PRAGMATIC NATURALISM & REALISM

edited by

JOHN R. SHOOK

Prometheus Books
59 John Glenn Drive
Amherst, New York 14228-2197

Published 2003 by Prometheus Books

Pragmatic Naturalism and Realism. Copyright © 2003 by John R. Shook. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, digital, electronic, mechanical, photocopying, recording, or otherwise, or conveyed via the Internet or a Web site without prior written permission of the publisher, except in the case of brief quotations embodied in critical articles and reviews.

Inquiries should be addressed to
Prometheus Books
59 John Glenn Drive
Amherst, New York 14228–2197
VOICE: 716–691–0133, ext. 207
FAX: 716–564–2711
WWW.PROMETHEUSBOOKS.COM

07 06 05 04 03   5 4 3 2 1

Library of Congress Cataloging-in-Publication Data

Pragmatic naturalism and realism / edited by John R. Shook.
p. cm.
Includes bibliographical references and index.
ISBN 1-57392-997-2 (alk. paper)
1. Pragmatism. 2. Naturalism. 3. Realism. I. Shook, John R.

B832 .P764 2002
144'.3—dc21

2002068082

Printed in Canada on acid-free paper

CONTENTS

Introduction
John R. Shook 7

1. The Benign Antimony of a Constructive Realism
Joseph Margolis 29

2. The Pragmatic Reconstruction of Realism: A Pathway for the Future
Sandra B. Rosenthal 43

3. Reconciling Pragmatism and Naturalism
John Ryder 55

4. Naturalism and Subjectivism: Philosophy for the Future?
Peter T. Manicas 79

5. Realism Thick and Thin
Vincent M. Colapietro 107

6. The Varieties of Realism Worth Wanting
Randall R. Dipert 125

7. Can Pragmatic Realists Argue Transcendentally?
Kenneth R. Westphal 151

8. Pragmatic Realism and Skepticism
Chi-Chun Chiu 177

9. Pragmatic Realism and Ethics: A Transcendental Meditation on the Possibility of an Ethical Argument for Moral Realism
Sami Pihlström 199

10. Problems and Prospects in the Ethics of Belief
Peter H. Hare 239

11. Immediacy, Knowledge, and Naturalism
Robert G. Meyers 263

12. A Pragmatic Realism
Murray G. Murphey 285

13. Scholastic Realism as Contextual Pragmatism
Frank X. Ryan 299

14. A Pragmatically Realistic Philosophy of Science
John R. Shook 323

Contributors 345

Index 349

INTRODUCTION

John R. Shook

This volume presents fourteen essays focused on the relevance of pragmatism to a variety of issues concerning naturalism and realism. Eleven of these essays originated in papers read at The Future of Realism in the American Tradition of Pragmatic Naturalism, a conference held in October 2000 to honor Dr. Peter H. Hare, SUNY Distinguished Service Professor Emeritus of Philosophy, State University of New York at Buffalo. Of the other three essays, one is Peter Hare's 1990 Presidential Address to the Society for the Advancement of American Philosophy, and two (by Frank Ryan and John Ryder) are invited contributions for this volume.

The essays display a remarkable overall coherence and collective focus, exceeding even the expectations of the conference organizers (Jorge Gracia, John Kearns, John Shook, and Eileen McNamara). The conference's stimulating examination of the most fundamental philosophical questions on pragmatism and realism was not entirely fortuitous; the carefully crafted topic, and the contributors' admirable efforts to directly address this topic, naturally engendered frank and rewarding discussions. The reader will discern as many agreements as disagreements, typical for a pluralistic tradition of thought that encourages respect for perspectives. Perhaps the surprising agreements reached, despite starting from quite different perspectives, suggest that serious discourse is capable of taking some measure of reality? Well, the essays suggest their own conclusions, but a pragmatic naturalist wouldn't rule out such a possibility.

THE RELEVANCE OF PRAGMATIC NATURALISM

Pragmatism, the philosophy native to America, has once again grown to prominence in philosophical debate around the world. During the first four decades of the twentieth century, the works of Charles Peirce, William James, John Dewey, George Mead, and many other pragmatists were at the center of important controversies from metaphysics, epistemology, and philosophy of science to social philosophy, moral theory, and aesthetics. The breadth and depth of this major intellectual movement ensured that it could not be completely forgotten even as European-inspired philosophies dominated post-WWII thought. In the latter part of the twentieth century, mainstream philosophy took a renewed interest in pragmatism, stimulated by such figures as W. V. Quine, Richard Bernstein, John E. Smith, Joseph Margolis, Hilary Putnam, and Richard Rorty. The type of pragmatism that has best weathered the many decades of neglect, and today is proving to be of greatest value for fostering discussions with other worldviews, is pragmatic naturalism.

Pragmatic naturalism, like all varieties of pragmatism, finds that too much of what passes for philosophy is really just extreme intellectualism in the worst sense: abstractly divorced from real problems and concerns of actual life. Unlike other philosophies that go to the opposite extreme by rejecting intellectual inquiry entirely, pragmatic naturalism works with the natural and social sciences to develop a view of the general nature of things and an understanding of the operations of human inquiry in that natural context. Thus the standpoint of this volume deliberately turns away from another renascent branch of pragmatism: the "neo-pragmatic" form of antifoundationalism championed by Richard Rorty. Pragmatic naturalism, by taking a naturalistic stance on the world, finds that the sciences and their methodologies are superior to other modes of inquiry into the human environment. The "pragmatist" label placed on naturalism indicates that all genuine inquiry must be conducted in a consistently empirical manner and be responsive to genuine human problems.

While pragmatic naturalism is formulated to advance inquiry into all areas of human concern, this book is specifically aimed at discussing one topic presently animating mainstream philosophy: the future of realism. A survey of contents of major philosophical journals quickly reveals that realism has once again become problematic. Hotly disputed areas include the theory of knowledge, the structure of nature, the relationship of thought and language to reality, and the nature of moral and religious values. Simplistic answers have crumbled, and the customary answers no longer seem satisfactory. In an age that cannot ignore ethnic, linguistic, religious, moral, and cultural pluralism, the problems of humanity can no longer be approached from a naive standpoint assuming an independently static reality capable of establishing agreement and consensus. There is no way to transcend lived human experience in all its complexity to point out fixed and permanent markers of the real, as if our problems could be thereby solved with a vision of the "true." Rather, as pragmatism has long insisted, agreement and consensus on what is real and valuable and justifiable must be forged within the social processes of scientific deliberation on human problems. Other schools of thought are showing signs of recognizing this wisdom. The essays of this volume all tackle these issues of realism in the context of pragmatic naturalism. They carry the tradition of pragmatism forward into the future by engaging in dialogue with the wider philosophical world on matters of immediate concern.

Some preparation for the terms "pragmatic" and "naturalism" as generally used by the essays may assist the reader. Pragmatism is a form of empiricism which understands all intellectual operations as phases of practical problem solving of obstacles to successful activities of human flourishing. Naturalism, in the broad sense used here, is a rejection of dualism and supernaturalism, by asserting continuities between all realities. Pragmatic naturalism is pluralistic, not monistic or deterministic, and it must not be confused with any form of scientistic materialism, since it cannot endorse reductionism or eliminativism. The diverse attempts by the classical pragmatists to affirm both naturalistic continuities

and pluralistic creativities cannot be neatly categorized. However, it can be said that pragmatic naturalists understand their work more or less consciously as a significant break with many fundamental tenets of Western philosophy.

