Popperian manner, by just deriving predictions and testing them.
7 I do not have my Peirce volumes with me (in Jerusalem) as I write this reply, but I recall that this is something Hookway discusses (Hookway 2000).

Introduction to Part II

1 Putnam entered the discussion of realism in the mid-1970s, when he prepared his two important essays on this issue: 'Realism and Reason' (1977 reprinted in Putnam 1978) and 'Models and Reality' (1977 reprinted in Putnam 1983). 'What is "Realism"?' (1975) also dates from this period.
2 It is easy to see here Wittgensteinian holistic approach to philosophical issues.
3 See for example his 'Models and Reality' in Putnam (1983), 'Model Theory and the 'Factuality' of Semantics' in Putnam (1994a): 351–75.
4 The Löwenheim–Skolem theorem asserts that if a set of first-order sentences has a model, that is, an interpretation in which all the sentences in the set come out true, then it has a countably infinite model. For a detailed examination of the model-theoretic argument see Brueckner (1984), Hale and Wright (1999). Recently Putnam commented recently on his model-theoretic argument in Putnam 1994b: 459f (as well as in Putnam 1999: 15f).
5 His argument can be supported by the analysis of Rudolf Carnap's relation between a statement and its extension treated as a set of possible worlds corresponding with a given statement.
6 Nevertheless in 'Meaning of "Meaning"' (1975b) Putnam assumed a certain sort of essentialism in his theory of reference. But, as he confessed later in 'Why There

Isn't a Ready-Made World?' (1983), this sort of essentialism is of no help to materialist realists in their argument for a stable and inner causal structure of the world.

7 This contextual studies of causality situates Putnam's research in a certain sense close to the studies of Bas van Fraassen or R. N. Hanson in philosophy of science.

8 Putnam discusses the difference between his and Dummett's verificationism in Putnam (1994b).

9 Davidson's theory is not representational, and like Putnam and Quine, Davidson criticizes the representational theories of mind and perception.

6 Realism with a metaphysical skull

1 For an interpretation of Putnam's work that emphasises its continuity see Haldane (1994).

2 The following two sections draw material from Haldane (1998), and in Oderberg (1999).

3 See, for example, Aquinas, 'On the Principles of Nature' in McDermott (1993): 'Now just as anything potential can be called *material*, so anything that gives existence . . . can be called *form*', p. 68.

4 See, for example, Fodor (1981), and 'RePresentation: An Introduction' in Rescher (1987).

5 Such a view is canvassed by Robert Stecker in criticism of my interpretation and endorsement of Thomas Reid's opposition to the doctrine of ideas. See Stecker (1992). I reply in Haldane (1993).

6 Later in the lectures Putnam generously notes my own use of the distinction between representations as mental acts, and as cognitive or causal intermediaries. See p. 505; also Haldane (1992). I hope he might consider the suggestion that formal causation has to be part of a true account of cognition.

7 See McDowell (1994), Lectures I and II.

8 Compare this with McDowell's Wittgensteinean version of cognitive identity: 'there is no ontological gap between the sort of thing one can . . . think, and the sort of thing that can be the case' (McDowell 1994: 27).

9 See, for example, Hilary Putnam, 'Models and Reality' in Putnam (1983), and 'Model Theory and the "Factuality" of Semantics' in Putnam (1994a).

10 Putnam worries about the invocation of substantial forms, using the example of dogs to make difficulty for it and to advance his own version of ontological relativity: see 'Aristotle after Wittgenstein', in Putnam (1994a). I respond to this in Haldane (1996b).

11 See Putnam (1981), Chapter 4. Even Thomas Nagel should be willing to countenance this suggestion, for (a) it is not a functionalist reduction, and (b) it is not a conceptual identification. See Nagel (1998: 337–8).

12 For those preferring a less directly hylomorphic argument, elsewhere I reason from the fact that thoughts involve conceptual modes of presentation to the conclusion that they are not physical; see Haldane (1989).

13 See my 'Aristotle After Wittgenstein', in Putnam (1994a), for a discussion of Haldane's arguments, and also the papers by Haldane cited in his notes.

14 Haldane quoted these words from my *Dewey Lectures*, collected as Part I of Putnam (1999).

15 See Hylton (1990).

16 Cf. 'On Properties', collected in Putnam (1975c).

17 I am particularly indebted to Travis's discussion of what was right and what was wrong in 'On Properties' in Travis (2001), and to his 'Mind Dependence', forthcoming in an issue of *Revue Internationale de Philosophie* devoted to my philosophy (2001).