In Western philosophy the ongoing quest for certainty has closely paralleled the pursuit of independence. The ultimate mode of independence is complete individuality, so philosophers have been tempted, to varying degrees, to locate in the independent individual the grounds for the true and the real. The reality of the individual's own experience is thus removed from questioning; what remains to be questioned is the reality of objective entities not of experience and the possible modes of experiencing that could permit human knowledge of those entities. The paradigm of independent individuality likewise set the parameters for transexperience real objects: an object is real if it can exist independently from everything else.

Philosophy after Descartes largely followed his exaggerated stress on the individual's special mode of attaining mental certainty and propelled the real object completely outside the realm of experience altogether. The object's reality was guaranteed if its existence was not dependent in any way on the mind. This principle generated the curious paradox that the only way to determine whether an object is real is to use the single, special mental mode of attaining certainty to *simultaneously* achieve a knowing relationship with the object *and* a knowing confirmation that the object has no dependence relation to the mind. The realist-idealist debate was thus immovably entrenched, since the idealist's point—that we can only know the object as an object in relation to the mind—can be matched by the realist's statement of faith that we are still free to believe (without the possibility of confirmation) in the object's independence. The paradox can be removed, of course, if more than one relationship with the object is possible: if two modes of attaining two different kinds of relationships with the object could be used, it would be possible to compare them to assess an object's ways of being.

The empiricist-rationalist debate accordingly avoided the

paradox by setting the mode of reason against the mode of experience. The rationalist declares that real objects must satisfy logical or mathematical or scientific principles, and passes judgment on the "objects" of experience accordingly. The empiricist prefers the objects of experience and denies any existential relevance to pure reason. In the context of Cartesian mind-world dualism, empiricism became entangled with subjectivism, since the objects known through experience are known only through each individual's mode of knowing. Subjective empiricism fell into the paradox of the exclusive knowledge mode. Rationalists reveled in exposing empiricism's dire need to adjudicate among people's diverse perspectives to ascertain the "real" object among the appearances, lest empiricism abandon certainty and degrade into complete relativism or solipsism. Rationalism can supply the saving method: reason can certainly identify the real object among the appearances. Yet stubborn empiricists (some having read Sextus Empiricus) were skeptical of this assistance, since rationalists (even those depending on their intuitions) notoriously disagreed over the proper rational methodology, and a non-question-begging justification for preferring one method instead of another seemed to be lacking. And some rationalists even discarded experience as complete illusion, themselves falling into the paradox of the exclusive knowledge mode. The rationalist claim that reason was uniquely universal and not diversely relative to individuals seemed to have no more justification than the empiricist claim that experience could be good enough knowledge by itself.

The original pragmatists were all aligned with empiricism, but they fully understood that empiricism must avoid the paradox of the exclusive mode of knowledge. Some empiricists from John Locke onward did not help matters by aligning with modern materialistic science. By attempting to make the world completely responsible for empirical knowledge through the medium of sensory impact, materialistic empiricism again suffered from the paradox of the exclusive knowledge mode. Could all sensory experience really be veridical? However implausible, empiricists could avoid that result either by (1) falling back on some indepen-

dent rational principles for distinguishing genuine sensory information from error, or by (2) attempting to show how rational principles can be generated from accumulated experience and then used to distinguish genuine sensory information from error. The first option simply leads back to the traditional empiricism-rationalism impasse, while the second option inevitably requires a vicious circle of justification.

Thus, the original pragmatists rejected the rationalism of materialism, declaring that the objects of scientific knowledge (present-day or perfected knowledge) are not the only kind of reality and hence cannot be the cause of human experience. They also rejected the rationalism of logicism, attacking its manifestation in the absolute idealisms of their era. But these rejections only cut off post-Cartesian growths springing from deeper Cartesian assumptions. The pragmatists wanted to strike a decisive blow against the supports for Descartes's dualism, and thus Peirce, James, Dewey, and Mead all concluded that the fundamental prejudices inherent in philosophy—certainty and independence—must be exposed and questioned. Is the natural world really independent from experience? Is one person's experience completely separate from that of others? Is the logic of deductive proof the only reasonable method, or reasonable at all? Must the reality of an object be characterized by its aloofness from human activities? Must a reasonable methodology stand universally and uniquely independent from our cultural-historical situations? The intriguing negative answers to such questions led the pragmatists away from most of the rest of modern philosophy. But these answers only brought the pragmatists to ask further complex questions, and their diverse approaches to the newly discovered options has immeasurably enriched philosophy.

THE ESSAYS

The essays in this volume continue the discovery and exploration of novel options available to pragmatic naturalists. The lead-off

essay by Joseph Margolis, "The Benign Antimony of a Constructive Realism," recounts the recent struggles of some prominent analytic philosophers against their Cartesian heritage. This heritage, despite their best efforts, has obstructed the attempt to overcome the dualism of mind and world. In *Experience and Nature,* Dewey had already reconciled the "benign antinomy" of the *ontic* priority of independent nature and the *epistemic* priority of the conditions of human cognition. His reconciliation is accomplished through a pragmatic account of realism, which superceded the Cartesian assumptions that wedged apart the way the world really is from our ability to gain knowledge of the world. These Cartesian assumptions, despite the rebellious struggles of recent Anglo-American philosophers such as Donald Davidson, Hilary Putnam, and Richard Rorty, has continued to impede the progress of naturalism in dealing with the problem of epistemology. Margolis argues that Dewey's pragmatism, by incorporating the Hegelian respect for the embeddedness of inquiring practices in the historically situated social/environment context, is the single most distinctive contribution of modern philosophy.

Sandra Rosenthal's essay "The Pragmatic Reconstruction of Realism: A Pathway for the Future" continues the theme of attempting to grasp experience's proper relationship with nature. She argues that the uprootedness of experience from its ontological embeddedness in a natural world is at the core of much contemporary philosophy, which, like pragmatism, aims to reject foundationalism in all its forms. Pragmatism, by rejecting foundationalism and its respective philosophic baggage, does not embrace the alternative of antifoundationalism or its equivalent dressed up in new linguistic garb. Instead, pragmatism attempts to instill an awareness of the interactive openness of humans and the natural universe in which they are embedded, an openness which provides an indefinitely rich interactive epistemic and metaphysical unity at the heart of lived experience. Rosenthal portrays this unique paradigmatic structure of pragmatism as a thorough reconstruction of realism, and argues that pragmatism and realism must be mutually supportive.

The relocation of experience back within nature, demanded by pragmatic naturalism, completely alters the question of the role of reason in achieving knowledge of the world. John Ryder provocatively pursues this question in his "Reconciling Pragmatism and Naturalism." He argues that two pairs of propositions, traditionally drawn up in opposition to each other, are actually all correct and coherent together as a set: (1) Natural phenomena have objectively determinate traits, (2) The traits of natural phenomena are knowable, (3) The process of inquiry is necessarily conditioned and perspectival, and (4) Human interaction with the rest of nature, cognitive or otherwise, is active and creative. Their reconciliation requires a reconstruction of "experience" which permits experienced objects of knowledge to be both conditioned by human cognition and objectively real.