18 I wonder if Haldane can accept this thesis of Travis's? Or does it conflict with the essentialism about 'form' that I detect in Haldane's writing?
19 This thesis too seems to conflict with essentialism.
20 Already in 'The Meaning of "Meaning"' – collected in Putnam (1975d) – I pointed out that what we call the 'nature' of water in chemistry (being H_2O) does not count as either necessary or sufficient in many ordinary contexts (ice is H_2O, but in many contexts it doesn't count as water; water plus certain other things sometimes counts as water – think of the chlorinated water that comes out of the tap – while water plus certain other things sometimes doesn't count as water, as when I am asked whether I 'want tea or coffee' and reply 'A glass of water, please').

7 Causal theory of perception and direct realism

1 The orthodoxy against which Putnam reacts by putting forward his incompatibility claim must be of a quite recent origin. A few decades ago the orthodox was rather the incompatibility claim. For instance, Paul Grice begins his famous defence of the causal theory of perception, originally published in 1961, with the following statement:

> The Causal Theory of Perception (CTP) has for some time received comparatively little attention, mainly, I suspect, because it has been generally assumed that the theory either asserts or involves as a consequence the proposition that material objects are unobservable, and that the unacceptability of this proposition is sufficient to dispose of the theory.
>
> (Grice 1983: 245)

As John Heil pointed out to me, Martin (1959: 108–9) advanced the causal theory of perception well before Grice did. The same priority claim is made by David Armstrong: 'there was Martin's demonstration (antedating Grice) that perception conceptually involves the causal action of the thing perceived on the perceiver.' (Armstrong 1993: 187)
2 Putnam prefers rather to talk about sense data. However, given a prevailing use of that term, much more narrow than his very generous use of it (encompassing what has been known as e.g. 'impressions', 'sense-impressions', 'sensations', 'qualia', 'raw feels'), I have found that potentially misleading. So I shall continue to talk about perceptual experiences.
3 The discussion of Strawson's views on perception is based mainly on Strawson (1979) (to which also Putnam makes reference while critically commenting on his views). His three other earlier papers relevant to this topic are reprinted in Strawson (1974).
4 Strictly speaking Strawson should formulate this claim in a somewhat moderate form, namely, 'if the thing had not been there, I should not – in ordinary or normal circumstances – even have *seemed* to perceive it'. Otherwise the counterfactual would fall prey of various counterexamples based on cases of perfect hallucination or illusion.
5 Given that the counterfactual claim is merely the first stage of the full causal story, one can easily undermine Snowdon's criticism (1980/81: 180), to the effect that Strawson's position is defensible only under a very implausible assumption that all dependencies are causal, by maintaining that the claim itself gives merely a necessary but not sufficient condition of obtaining a causal relation between two items. (The second section of Snowdon's paper contains a very good analysis of Strawson's passage discussed, from a slightly different angle, in the present essay.)
6 In that spirited fashion Churchland argues against our common conception of mental phenomena, or folk psychology (Churchland 1989: 125).

7 Developed in various publications and summarised recently in Dretske (1995).
8 Collected as Part I of Putnam (1999).
9 I am thinking in particular of the work of Kevin O'Regan and Alva Noe; an issue of *Brain and Behavioral Science* will soon be devoted to this work [added January 2001].
10 This is argued in detail in my third Royce Lecture, in Part II of Putnam (1999).

8 Functionalism, realism and levels of being

1 *Psychological Predicates* was subsequently re-titled 'The Nature of Mental States'. Citations here are taken from the version appearing in Putnam (1975d).
2 I shall use 'externalism' as a label for conceptions of the mind according to which mental states owe their intentional character to agents' social setting or environment.
3 An excellent discussion of this point can be found in Martin (1993). Those who imagine that the world is a construct depending at bottom on language must be realists about language. This is hard to swallow: what sort of person can regard tablesand electrons with suspicion while remaining blasé about – what? – syllables or phonemes?
4 A state presumably is an object's possessing a property at a time. In the quoted passage, Putnam suggests that he regards being in a state as itself a property, presumably a 'higher-level' property. The significance of this distinction will become clear presently.
5 I am well aware that some readers will balk at talk of predicates holding of objects *in virtue of* properties possessed by those objects. I am assuming realism, however, and with it the unfashionable doctrine that truths require truth-makers.
6 Here I exclude, perhaps unfairly, Pascal's infinitely mobile point. Some philosophers conceive of universals as transcendent entities existing apart from the space-time world. I shall not discuss such conceptions here. See Armstrong (1989).
7 Block (1980b) distinguishes two brands of functionalism: (1) the 'functional state identity' theory, and (2) the 'functional specifier' theory. Views of the latter sort have been defended by Lewis (1966, 1994), Armstrong (1968), and Smart (1971). The dominant view, however, is the first. Indeed, Block (1990) suggests that the functional specifier view is confused. Proponents of the functional state identity theory include Putnam (1967), Fodor (1968), Shoemaker (1975) and most philosophers who call themselves functionalists.
8 One way to see the point is to notice that being material is not required for being a vice-president. A ghost or an angel might fill the appropriate role.
9 In Figure 8.1, *M*, *P*, and *B* are properties possessed by an agent at a time. The vertical double arrow represents the realizing relation, and the horizontal arrow, the causal relation. Thus an agent, *a*, possesses *M* in virtue of possessing *P* (though *M* and *P* are distinct properties), and it is *a*'s possessing *P* that brings it about that *a* possesses *B* (*a*'s body moves in a particular way).
10 I use 'supervenience' here in a way that packs no ontological punch. If *A*s supervene on *B*s, then *A*s are 'nothing over and above' *B*s: if you have the *B*s, the *A*s 'come for free'. On the 'ontological free lunch', see Armstrong (1997: 11–13).
11 Some philosophers, notably Kim (1993), have suggested that we can provide a reductive account of pain by giving up the idea that 'is in pain' designates a *single* property. Rather, 'is in pain' designates a disjunction of properties: one property when applied to human beings, a distinct property when applied to octopodes, and still another property when applied to Alpha Centaurians. I think this is a move in the right direction, but it concedes too much to the levels view.
12 In speaking of 'sharing' a property or of distinct objects possessing 'the same' property, I am using the expressions inside inverted commas with deliberate

ambiguity. The points I am making here are intended to be neutral between the view that objects possessing 'the same' property instantiate a single universal or merely exactly resemble one another in particular ways.

13 For those who prefer snappier formal counter-examples, here is one concocted by E. J. Lowe. Suppose '*F*' is the predicate '*x* does not instantiate itself'. If (P) is true, then '*F*' picks out a property, *F*. But *F* instantiates itself if and only if it does not instantiate itself, and this implies a contradiction.

14 On family resemblances, see Wittgenstein (1953, §§66–7).

15 A problem I have not raised for the layered view is the problem of explaining relations between property levels. Appeals to supervenience are of no help here. The question is, if *A*s supervene on *B*s, what is it about *B*s (and *A*s) that grounds this relationship. See Heil (1998).

9 From alethic anti-realism to alethic realism

1 I have borrowed the term from Alston (1996). As to the doctrine associated with this term, his definition in Alston (1996: 1, 6, 231) differs widely from my own explanation given above.

2 I have adopted this term from Wright (1993: 426). In 1992, Wright uses 'not evidence-transcendent' with the same intent, but the latter phrase is less felicitous: Most justified beliefs 'transcend' the evidence because they are not strictly entailed by the evidence.

3 The kind of realism which Davidson rejects is also characterized by the admission of Undetectable Error: Davidson (1984: 309; 1990: 298, 308).

4 I have added the cautionary 'nearly' because of the semantic paradoxes.

5 Alston accepts the Putnam-Kripke view of such statements: Alston (1996: 229).

6 As to 'proper', see Alston (1996: 208), and as to 'improper', see ibid.: 219).

7 Pertinent texts of *Putnam 1981–1991* ('Interim Putnam') are: Putnam (1981, Chapter 3); 1982 'A Defence of Internal Realism', in Putnam (1990b, Chapter 2); (1983) 'Introduction' and Chapter 4; (1988) Chapter 7; (1989) 'Why Is a Philosopher?' repr. in Putnam (1990b, Chapter 7); (1990b) 'Preface'; (1991).

8 My quotations are taken from reviews of Putnam (1983) (Smart in *Australasian Journal of Philosophy* 63 (1985), p. 534; Rorty in *London Review of Books* 7 (August 1984)). The 'Introduction' of the book under review was designed, among other things, to prevent this very reading.

9 Pertinent texts of Putnam (1992 ff.) are: Putnam (1992a; 1992b; 1992c; 1995a); 'Blackburn on Internal Realism', in Clark and Hale (1994: 242–54); 'Michael Dummett on Realism and Idealism', in Clark and Hale (1994: 256–61). In finding my way through Putnam's writings I have profited both from the accurate bibliography in the collection put together by Vincent Müller (in Müller 1993) and from the well-documented surview in Schanz (1996, Chapters 11 and 12).

10 Instead of 'rational acceptability' Putnam often uses the Deweyan phrase 'warranted assertability', but the former way of putting it is preferable. Imagine a pre-arranged quiet minute in world-history. Even obsessive non-stop talkers, and writers, have agreed that when that minute has come they will neither say nor write anything. Suppose that quiet minute has just begun: Then it is rational to accept the proposition that nobody is asserting anything now, but this proposition is not warrantedly assertable. If you were to assert it you would falsify the content of your linguistic act by performing it. So let us stick to 'rational acceptability'.

11 The argument was anticipated by Moore (1907) in Moore (1922: 128ff); by Carnap (1936) 'Wahrheit und Bewährung', translated as Carnap (1949: 119, 122f.); by Ezorsky (1963: 133f.); and by Goodman (1978: 123f.).