The essay "Naturalism and Subjectivism: Philosophy for the Future?" by Peter Manicas expresses an enthusiasm for naturalism while harboring some reservations about Dewey's version of pragmatic naturalism. The first part of the paper offers a brief overview of how epistemology became the preeminent philosopher's problem, and traces the consequences of this problem, especially as regards ontology and the philosophy of science. Dewey receives credit for solving epistemology's difficulties through his pragmatic theory of inquiry. In the second part, Manicas argues that Dewey's naturalism was unstable, requiring what he seemed unwilling to promote: a critical realism which is necessary if his ecological conception of inquiry and problem solving is to be sustained. Dewey's instrumentalist skepticism toward the objects postulated by science appears to be inconsistent with the need to assert the existence of natural processes that sustain our experienced interactions with the environment.

Vincent Colapietro's "Realism Thick and Thin" starts from considerations of the philosophies of James and Peirce, stimulated by directions suggested by the contemporary feminist Naomi Scheman and, to a greater degree, the psychoanalytic theorist Hans Loewald. The distinction between two kinds of realism established by Colapietro is that between the abstract definition of

the real and pragmatic clarification of the real. Abstractly defined, reality means otherness (what is independent of what you or I or any other finite mind, or even community of such minds, happens to think); but pragmatically clarified, its meaning is bound up with the efficacy and frustration of our habits. The pragmatic clarification of the real can be advanced through a psychoanalytic consideration of the human psyche: pragmatically, coming to terms with reality entails coming to terms with our selves and doing so in a manner expressly attentive to the human psyche as an involuted career of erotic attachments. The world is principally not an object of dispassionate knowledge but an array of erotically charged attachments. Colapietro suggests that thick realism requires one to thematize these aspects of our encounters with reality.

Randall Dipert also is intrigued by making a pragmatic clarification of kinds of realism in "The Varieties of Realism Worth Wanting." Dipert holds that the meaningfulness of any claims for the reality, or irreality, of an attribute are inextricably tied to a pragmatic methodology. A claim that something is real must qualify this something with one or more attributes to avoid having no cognitive content. Furthermore, such a claim must describe how something's attributes directly or indirectly manifest themselves in working experience. Dipert concludes that *only* pragmatists are entitled to be realists—or irrealists—so long as they make intellectually serious claims. He points out that there are some pragmatists, and others, who adopt a general irrealism and avoid making *any* claims about what is real or what is not real. But this position, perhaps best labeled as Rortyism, actually blocks the road of inquiry.

Kenneth Westphal's "Can Pragmatic Realists Argue Transcendentally?" attempts to break the deadlock between "internal" realists and genuine realists by adapting Kant's and Hegel's transcendental argument for mental-content externalism, which concludes that human beings can only be self-conscious in a world that provides a humanly recognizable regularity and variety among the things (or events) we sense. This feature of the world cannot result from human thought or language. Hence, semantic arguments

against realism can only be developed if realism about the world is true. Some of Putnam's arguments for internal realism are taken as a case in point, and criticized accordingly. Pragmatic realists can use this transcendental argument, Westphal argues, because its strong modal claims are consistent with fallibilist accounts of justification.

The next essay, "Pragmatic Realism and Skepticism" by Chi-Chun Chiu, continues the critical examination of transcendental arguments and Putnam's type of realism. Chiu tries to show that Putnam's pragmatic realism, inspired by the brain-in-a-vat (BIV) argument, has two ways to challenge skepticism. One is to reject one of the premises of the skeptical argument, which holds that we do not know that the BIV hypothesis is false. Based upon his investigation of the preconditions of reference and thought, Putnam argues that the BIV hypothesis is self-refuting and thus is false. Chiu finds that there is another, far more radical, way to challenge skepticism utilizing Putnam's arguments. Putnam successfully defeats the three presuppositions of skeptical argument: the mind-independency of the external objects, the totally detached perspective, and the cleavage between truth and epistemic justification. If these presuppositions are abandoned, then the strength of the skeptical argument will fall into doubt.

The surprisingly deep connections between transcendental arguments and pragmatic naturalism are pursued further by Sami Pihlström in "Pragmatic Realism and Ethics: A Transcendental Meditation on the Possibility of an Ethical Argument for Moral Realism." This essay investigates the possibility of arguing, both pragmatically and transcendentally, in favor of moral realism, the view that moral statements can be true or false and that there are genuine moral values guiding our lives. Drawing from Putnam's "companions in the guilt" argument, Pihlström shows that the pragmatic way of defending moral realism in terms of what is given in human practices can be interpreted as a transcendental argument establishing the conditions for the possibility of some actual features of our life. To illustrate pragmatism's emphasis on fallibilism, Pihlström criticizes Karl-Otto Apel's version of transcendental philosophy, and explores the possibility of an ethical grounding of

philosophical argumentation in a fallibilistic setting lacking any ultimate justification. The pragmatic and transcendental argumentation presented in this paper amounts to an impressively original defense of the metaethical commitment of moral realism.

Peter Hare's "Problems and Prospects in the Ethics of Belief" also anticipates the dissolution of purely epistemological and metaphysical perplexities over the ground of knowledge. Hare finds that it is time that pragmatists participated in the development of a social and responsibilist epistemology that is emerging from research in cognitive science, analytic philosophy, and virtue epistemology. The question of the possibility of an "ethics of belief," raised to prominence by William James, at present signals widespread discontent with evidentialist and reliabilist theories of knowledge that have detached knowledge from our psychological functions and overall adaptive capacities. For example, tentative progress has been made in understanding how cognitive attitudes of optimism or skepticism influence our interpretation and incorporation of "evidence" and thus of our belief acceptance. What is now required, advises Hare, is mutual cooperation among pragmatism and these research programs. Pragmatism can supply a metaphysical standpoint on the interaction of experience and nature, a theory of the complex self-society relationship, and an understanding of the role of cognitive processes in the pursuit of ends.

The remaining four essays study the contested role of the theory of knowledge in establishing a pragmatic naturalism against its rivals. Robert Meyers, in "Immediacy, Knowledge, and Naturalism," argues for a primary thesis of Peirce's, that all knowledge is representational or relational and not just a matter of immediate or intuitive knowledge of physical objects. Concentrating on Russell's account of knowledge by acquaintance, Meyers argues that direct realism about physical objects is subject to the same objection which direct realists make to a representative theory of perception, namely, that present experience does not provide immediate knowledge that the physical object exists. This argument is then expanded to cover all knowledge regardless of the nature of the object; that is, knowledge is representational even

in the case of necessary truths and immediate experience. Russell holds that acquaintance is a two-term relation between a knower and an object that exists in some sense and, that by examining this object, we can have immediate knowledge about the object. Unfortunately, we do not immediately know that we are acquainted with anything in this sense, and therefore we have no reason to think that when we introspect, we are reading facts off an existent object rather than just thinking about some object that may or may not exist in any sense. Meyers concludes that the basic cognitive attitude is not acquaintance, but the pragmatic framing of a conjecture, which must then be supported by further experience.

Murray Murphey's "A Pragmatic Realism" also concerns the question of the contested role of empirical knowledge by arguing for two theses. First, empirical knowledge rests on sense experience, which is known as reported in statements about what is perceived. Against Wilfrid Sellars, Nelson Goodman, etc., Murphey explains that we can be certain of our sensory experience, though not of its causes, and reminds us that the function of knowledge is to explain sensory experience. Second, against Thomas Kuhn, Murphey argues that the only plausible explanation for science's increasing power and adequacy is that there is a real world of which science gives us increasingly accurate information. If reality is knowable by the human mind, we are justified in assuming that continuing inquiry will in the long run lead to a true theory of the real. Murphey concludes by explaining the value of Peirce's conception of the real as that which would be held to exist by the best theory—i.e., the theory that will ever after be affirmed.