12 Whether the restriction to the world of appearances makes it illegitimate to call Kant an alethic anti-realist *tout court* depends on whether he takes propositions about *'Dinge an sich'* to be not only undecidable, but also unintelligible for us.

13 This is stressed by Christopher Peacocke in his 'Introduction' to Peacocke (1993: xxii).
14 This revision differs from the one Peacocke envisages when he writes:

> [I]t is not clear that this position should not also allow a universal quantification, itself undecidable, to be true, provided that each of its instances could be justified were epistemic conditions good enough.
>
> (loc. cit.)

No matter how many of its instances you pile up, the universal quantification does not *follow* from them.
15 Putnam accepts Frege's contention that 'truth does not tolerate a more or less (*Die Wahrheit verträgt kein Mehr oder Minder*)' (Frege 1918).
16 The argument is due to Hugly and Sayward (1996: 368).
17 As to the last point cf. Russell's objection against Peirce:

> During breakfast, I may have a well-grounded conviction that I am eating eggs and bacon, but I doubt whether scientists 2000 years hence will investigate whether this was the case, and if they did their opinions would be worth less than mine.
>
> (Russell 1939: 146)

18 Because of (P-10a) I wonder whether Putnam was fair towards his earlier self when he wrote:

> It was the hope [. . .] that truth might be actually reduced to notions of 'rational acceptability' and 'better and worse epistemic situation' that did not themselves presuppose the notion of truth that was responsible for the residue of idealism in Putnam 1981.
>
> (Putnam 1992c: 373)

(My question is meant to counteract the somewhat unkind suspicion expressed in Schanz 1996: 330f.)
19 Cf. H. Putnam 'Blackburn on Internal Realism', in Clark and Hale (1994: 243). Incidentally this answer shows that the objection against (P-9) in Schanz (1996: 329) misses its target.
20 That's why there is an omission in (P-12): I have erased the word 'simply'. On my understanding of the phrase 'interdependent notions' it is plainly false that 'truth is idealized rational acceptability' *simply* suggests that truth and idealized rational acceptability are interdependent notion.
21 Cf. Putnam (1994b: 256; 1995a: 299).
22 'On Properties' (1970), in Putnam (1975b, Chapter 19).
23 Here is an early statement of (b) and (c):

> [My view] is not a 'verificationism' which requires one to claim that statements about the past are to be understood by seeing how we would verify them in the future. All I ask is that what is supposed to be 'true' be *warrantable* [. . .] for creatures with 'a rational and sensible nature'. Talk of there being saber-toothed tigers here thirty thousand years ago, or beings who can verify mathematical and physical theories we cannot begin to understand (but who have brains and nervous systems), [. . .] is not philosophically problematic for me.
>
> (Putnam 1990b: 41)

24 Cf. Putnam (1992b: 363).
25 Cf. H. Putnam 'Blackburn on Internal Realism', in Clark and Hale (1994, note); 'Michael Dummett on Realism and Idealism', (ibid.: 261); Putnam (1994b: 503; 1995a: 293ff).
26 We know already from (P-3) that Putnam is not wedded to bivalence. In the present context he writes:

> (2) is a claim that almost certainly has a truth value, and if it is true, it is very unlikely that this is because (3) is true [. . .]. I say 'almost certainly' because of the possibility that there might be *borderline* cases of extraterrestrial life. (2) could fail to have a truth-value because the state of things is such that it is indeterminate (just as 'my watch is lying on he table' could fail to have a truth-value because the watch is standing on the end of the table, and we have not stipulated whether that counts as 'lying' or not). Because of the possibility of *that* sort of truth-value gap, to say of an empirical statement S 'S is either true or false' is to make a substantive claim.
>
> (Putnam 1992b: 365 and note 25)

Cf. Putnam (1994a: 254; 1994b: 511); and Putnam (1983, Chapter 15).
27 (1994b: 516 (my italics)); cf. Putnam 'Michael Dummett on Realism and Idealism' in Clark and Hale (1994: 261 and note 31). Contrast (P-13) and the references given there.
28 M. Dummett, 'Wittgenstein on Necessity: Some Reflections', in Clark and Hale (1994: 49).
29 Fitch (1963: 138 (where Fitch attributes the argument to an anonymous referee for an earlier, never published paper of his, in 1945).
30 Tennant calls it 'an unimpeachable rule of epistemic logic' (Tennant 1997: 260). To be sure, on Nozick's account of knowledge K does *not* distribute over conjunction (Nozick 1981: 228). But, as Peacocke very politely puts it, 'it is hard not to regard that as a problem for his account' (Peacocke 1999: 16; cf. Williamson 1993: 81–3). In any case, Williamson has shown that there is a variant of the Fitch Argument which does not rely on *distributivity* (op. cit.: 84–6).
31 Dummett's anti-realist adopts this principle.
32 I have changed Putnam's numbering of the indented sentence.
33 This principle is obviously a close relative of the *distributivity* rule in the Fitch Argument as reconstructed above.
34 The Paradox of the Preface provides us with a good reason for not relying on &-*introduction* under $\mathfrak{I}$, I think, but the corresponding elimination rule shouldn't suffer from guilt by association.
35 Cf. the following bizarre dialogue:

> – Why do you believe that p & q?
> – Because NN, a very reliable eye-witness, as you know, told me that p & q.
> – I see, yes, that's a good reason. But I still do not understand why you believe that **p**? Its so very unlikely that p . . .
> – Good Lord, as I just said, I got my information from a trustworthy witness!

36 As Williamson pointed out (1993: 83).
37 One would also like to see how Tennant would answer Putnam´s Extraterrestrial Objection.
38 This is the way I used to argue, until Jonathan Dancy cured me.
39 Cf. H. Putnam, 'Blackburn on Internal Realism', in Clark and Hale (1994: 242); Putnam (1995a: 297).
40 Cf. 'Vagueness and Alternative Logic' in Putnam (1983).

41 This is argued in detail in my third Dewey Lecture.
42 This is argued in Putnam (1995a).

10 Truth and trans-theoretical terms

1 This theme runs through much of Putnam's work. It is present in 'It Ain't Necessarily So' (1962), reprinted in Putnam (1975c: 237–49, 'The Analytic and the Synthetic' (1962), 'Explanation and Reference' (1973), 'Language and Reality' (1974) and 'The Meaning of "Meaning"' (1975), reprinted in Putnam (1975d: 33–69, 196–214, 271–90 and 215–71, respectively). More recently Putnam has developed the theme into a criticism of deflationary theories of truth. See his papers 'On Truth' (1983), 'A Comparison of Something With Something Else' (1985), 'Does the Disquotational Theory of Truth Solve All Philosophical Problems?' (1991), 'The Question of Realism' (1993), reprinted in Putnam (1994a). In 'Explanation and Reference' Putnam notes that he picked up the phrase 'trans-theoretical term' from Dudley Shapere, 'Towards a Post-Positivistic Interpretation of Science', in Achenstein and Barker (1969: 115–60).
2 This exposition of the problem needs qualification. Suppose that Bohr asserted that 'There is an *x* such that *x* is an electron, *x* is a sub-atomic particle, *x* has negative charge, and *x* has a definite momentum and position.' Then we do not need to know how to translate his term 'electron' to see that this existential claim is false, *provided that we can translate enough of the other terms in the sentence to settle that Bohr's assertion was false*. But the positivist theories of truth and reference that Putnam opposes imply that the references of *all* of the descriptive terms in our current theory of subatomic particles are different from the references of all of the descriptive terms in Bohr's theory of subatomic particles. Hence if those positivist views were correct, we would be unable to infer, from accepted statements of our current theory of subatomic particles, that *any* of Bohr's theoretical claims about subatomic particles were false. This note responds to a comment by Art Melnick.
3 I present a detailed reconstruction of this kind of argument, aimed at Carnap's analytic-synthetic distinction, in Chapter 6 of Ebbs (1997).
4 See Hilary Putnam, 'On Truth' (1983), 'A Comparison of Something With Something Else' (1985), 'Does the Disquotational Theory of Truth Solve All Philosophical Problems?' (1991), 'The Question of Realism' (1993), reprinted in Putnam (1994a).
5 He criticizes the idea that truth is a substantive property in Lecture III (pp. 488–517), most pointedly on p. 500; the quotation about the truism is from p. 501.
6 Quine's classic statement of his indeterminacy thesis is in Chapter 2 of Quine (1960). In later writings he emphasizes the 'fluency of dialogue' criterion for successful communication. See, for example, Quine (1992: 43). Quine has never explained how a behavioristic test for 'fluency of dialogue' could be defined and applied. But on any plausible interpretation of 'fluency of dialogue', in actual practice a systematically non-homophonic translation manual from one English speaker's idiolect into another English speaker's idiolect would *not* allow for fluency of dialogue between the two speakers. English speakers typically take each other's words at face value, and would not accept that they were genuinely 'communicating' with an English speaker who insisted on using a non-homophonic translation manual. This shows that Quine's behavioristic test for 'fluency of dialogue' between the speakers must be seen as a test of how speakers *would* interact if they did *not* take each other's words at face value. It is unclear how to assess such a counterfactual.
7 As Quine says: 'So long as we are speaking only of the truth of singly given sentences, the perfect theory of truth is what Wilfrid Sellars has called the disappearance theory of truth.' (Quine 1986: 11)

8 For Tarski's own classic presentation of his approach to defining truth, see Tarski (1935, reprinted in 1983: 152–278).