Frank Ryan, like Murphey and Meyers, utilizes the philosophy of Peirce in "Scholastic Realism as Pragmatic Contextualism." Although Peirce has been aligned with a dizzying array of idealisms and realisms, Ryan claims that he is most constructively construed as a forerunner to Dewey's pragmatism. Early in his career, Peirce turned to scholastic realism to banish the *ding an sich*. John Duns Scotus's "common nature" inspired Peirce's "it-general," an integral unity of particular and universal that undercuts the separation of mind and world, subject and object. The "it-gen-

eral" manifests the interpenetration of Peirce's phenomenological categories of thirdness and firstness. Ryan depicts this development in Peirce's theory of the categories as creating a pathway to understanding Dewey's essential notion of primary experience.

John Shook, in "A Pragmatically Realistic Philosophy of Science," develops a theory of scientific knowledge indebted to both Peirce and Dewey. Shook proposes that the proper object of scientific knowledge is the technologically created natural object in human experience. This definition has three components: (1) the object of scientific knowledge can be experienced (pragmatism's empiricism), (2) scientific knowledge is directed toward natural objects (pragmatism's naturalism), and (3) the object of scientific knowledge is technologically created (pragmatism's productionism). Peirce and Dewey had no trouble locating the ground of our conviction in nature's own processes in immediate experience. Unless we thought that nature did have its own processes, we would hardly bother to attempt to theoretically model them for our constructive purposes. But pragmatists should not be realists about the never-experienceable transcendent entities postulated by successful science, since the terms describing such entities are embedded in propositions having no existential function. Shook argues that this refusal is not a leap backward into phenomenalism or global skepticism, since we can believe in nature's stable processes while withholding belief in the existence of the postulated transcendent entities of science.

The Career of Peter H. Hare

This volume of essays on pragmatic naturalism is a most fitting tribute to the philosophical career of Dr. Peter H. Hare. Hare earned his Ph.D. at Columbia University where, from the time of Dewey's residence to the present, pragmatic naturalism has thrived. Among Hare's teachers were John Herman Randall, Jr., Herbert W. Schneider, and Justus Buchler, who were the inheritors of Dewey's naturalistic perspective and each a major contributor

to American philosophy in general and to naturalism in particular. Other prominent graduates from Columbia University who have enriched the tradition of pragmatic naturalism with their own thought include Irwin Edman, Sidney Hook, Abraham Edel, Joseph Blau, John E. Smith, H. Standish Thayer, Paul Kurtz, Joseph Margolis, Ralph Sleeper, Isaac Levi, Stephen Ross, Steven Cahn, Joseph Ransdell, Beth Singer, James Gouinlock, and Naomi Zack. The list of their students who in turn have been imbued with respect for American philosophy would run many pages; it suffices to say that at the start of the new century, pragmatic naturalism flourishes as a viable and vocal alternative worldview.

A good measure of credit for this flourishing, both nationally and internationally, belongs to Peter Hare. During the recent decades of dominance by other philosophical schools, at a time when mere survival would have been sufficiently astonishing, the voice of classical American philosophy only grew more powerful. This voice had its own forum, the *Transactions of the Charles S. Peirce Society: A Quarterly Journal in American Philosophy*, and this forum was somehow always large enough to accommodate quality scholarship on any facet of American philosophy. What other philosophy journal has ever had such an amazingly broad capacity matched to such a narrow-sounding title? Of course, the subtitle conveys its true mission; and for decades that mission has been executed admirably by the *Transactions* and its primary editor, Peter Hare. Not only were the journal pages consistently open to the breadth of American philosophy, but Hare's tireless and enthusiastic support of younger scholars and international professors has enriched the study of the history of American thought beyond calculation. A finer ambassador of American philosophy to the wider philosophical world could hardly be imagined. And the world has responded to such generosity. The numerous international communities of scholars active today, eagerly applying ideas born in America to global problems, testify to the power of so simple a thing as communication.

The following award citation composed by Edward Madden, Peter Hare's close friend and colleague at SUNY Buffalo, best con-

veys the scope and lasting impact of Hare's devotion to American philosophy. The occasion was the Twenty-third Annual Meeting of the Society for the Advancement of American Philosophy, at the University of Toronto in March 1996. Peter Hare received the Herbert W. Schneider Award, the highest honor bestowed by the Society, "for distinguished contributions to the understanding and development of American Philosophy."

1996 Herbert W. Schneider Award Citation: Peter H. Hare

It seems appropriate at this time to honor and thank Peter H. Hare for all that he has done for the advancement of American philosophy—in his fine publications, papers read at conferences and colloquia, as president of the Society for the Advancement of American Philosophy and the Charles S. Peirce Society, and in his many editorial labors, most notably as longtime coeditor of the *Transactions of the C. S. Peirce Society: A Quarterly Journal in American Philosophy* which he, with the never failing help of Richard Robin, took over as an in-house publication and built into one of the major philosophical journals of our time. Through all of these activities he certainly has *earned* the Herbert Schneider Award of 1996.

Professor Hare's publications in American philosophy span a wide range of topics, including numerous clarifying articles on James's will-to-believe doctrine and a splendid introduction to the Harvard edition of James's *Some Problems of Philosophy*. His scholarship has range as well as depth. He has also written substantial articles (or sections of books) on Whitehead, Royce, Tillich, Hartshorne, Ducasse, Mead, Sheldon, Buchler, Dewey, and Dickinson Miller. And he has written numerous valuable articles for recent and current dictionaries, encyclopedias, and companions of philosophy, pieces generally dealing with figures in American philosophy. Peter has written a good deal on American naturalism and several entries for the *Encyclopedia of Unbelief*; but it is clear that he has not entirely escaped his Puritan heritage: for him, laziness is *the* Unpardonable Sin.

Peter's editorial work has been far-reaching in its influence. In addition to the *Transactions*, he is the editor of a series of books entitled *Frontiers of Philosophy*, one of which includes a symposium on William James. He has edited individual books as well, and was a long-term member of the editorial board of the *American Philosophical Quarterly*. His editorial significance lies in the fact that he has made every effort to see that all aspects of American philosophy are given a hearing. I can think of no dimension of American philosophy that has not been included some time or other in the *Transactions*, many written as a result of his encouraging authors to write on diverse subjects. His openness, his desire to have all sides heard, is more than an ideological commitment to pluralism but also reflects his heartfelt commitment to all democratic principles.

We all know, of course, that Peter is past president of our Society. That honor came as the result of many years of labor on every conceivable committee of the Society and his participation in organizing annual and sectional meetings, including the excellent international meeting in Buffalo, where the interest of foreign scholars in American philosophy was cheeringly evident. From the day he received his Ph.D. from Columbia University he has worked tirelessly and effectively for the recognition of American philosophy.

In still another way Peter has promoted American philosophy from his home base at SUNY at Buffalo. In the near future he will have chaired more Ph.D. committees than any other person in the history of the department, the majority of students writing their dissertations in American philosophy and who, in turn, carry on this interest in their own teaching careers. But even more impressive is the fact that he has been a member of fifty-six dissertation committees at Buffalo. He has sunk many baskets himself but, to his credit, he also has had an overwhelming number of assists. Peter has always been helpful to young philosophers beyond measure, whether they be friends or bare acquaintances, whether they be Buffalo students or young people he met at a convention. Helping others is not a prominent feature of our world and deserves to be honored when it assumes a large role in a scholar's life.