9 See for instance Quine's syntactical criteria for substitution, presented in Chapters 26 and 28 of Quine (1982).

10 The satisfaction clauses for predicates are needed to give inductive specifications of satisfaction conditions for sentences containing quantifiers. Suppose our regimented language contains just negation (symbolized by '¬'), alternation (symbolized by '∨'), and a universal quantifier (symbolized by '∀'). (In this language there is no separate symbol for the existential quantifier; existential quantifications must be expressed in terms of negation and universal quantification. Other truth functional connectives, such as '→' and '∧', can expressed in terms of '¬' and '∨' in the usual way.) Then the satisfaction clauses we need, in addition to those for the *n* simple predicates of the language, may be formulated as follows:

> (n + 1) For all sequences s and sentences S: s satisfies the negation of S if and only if s does not satisfy S.
>
> (n + 2) For all sequences s and sentences S and S′: s satisfies the alternation of S with S′ if and only if either s satisfies S or s satisfies S′.
>
> (n + 3) For all sequences s, sentences S, and numbers i: s satisfies the universal quantification of S with respect to var(i) if and only if every sequence s' that differs from s in at most the ith place satisfies S.

Suppose that together with the satisfaction clauses for the *n* simple predicates of the language, these clauses inductively define satisfaction for all sentences of the language. Using this inductive definition of satisfaction, we can then define truth for this language as follows: a sentence of the language is *true* if and only if it is satisfied by all sequences.

(The above satisfaction clauses are modeled on Quine's formulations in Quine 1986, Chapter 3.)

11 By 'denote' I mean 'true of'. See Quine (1982: 94). Tarski characterizes truth as satisfaction by all sequences of objects. Alternatively, truth can be seen as a special case of denotation (the denotation of a 0-place predicate) as Quine explains in Chapter 6 of Quine (1995). I recently discovered that this idea was suggested much earlier by Rudolf Carnap, in Carnap (1941, §11: 48). See also McGee (1991: 32f).

12 To specify the denotation of a predicate it isn't necessary to identify objects as members of sequences; I do this here only to highlight the intimate connection between denotation and satisfaction.

13 Putnam claims that this is essentially the same as Gottlob Frege's argument against the naturalistic view that the laws of logic are psychological laws. See Frege's introduction to Frege (1964). Quine's naturalism is more sophisticated than the type of naturalism that Frege rejected, however, and Putnam's argument against Quine is accordingly less decisive than Frege's argument against the naturalisms of his day. As I will explain in the next section, what saves Quine's naturalism from the crude mistakes that Frege exposed is that Quine respects the use-mention distinction.

14 We can't directly use sentences of another speaker's idiolect, so when we describe another speaker's idiolect, we can't shift our perspective and directly use that speaker's sentences. When we describe our *own* idiolect, in contrast, we can and do both mention and directly use our sentences.

15 I assume that every sentence of a properly regimented language is *false* if and only if it is *not true*. Given the standard satisfaction clauses for negation (for example, clause (n + 1) of note 10), every sentence of the form '$p \wedge \neg p$' is not

true if and only if every sentence of the form '$\neg(p \wedge \neg p)$' is true. A simple calculation shows that every sentence of the form '$\neg(p \wedge \neg p)$' is true.

16 Quine's behavioristic criterion for determining whether a given expression E is to be translated as negation is that E 'turns any short sentence to which one will assent into a sentence from which one will dissent, and vice versa.' See Quine (1960): 57.

17 The key point about sentences is that

> unless pretty normally and directly conditioned to sensory stimulation, a sentence S is meaningless except relative to its own theory; meaningless intertheoretically.
>
> (Quine 1960: 24)

18 In 'A Comparison of Something With Something Else' (Putnam 1994a: 330–50) Putnam writes:

> sentences in French are true or false only relative to a translation scheme into English (or the interpreter's 'home language'). This is Quine's startling conclusion. The idea that truth and falsity are substantive properties which sentences in any language possess independently of the point of view of the interpreter must be given up.
>
> (p. 336)

In this passage Putnam doesn't mention Quine's indeterminacy thesis, but it is clear that he sees that thesis as one of the problematic consequences of Quine's naturalistic view of linguistic behavior.

19 For some of Putnam's criticisms of these authors, see his papers 'On Truth' (1983), 'A Comparison of Something With Something Else' (1985), 'Does the Disquotational Theory of Truth Solve All Philosophical Problems?' (1991), 'The Question of Realism' (1993), reprinted in Putnam (1994a).