With his advancement of American philosophy in numerous and diverse ways no one can deny that Peter Hare richly deserves the high honor bestowed on him today by this Society, the Herbert W. Schneider Award. This award, which recognizes one's contributions and dedication to American philosophy, also has a significant moral overtone. Like most areas of life nowadays, academia is not known for its benevolence, so it is reviving and refreshing to be present when a most kindly and benevolent Peter Hare is honored—by an official award, yes, and one accompanied by overwhelming affection from the members of this Society.

Edward H. Madden
Professor Emeritus, SUNY at Buffalo

The Publications of Peter H. Hare

Books Authored

"G. H. Mead's Metaphysics of Sociality," Ph.D. diss., Columbia University, 1965. Advisors Justus Buchler, Arthur Danto, John H. Randall, Jr., David Sidorsky.

With Edward H. Madden. *Evil and the Concept of God*. Springfield, Ill.: Charles C. Thomas, 1968, pp. 83–90. Reprinted in *Exploring the Philosophy of Religion*, ed. David Stewart (Englewood Cliffs, N.J.: Prentice-Hall, 1980), and in *Philosophy of Religion: An Anthology*, ed. Louis P. Pojman (Belmont, Cal.: Wadsworth Publishing Co., 1987).

With Edward H. Madden. *Causing, Perceiving, and Believing: An Examination of the Philosophy of C. J. Ducasse*. Dordrecht, Netherlands: D. Reidel, 1975.

A Woman's Quest for Science: Portrait of Anthropologist Elsie Clews Parsons. Amherst, N.Y.: Prometheus Books, 1985.

Books and Journal Issues Edited

Religion, History, and Spiritual Democracy: Essays in Honor of Joseph L. Blau. New York: Columbia University Press, 1980. Coeditor.

Naturalism and Rationality. Amherst, N.Y.: Prometheus Books, 1986. Coeditor.

Doing Philosophy Historically. Amherst, N.Y.: Prometheus Books, 1988.
"Can Epistemology Be Unified?" *Monist* 81 (July 1998): 351–308.

Articles

"Behaviorism and Total Life Orientation." *Pacific Philosophical Forum* 3 (1964): 84–86.

With Edward H. Madden. "Evil and Unlimited Power." *Review of Metaphysics* 20 (1966): 278–89.

"Hartshorne's Social Feelings and G. H. Mead." *Southern Journal of Philosophy* 4 (1966): 69–70.

"In Defense of Impersonal Egoism." *Philosophical Studies* 17 (1966): 94–95.

With Edward H. Madden, "A Theodicy for Today?" review of Hick, *Evil and God of Love*. *Southern Journal of Philosophy* 4 (Winter 1966): 287–92.

"Is There An Existentialist Theory of Truth?" *Journal of Existentialism* 7 (1967): 417–24.

With Edward H. Madden. "On the Difficulty of Evading the Problem of Evil." *Philosophy and Phenomenological Research* 28 (1967): 58–69.

"Religion and Analytic Naturalism." *Pacific Philosophical Forum* 5 (1967): 52–61.

"W. H. Sheldon's Philosophy of Polarity: A Metaphilosophy." *Personalist* 48 (1967): 200–16.

"Should We Concede Anything to the Retributivists?" In *Philosophical Perspectives on Punishment*, eds. Edward H. Madden, Marvin Farber, and Rollo Handy. Springfield, Ill.: Charles C. Thomas, 1968, pp. 82–85.

With Richard Koehl. "Moore and Ducasse on the Sense Data Issue." *Philosophy and Phenomenological Research* 28 (1968): 313–31.

"On Defining Existentialism." *Buffalo Studies* 4 (1968): 3–17.

"Review Essay: Purposes and Methods of Writing the History of Recent American Philosophy." *Southern Journal of Philosophy* 6 (1968): 269–78.

"Sartre on Freedom and Authenticity: A Short Critique." *Buffalo Studies* 4 (1968): 133–42.

With Edward H. Madden. "William James, Dickinson Miller and C. J. Ducasse on the Ethics of Belief." *Transactions of the Charles S. Peirce Society* 4 (1968): 115–29.

"Propositions and Adverbial Metaphysics." *Southern Journal of Philosophy* 7 (1969): 267–71.

With Edward H. Madden. "Why Hare Must Hound the Gods." *Philosophy and Phenomenological Research* 29 (1969): 456–59.

"A Tribute to C. J. Ducasse." *Journal of the American Society for Psychical Research* 64 (1970): 143–46.

"The Case for the Pragmatic View of the Past." *Discourse* 3 (1970): 16–19.

With Edward H. Madden. "Reflections on Civil Disobedience." *Journal of Value Inquiry* 4 (1970): 81–95.

"An Examination of C. J. Ducasse's Philosophy of Religion." *Transactions of the Charles S. Peirce Society* 7 (1971): 58–69.

With Edward H. Madden. "C. J. Ducasse on Human Agency." *Personalist* 52 (1971): 618–29.

With Edward H. Madden. "The Powers That Be." *Dialogue* 10 (1971): 12–31.

With Edward H. Madden. "Evil and Inconclusiveness." *Sophia* 11 (1972): 8–12.

With Edward H. Madden. "Evil and Persuasive Power." *Process Studies* 2 (1972): 44-48. Reprinted in *The Problem of Evil: Selected Readings,* ed. Michael L. Peterson (Notre Dame, Ind.: University of Notre Dame Press, 1992), pp. 267–72.

"Feeling Imaging and Expression Theory." *Journal of Aesthetics and Art Criticism* 30 (1972): 343–50.

"Rowland G. Hazard (1801–88) on Freedom in Willing." *Journal of the History of Ideas* 33 (1972): 155–64.

With Edward H. Madden. "C. J. Ducasse's Progressive, Universal Hedonism." *Philosophy and Phenomenological Research* 34 (1973): 36–50.

With John Lincourt. "Neglected American Philosophers in the History of Interactionism." *Journal of the History of the Behavioral Sciences* 9 (1973): 333–38.

With Peter Kauber. "The Right and Duty to Will to Believe." *Canadian Journal of Philosophy* 4 (1974): 327–43.

Introduction to "Perspectives on the History of Pragmatism: A Symposium on H. S. Thayer's *Meaning and Action." Transactions of the Charles S. Peirce Society* 11 (1975): 229–30.

With Edward H. Madden. "A Critical Appraisal of James's View of Causality." In *The Philosophy of William James,* ed. Walter R. Corti. Hamburg: Felix Meiner, 1976, pp. 101–17.

With Edward H. Madden. "Civil Disobedience in Health Services" in *Encyclopedia of Bioethics*. New York: The Free Press, 1978, vol. 1, pp. 159–62.

With Edward H. Madden. "Review Essay on Bruce Kuklick, *The Rise of American Philosophy." Transactions of the Charles S. Peirce Society* 14 (1978): 53–71.

Introduction to *The Works of William James: Some Problems of Philosophy.* Cambridge: Harvard University Press, 1979, pp. xiii–xli.

"Introduction, American Philosophical Reflections," in *Religion, History, and Spiritual Democracy: Essays in Honor of Joseph L. Blau*, ed. Maurice Wohlgelernter et al. New York: Columbia University Press, 1980, pp. 153–54.

With Chandana Chakrabarti. "The Development of James's Epistemological Realism." In *Religion, History, and Spiritual Democracy: Essays in Honor of Joseph L. Blau*, ed. Maurice Wohlgelernter et al. New York: Columbia University Press, 1980, pp. 231–45.

With John Ryder. "Buchler's Ordinal Metaphysics and Process Theology." *Process Studies* 10 (1980): 120–29. Reprinted in *Nature's Perspectives: Prospects for Ordinal Metaphysics*, eds. Armen Marsoobian, Kathleen Wallace, and Robert Corrington (Albany, N.Y.: State University of New York Press, 1991), pp. 335–45.

"What Pepperian Response to Rorty is Possible?" *Journal of Mind and Behavior* 3 (1982): 217–20.

"Clifford, William Kingdon (1845–1879)." Article in *Encyclopedia of Unbelief*, ed. Gordon Stein (Amherst, N.Y.: Prometheus Books, 1985), vol. 1, pp. 112–14.

"Evil, Problem of." Article in *Encyclopedia of Unbelief*, ed. Gordon Stein (Amherst, N.Y.: Prometheus Books, 1985), vol. 1, pp. 187–95.

"Godwin, William (1756–1836)." Article in *Encyclopedia of Unbelief*, ed. Gordon Stein (Amherst, N.Y.: Prometheus Books, 1985), vol. 1, pp. 294–97.

"The Abuse of Holocaust Studies: Mercy Killing and the Slippery Slope." In *Echoes from the Holocaust: Philosophical Reflections on a Dark Time*, eds. Alan Rosenberg and Gerald E. Myers (Philadelphia: Temple University Press, 1988), pp. 412–20.

"Toward an Ethics of Belief." In *Philosophie et Culture: Actes du XVIIe congrès mondial de philosophie / Philosophy and Culture: Proceedings of the XVIIth World Congress of Philosophy* (Montreal: Editions Montmorency, 1988), vol. 3, pp. 428–32.

"Alfred North Whitehead." Article in *Handbook of Metaphysics and Ontology*, eds. Hans Burkhardt and Barry Smith (Munich: Philosophia Verlag, 1991), vol. 2, pp. 932–34.

"John Dewey." In *A Companion to Epistemology*, eds. Jonathan Dancy and Ernest Sosa (Oxford: Blackwell, 1992), pp. 97–98.

"William James." In *A Companion to Epistemology*, eds. Jonathan Dancy and Ernest Sosa (Oxford: Blackwell, 1992), pp. 227–28.

"Learned Discussion." *American Heritage* (February-March 1992), pp. 36–37.

"Euthanasia: Arguments For and Against" (in Russian). *Yasnopolyanskii Herald* (1993), p. 5.

Sixteen articles in *The Oxford Companion to Philosophy*, ed. Ted Honderich (Oxford: Oxford University Press, 1995). "Belief, ethics of," p. 83. "Blanshard, Brand (1892–1987)," p. 96. "Brightman, Edgar Sheffield (1884–1953)," p. 105. "Buchler, Justus (1914–1991)," pp. 106–107. "Ducasse, Curt John (1881–1969)," p. 207. "Hartshorne, Charles (1897–)," p. 335. "Hocking, William Ernest (1873–1966)," pp. 370–71. "Hodgson, Shadworth Holloway (1832–1912)," p. 371. "Hook, Sidney (1902–1989)," pp. 373–74. "Lovejoy, Arthur O. (1873–1962)," p. 513. "Mead, George Herbert (1863–1931)," p. 540. "Renouvier, Charles Bernard (1815–1903)," p. 769. "Sellars, Roy Wood (1880–1973)," p. 819. "Virtues, doxastic," p. 901. "Voluntarism, doxastic," pp. 902–903. "Whitehead, Alfred North (1861-1947)," pp. 909–10.

"The American Naturalist Tradition." *Free Inquiry* 16, no.1 (Winter 1995): 38–39.

"Classical Pragmatism, Recent Naturalistic Theories of Representation, and Pragmatic Realism." In *The Role of Pragmatics in Contemporary Philosophy*, eds. Paul Weingartner, Gerhard Schurz, and Georg Dorn (Vienna: Hölder-Pichler-Tempsky, 1998), pp. 58–65.

"Introduction to American Philosophy and the Hispanic World." *Transactions of the Charles S. Peirce Society* 34 (1998): 29–30.

"Marvin Farber." In *American National Biography*, eds. John A. Garrety and Mark C. Carnes (Oxford: Oxford University Press, 1999), vol. 7, pp. 707–10.

"William T. Parry." In *American National Biography*, eds. John A. Garrety and Mark C. Carnes (Oxford: Oxford University Press, 1999), vol. 17, pp. 78–79.

"Richard S. Robin: Present at the Creation." *Transactions of the Charles S. Peirce Society* 38 (2002): 1–6.

With Timothy Madigan. "Patrick Romanell, 1912–2002." *Proceedings and Addresses of the American Philosophical Association* 75 (May 2002): 201–202.

THE BENIGN ANTIMONY OF A CONSTRUCTIVE REALISM

1

Joseph Margolis

I

When I consider the grand puzzle of realism, now that the twentieth century has played itself out, two impressions nag that I cannot easily shake off: one, the abiding sense that for all its fatal weaknesses, it is René Descartes's conception in the *Meditations*, that has, after all, completely dominated the philosophical tradition from his day to ours; the other, that pragmatism, particularly the pragmatism of Charles Peirce and John Dewey, which easily and effectively defeated the Cartesian vision they rightly found pernicious, is now, in its second incarnation, in as sorry a state as the analytic naturalism it was bound to contest. The plausibility of these two intuitions is confirmed by the plain fact that, give or take a little, analytic philosophy is a kind of thinned-down Cartesianism, and that the two leading pragmatists of our day, Hilary Putnam and Richard Rorty, have pretty well exhausted their own foray into the realism puzzle by falling in with the Cartesians—innocently perhaps, but disastrously nevertheless.

I mean this as a provocation of course. But you must remember that, in his Dewey Lectures, Putnam rejected the "internal realist" position he advocated in *Reason, Truth and History*[1] and *The Many Faces of Realism*.[2] He rejected it because he saw, quite rightly, that

he had, without being aware of it, yielded to a kind of Cartesian representationalism, which signified a contradiction in his insistence against a principled division between the "subjective" and the "objective."[3] Putnam was absolutely right, though strangely slow, about his mistake. But he put the entire recovery of pragmatism unnecessarily at risk by failing to perceive that rejecting representationalism did not require rejecting "internalism" (witness Hegel). He has yet to explain the fate of his notorious *Grenzbegriff* or what might replace it in a reconstituted realism.[4]

Putnam believes he has now found a way to escape his original error via John McDowell's Kantian-oriented recovery of realism, liberated from Kant's own representationalism—that is, from the encumbrances Kant mentions in his famous 1772 letter to Marcus Herz. But McDowell does not subscribe to Putnam's objection to any disjunction between the subjective and the objective, and Kant's own transcendentalism requires just such a disjunction.