20 In 'A Comparison of Something With Something Else', summarizing his objections to Quine's and Rorty's deflationary views of truth, and to Kripke's exposition of Wittgenstein's 'skeptical solution' to the rule-following paradox, Putnam writes:

> All three tell a story about how all there is is speakers and speech-dispositions, and about how we don't need any 'metaphysical' notions of truth or warranted assertability . . . I say this sort of transcendental Skinnerianism has got to stop! If all there is is talk and objects internal to talk, then the idea that some pictures are 'metaphysical,' or 'misleading', and others are not is itself totally empty.
>
> (Putnam 1994a: 349)

21 I will not try to answer the vexed question of whether electrons are objects. Those readers who find this question distracting may prefer to think of cases in which we apply (S) and (D) to predicates that are without question true or false of objects.

22 Here I use Quine's idea of an 'ultimate parameter', taken from Quine, 'Reply to Chomsky' (1969), to articulate my alternative to his position. It is fundamental to Quine's indeterminacy thesis that our actual linguistic interactions cannot constitute an ultimate parameter for translation or interpretation. This is a reflection of his scientific naturalism, and his observation that no scientific reconstructions of our linguistic interactions can yield a unique translation relation. My alternative begins by rejecting the idea that such a scientific reconstruction is needed. This in turn leads me to reject Quine's scientific naturalism.

23 Although many philosophers acknowledge that deflationists about truth need not be committed to scientific naturalism, it is widely assumed that scientific

naturalism is the only *systematic* motivation for deflationism. Even an author as thoughtful and careful as Marian David presents only one systematic motivation for deflationism: eliminative physicalism. See David (1994, Chapter 3).

24 This speculation about how Putnam would object to my proposal is based on some of his criticisms of disquotational theories of truth. For instance, in 'Does the Disquotational Theory of Truth Solve All Philosophical Problems?' (reprinted in Putnam 1994a: 264–78), Putnam *acknowledges* that

> the claim that a statement S . . . never has the same *meaning* as the statement 'S is assertable' is no part of the position of Williams and Horwich.

Who accept deflationary views of truth; but Putnam objects that

> the statement S . . . never has any kind of *substantive rightness or wrongness* beyond being assertable or having an assertable negation, on this picture. (p. 276)

Against my proposed deflationary view, Putnam would probably argue that our *trust* in practical judgments of sameness of denotation does not establish that our statements have any kind of 'substantive rightness or wrongness'. Putnam apparently thinks that a version of this criticism of deflationism survives his recent rejection of the idea that truth is a substantive property. In his *Dewey Lectures*, just after he criticizes the idea that truth is a substantive property, he repeats his earlier criticism that

> deflationism . . . cannot properly accommodate the truism that certain claims about the world are (not merely assertable or verifiable but) *true*. (Putnam 1994b: 501)

25 On this point I agree with Quine, even though I find his descriptions of our linguistic behavior impoverished.

26 Quine proposed this way of applying disquotational truth to expressions of a foreign language in his paper, 'Notes on the theory of Reference', in Quine (1953: 130–8; see pp. 135f.). Hartry Field endorses this proposal in Field (1994: 273f.).

27 In Field (1994), Hartry Field apparently endorses the idea of truth relative to a correlation even when the correlation does not fit with our practical judgments of sameness of denotation. I do not think such correlations license applications of 'true' to sentences of foreign languages.

28 Both our unreflective judgments of sameness of predicates (such as 'white' and 'blanche') and our unreflective practice of taking words of our own natural language at face value mediate our applications of disquotational patterns (S) and (D) to expressions used by other speakers. For Rudolf Carnap, such fundamental judgments of sameness of predicates, both between languages and within the same language, are analytic – true in virtue of syntactical rules. See Carnap (1937, §2: 24–5, 62), and Carnap (1941, §§4–5). In my view these unreflective judgments are not analytic, because they are always in principle open to revision; but they are not best viewed as synthetic (factual) claims either, since we typically do not and *could* not justify them. Instead of saying that they are analytic, I prefer to say that they are *contextually* a priori, and hence always in principle open to revision.

29 This is a paraphrase of a sentence from Putnam (1994a: 318).

30 This way of handling ambiguity is suggested by Scott Soames in Soames (1984: 427, n. 26). It requires that the truth predicate be defined for regimented languages, not directly for sentences that may differ in meaning despite being spelled in the same way.

31 On this point I agree with Hartry Field. See Field (1994).
32 I argue this point in detail in Ebbs (2000).
33 This example is based on one used by G. E. Moore in his paper 'Proof of an External World', reprinted in Moore (1959).
34 In section 243 of *On Certainty* (Wittgenstein 1969), for example, Wittgenstein writes:

> One says 'I know' when one is ready to give compelling grounds. 'I know' relates to a possibility of demonstrating the truth. Whether someone knows something can come to light, assuming that he is convinced of it. But if what he believes is of such a kind that the grounds that he can give are no surer than his assertion, then he cannot say that he knows what he believes.