McDowell has the best minimalist treatment of the realism issue judged in light of the views of Putnam, Rorty, and Donald Davidson. His solution—the right one, I would say, for the classic realist position, but not for a constructive realism that embraces the "internalist" insight—which he offers by way of bringing Kant and Aristotle together (with a touch of Hegel), centers on the following remark which he pursues (to good effect) against Rorty's defense of Davidson's brand of realism, that is, as Rorty reads Davidson:

> I . . . assume [he says] that philosophical concerns about the possibility of knowledge express at root the same anxiety as philosophical concerns about how content is possible [empirical and conceptual content], an anxiety about a felt distance between mind and world. Davidson and Rorty usually focus on concerns of the former sort, whereas I focus on concerns of the latter sort; I take it that the underlying thought is the same, that we ought to exorcise the feeling of distance rather than trying to bridge the felt gap.[5]

The charge applies to Putnam as much as to Rorty and Davidson—implicitly, on Putnam's own admission. But McDowell's argument

also shows that Rorty, functioning as a self-styled pragmatist, is, in however attenuated a way, committed as was Putnam to something akin to Cartesian realism. Rorty's "Cartesianism" (also Davidson's) is very much thinned down—enough to make the charge seem unlikely. For instance, it abandons indubitability and mind/body dualism and a reliance on objective "ideas." McDowell correctly sees that this commitment of Rorty's is systematically linked to the defense of Davidson's coherence theory of truth and knowledge and that, in effect, Davidson is committed to the same Cartesian vision as is Rorty. Here is what Rorty says, in advancing (in one breath) Davidson's view, his own, the engine of pragmatism, the nerve of the new naturalism Davidson advocates, and the key to recovering a viable realism—quite a lot in one swoop:

> A common feature of all the forms of this dualism which Davidson lists ["the dualism of scheme and content"] is that the relations between the two sides of the dualism are non-causal. Such *tertia* as a "conceptual framework" or an "intended interpretation" are non-causally related to the things which they organize or intend. They vary independently of the rest of the universe, just as do the skeptic's relations of "correspondence" or "presentation." The moral is that if we have no such *tertia*, then we have no suitable items to serve as representations, and thus no need to ask whether our beliefs represent the world accurately. We still have beliefs, but they will be seen from the outside as the field linguist sees them (as causal interactions with the environment) or from the inside as the pre-epistemological native sees them (as rules for action). To abjure *tertia* is to abjure the possibility of a third way of seeing them—one which somehow combines the outside view and the inside view, the descriptive and the normative attitudes.[6]

Rorty gives us no reason to suppose that the causal interaction between belief and world *can* capture what would otherwise be tendered as the epistemic connection between the two.

McDowell sees very clearly that these views of Davidson and Rorty cannot fail to reinstate all the paradoxes of the Cartesian skeptic's commitment, for they entrench the separation between

beliefs lacking sufficient epistemic resources and the real world they are said to be about. McDowell's argument is a careful effort to recover precisely what Rorty calls the "third way of seeing [beliefs]," except that McDowell never treats beliefs *relationally* (as Rorty wrongly guesses would be necessary on the view [Putnam's, for instance] that opposes his own—*his* naturalism, *his* pragmatism), that is, by insinuating into the story something akin to *tertia*. McDowell has surely got this right. But the truth is, it was already the thesis of both Peirce and Dewey; it belonged to them precisely in virtue of the Hegelian genealogy, however muffled, of pragmatism itself. You will find the clue in Hegel's treatment of the original Cartesian conception of independent reality's role in perceptual contexts—that is, within the scope of "self-consciousness"—and in Dewey's *Experience and Nature*.[7] McDowell rejects the Cartesian disjunction by way of Immanuel Kant and Aristotle, but he does not qualify the cognizing subject in any way that rightly overcomes the gap between cognizer and cognized: he affirms no more than that there cannot be a gap. In short, he fails to motivate the epistemic complication Davidson and Rorty ask us to abandon. There's the stalemate. He certainly never uses Hegel's essential maneuver.

The connecting idea had already been skillfully formulated closer to home in Frederick Will's "Thoughts and Things," his 1968 presidential address before the central division of the American Philosophical Association. This tribute to Peirce and Dewey was part of a sustained effort to explain the compatibility of pragmatism and realism. You must bear in mind that Rorty's *Philosophy and the Mirror of Nature* was published in 1979, so Will's address was recent enough to have forestalled Rorty's mistake in the name of pragmatism. There was no need to invent the doctrine of irrelevant *tertia*. The pragmatists had, under post-Kantian instruction, already retired the relational theory of cognition (representationalism or Rorty's replacement) in favor of a prior *adverbial qualification*, by way of enculturing thought, *of* our cognizing powers. That replacement is pragmatism's advantage over McDowell, and over the Putnam who appears willing to follow McDowell's lead.

Rorty and Davidson completely overlook the pragmatist (and

"Hegelian" emphasis on the cultural formation of what *first counts as a "belief"*; so that beliefs, variably constructed in a historical world, oblige us to *explain* the sense in which *such* cultural artifacts, noticeably different and often incompatible, among different societies *can* count as true beliefs about the world. Rorty and Davidson simply ignore the question. The doctrine Rorty shares with Davidson—it is usually termed "naturalizing"—remains Cartesian since it ignores the epistemic inseparability of subjects and objects, which, after all, is the supreme Hegelian theme. It is but a step from there to grasp that that kind of explanation is precisely what the theory of truth, under constructivist conditions, is rightly expected to supply. They stonewall on the matter.

Rorty and Davidson simply ignore the facts; McDowell makes too little of them. Will has a better argument than McDowell, because he is prepared to reconcile realism with as rich an account of the social and historical formation of knowledge as the pragmatists (particularly Dewey) might insist on; whereas McDowell is content with a purely formal argument—correct as far as it goes—to the effect that we must abjure any epistemic disjunction between mind and world. You cannot find a developed account of the social formation of our cognizing powers in McDowell's 1991 John Locke Lectures which form the principal part of *Mind and World*. McDowell does not mention Frederick Will of course, and McDowell is certainly not a pragmatist. But we see the important possibility of a rapprochement between pragmatism and analytic philosophy, if only analytic philosophy would shed the regressive doctrines Davidson and Rorty espouse. McDowell's is an excellent half-way measure, but it is a half-way measure. If you press the point, you may conclude (not unreasonably) that McDowell never addresses the epistemological issue.

In fact, Will offers an epigraph from Peirce to start his address which Rorty might have pondered: "if [consciousness] is to mean Thought [Peirce says] it is more without us than within. It is we that are in it rather than it in any of us."[8] The remark is an extravagance (a requirement of Peirce's idealism) but it has its obvious anti-Cartesian lesson. Will's thesis is a gloss on Peirce: "as in our

thoughts we are dependent upon things, so [says Will] these things exert some guidance on the development of our thought, on our language.... In our thoughts themselves, things are implicated and in a variety of subtle ways make their characters known to us."[9] Thought, the would-be cognizing function of our mental life, must have an intrinsically realist thrust. Will simply bypasses the idealist strain in Peirce, since he accepts its Deweyan "correction."

You would not be wrong to see in this a clear alternative to Rortyan *tertia* (not, however, to Peirce's Thirdness), that is, a doctrine to the effect that the social, cultural, and historical formation of our thoughts is always in principle constrained by things. This view is what, very reasonably, Peirce meant by Secondness, though he always viewed Secondness within the context of Thirdness (itself never confined to the psychological). What Rorty misleadingly calls *tertia*, therefore, are really (or are rightly replaced by) nonrelational, adverbial, noncausal, historically formative (that is, "prior") qualifications of our conceptual powers, qualifications that need not disturb the symbiosis between mind and world and need not assume the objective truth of any particular belief.

If you concede this much, you see that not only Rorty, but also Putnam, was committed to a profoundly inconsistent pragmatism. For Will's account rules out Putnam's paradoxes regarding his use of the Skolem-Löwenheim theorem, the model-theoretic idea that the standard use of a natural language might not be able to fix at all the referents of our discourse (in any reasonably practical or effective way congruent with its mastery). Such a view requires a disjunction, *somewhere*, between language and world that matches, however eccentrically, the fatal disjunction which, as Putnam admits, defeats his former representationalism.[10] Alternatively put, the Skolem-Löwenheim theorem has no application to natural language until some denotative specification is already in place; and then its application must be relativized to *that*—in a way that precludes any skeptical threats against natural-language discourse itself.