Wittgenstein also observes that when what someone believes is of such a kind that 'the grounds that he can give are no surer than his assertion', it is misleading to for him to assert that his claim is true or false. Wittgenstein is thinking of G. E. Moore's notorious claim that he knows he has hands, for example; Moore explicitly meant this knowledge claim to 'correspond' to the facts. In section 199 of *On Certainty*, Wittgenstein writes:

> The reason why the use of the expression 'true or false' has something misleading about it is that it is like saying 'it tallies with the facts or it doesn't', and the very thing that is in question is what 'tallying' is here.

Wittgenstein shows that in some epistemological contexts claims about which we feel very confident cannot be said to 'correspond' to the facts. It makes sense to say that a given assertion 'corresponds' to the facts only if we can give grounds for it. It may seem that in these passages Wittgenstein equates truth with correspondence. I read him differently, however. I think he is saying that the predicate 'true' often *suggests* the idea of correspondence, and misleads us into thinking that to say a sentence is true is to say it 'corresponds' to the facts. My deflationary account of truth allows us to say that a sentence is true even if we can't provide independent grounds for believing it, hence even if we can't say that it 'corresponds' (in Wittgenstein's epistemological sense) with the facts. If one were to insist that Wittgenstein is saying that the ordinary meaning of 'true' is 'corresponds', then one would have to face the unwelcome consequence that assertions about which we feel most confident are neither true nor false. Aside from the strongly anti-realist sound of this position, it also leaves us unable to say that an assertion about which we are now very confident may turn out to have been false.
35 It seems to me that Putnam came closer to diagnosing the problem with standard deflationary theories of truth and reference when he argued that

> the formal logic of *true* and *refers* is captured by Tarskian semantics, but the concepts of truth and reference are undetermined by their formal logic.
> (Putnam 1978: 46)

I agree with Putnam that disquotational patterns for specifying truth and denotation, which may capture the *formal* role of truth and denotation within a Tarski style truth theory for a particular regimented language, don't by themselves show us how they should be applied to other speaker's words, or to our own past uses of words. That is one of the profound lessons of Quine's disturbing indeterminacy thesis.
36 Thanks to Adrian Cussins, David Finkelstein, Scott Kimbrough, Art Melnick, Tom Meyer, David Shwayder, Tadeusz Szubka, Charles Travis, Steve Wagner,

and (especially) Hilary Putnam for helpful comments on earlier drafts of this paper.

37 See my third Dewey Lecture for an account of the difference.

11 What laws of logic say

1 'Rethinking Mathematical Necessity', in Putnam (1994a: 256).

2 Op. cit.

3 That point is curiously controversial these days.

4 In the general case, *n*-tuples.

5 Putnam has suggested a related thing he thinks quantum mechanics *has* shown: there are pairs of descriptions of the world, A and B, such that for each there is a *correct* way of treating (viewing) it on which it is a *true* description, but such that there is no correct way of treating them on which 'A and B' is a correct description. (See his 'Quantum Mechanics and the Observer', collected in Putnam 1983: 248–70.) The ordinarily observable occasion-sensitivity of our concepts already makes that sort of situation familiar. Take, for example, ink that looks black in the bottle, but writes red. It is truly describable as red (on a certain way of understanding that description), and as black (on a certain way of understanding *that* one). But on no possibly correct understanding is it truly describable as coloured both red and black (though it is, of course, red *in a sense* and black *in a sense*).

6 See, for example, his discussion of time travel in 'It Ain't Necessarily So', collected in Putnam (1975c: 237–49).

7 Putnam discusses this aspect of our notion of proposition in the opening pages of 'Vagueness and Alternative Logic', collected in Putnam (1975d: 271–86.)

8 I thank Hilary Putnam, Peter Sullivan and Larry Sklar for comments on earlier drafts. I also thank the Arts and Humanities Research Board of the United Kingdom for their generous support of this work.

9 The logic proposed by von Neumann for the interpretation of quantum mechanics – versions of which I employed in my papers on quantum mechanics – is called 'modular' because its intended models are isomorphic to the lattices of subspaces of various Hilbert spaces, and these are modular lattices. The most obvious characteristics of modular logic are that although (1) the schematic form of the law of the excluded middle, 'p or not-p', is still valid in modular logic, (2) the distributive law, '[p & (q v r)] = [(p & q) v (p & r)]' has false substitution instances.

10 E.g, in 'Rethinking Mathematical Necessity', in Putnam (1994a).

11 An example of a use of words that turned out to be impossible to retain unaltered (when it comes to astronomical contexts, or even when space-travel became possible) is the pre-Relativity use of the term 'simultaneously' and other time terms. That what looks like a conceptual truth – 'there is such a thing as absolute simultaneity' – may have to be given up *for empirical reasons* was the great lesson of Einstein's Special Theory of Relativity. No better discussion of this has ever been written than Reichenbach (1965).

12 For details, see my reply to Michael Redhead in Clark and Hale (1994).

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