In this sense, the remarkable revival of pragmatism, due almost entirely to a running quarrel between Rorty and Putnam, now lies in a shambles. For both have capitulated to the original

opponent: Putnam, grudgingly, and much to his surprise; Rorty, by an overly zealous confusion between his loyalty to Davidson's naturalism (or Cartesianism) and his own self-styled postmodernism. You realize therefore that the essential philosophical gain of the post-Kantians that culminated in Hegel, is, two hundred years later, still very much at risk.

II

Many believe that pragmatism is irreconcilable with realism. I do not, but only because there is no reliably settled reading of these notions in terms of which a proper answer must be given. It's a bit like throwing dice under the risk of antecendent probabilities, except that there *is* a reasonable way to say just how to construe those notions *now*. The answer depends on grasping the fact that reconciling pragmatism with realism is an utterly different matter from that of reconciling pragmatism with naturalism—that is, with the new "naturalizing" program Davidson and Rorty favor (not altogether in agreement with one another). The two questions are not entirely separable.

Pragmatism, I would say, is—cannot fail to be—a form of realism. That is the point of refusing the Cartesian dualism of mind and matter, even where it is not a dualism of substances (as it is not in Davidson and Rorty). We are misled by Descartes's version of Cartesian realism. If it is put in epistemological terms, as it should be, then, in the hands of "naturalists" like Davidson and Rorty, *both* the affirmation of *tertia* (which Rorty charges against Putnam) *and* their rejection (in the larger setting of Putnam's internalism—which, I argue, can be recovered) would be irreconcilable with the new naturalism. That is, both relational *tertia* and adverbially prior qualifications of our cognizing powers: in effect, autonomous interpretations and historical formations. You see, therefore, that Cartesian dualism at the epistemological level poses the same problem as does Cartesian realism regarding an absolutely independent world. That is the insight Peirce and Dewey—and Will and Putnam (apart

from his admitted blunders) and McDowell—all share with Hegel and with us (if we are philosophically fortunate).

The essential clue regarding what counts as "naturalized" realism appears in Davidson, though it is better known through Rorty's advocacy. It takes form, epistemologically, in Davidson's clever version of coherentism: that is, one's acceptance of the "presumption in favor of the truth of a belief that coheres with a significant mass of belief." "If knowledge is justified true belief," Davidson holds, "then it would seem that all the true beliefs of a consistent believer constitute knowledge. . . . There is no further relativism to a conceptual scheme, a way of viewing things, a perspective. . . . So [first] if a coherence theory of truth is acceptable, it must be consistent with a correspondence theory [with 'how the world is arranged' and,] second, a theory of knowledge that allows that we can know the truth must be a non-relativized, non-internal form of realism." Davidson has now abandoned the argument, admitting its absurdity.[11] But of course that leaves his naturalized realism dangling without a rationale.

The obvious solution to Davidson's difficulty runs as follows. First, whatever within the mental bears on belief and knowledge of the world cannot be completely insulated from the world in epistemic terms—nor, indeed, in terms that would challenge its own reality. Second, if knowledge of an absolutely independent world could never be relevantly justified, and if cognitive privilege entails what Davidson rightly condemns as the absurdity of treating correspondence criterially, then every viable realism must be a form of constructivism, and constructivism must not tamper with the formal symbiosis of the subjective and the objective. Third, since constructivism precludes invoking coherence as a criterion of correspondence, more than naturalizing is needed. Fourth, we must as realists retreat from any privileged or foundational account of truth in favor of a constructivist ascription of truth-values. These four conditions are incompatible with *any* "naturalizing" version of naturalism but not with one or another version of pragmatism along broadly Peircean or Deweyan lines. Also, rightly pursued, any pragmatist solution would reclaim an

epistemic role for the theory of truth and would count, as such, as a distinctly original variant of the Hegelian theme.

My point is that naturalizing cannot possibly succeed, because if it is to avoid constructivism it must fall back to Cartesian privilege or to something akin to representationalism (a charge that applies equally to Davidson and Rorty). It cannot succeed on the strength of Putnam's realism, if we read Putnam in terms of his representationalism and/or his compensating *Grenzbegriff.* It cannot succeed on the strength of McDowell's corrected realism, because McDowell's analysis (addressed, say, to Putnam) makes only formal provision for a genuine correction. It provides no *epistemic* details that bear on pronouncing any belief true! You cannot find in McDowell any reckoning of the contingent, culturally generated, variable, historically evolving, divergent concepts and aptitudes by which human truth-claims are first formed and made to count as bearers of knowledge or science.

This last is the supreme contribution that develops from Hegel (not Kant) that runs in endlessly diverging ways, through Karl Marx, through Friedrich Nietzsche, through the pragmatists, through Dilthey, through Heidegger, through the Frankfurt Critical movement, through Gadamer, through Wittgenstein, through Kuhn, and through Foucault. Among the nearer "Hegelians" the pragmatists effectively count as the only English-language movement to have remained loyal to the notion of the social formation of thought and belief in such a way that only a constructive, socially reflexive, critical, inherently provisional justification of the objective standing of any particular belief would satisfy us. This is not yet pragmatism, but it is the generic feature pragmatism shares with the other Hegelian strands. It is the theme that Will and McDowell touch on in very different ways: Will, as a pragmatist; McDowell, as a Kantian yielding (thus far at least) to a pre-Kantian reading of Kant himself.

III

Let me collect the argument now. I say that the pivot of the whole of modern Western philosophy rests with the avoidance of Cartesian realism, by which I mean the avoidance of any doctrine that would attempt to ensure a compatibility between the realist standing of science and the admission of an insurmountable epistemic gap between subjective belief and objective world. Kant shows that the Cartesian aporia can be overcome only in constructivist terms, in terms that deny any principled disjunction between the subjective and the objective as far as evidentiary sources go. But Kant does fall back to something of a vestigial Cartesianism along idealist lines through his transcendentalized confidence about the specific constituting role of the "understanding" within the bounds of empirical realism. There's the point of the Copernican revolution, marred by Kant's unresolved representationalism. McDowell favors a naturalistic reading of Kant's transcendental theme, opposes representationalism, and thereby eliminates tertia; but, in doing so, he also fails to provide a conceptual (a Hegelian) basis for the cultural formation of our cognizing powers themselves. In that sense, he fails to match the amplitude of the pragmatist alternative. He does not motivate the epistemic question.

By contrast, although he also preserves a constructivist solution, Hegel abandons (in his best moments, though possibly not always or altogether) every a priori or necessitarian claim about subjectivity; he historicizes the essential realist competence of human inquiry; and, as a result, abandons (or must abandon) transcendental idealism. Hence, Hegel had already outflanked, at the very beginning of the nineteenth century, the need to postulate any threat of epistemic *tertia* of the sort which concerns Davidson and Rorty.[12] Their objections are either irrelevant or due to a fundamental misunderstanding of what is relevant. That explains why the classic pragmatists were in such a strong position: they abandoned Hegel's impossible apparatus without abandoning the new symbiosis (the inseparability of the subjective and the objective) that Hegel invented. In *Experience and Nature*, Dewey, for instance,

opposed Cartesian "metaphysics"—which admittedly misled Rorty into reading Dewey as a "posmodernist"—by saying very clearly (he is following James here):

> For empirical method the problem [of analyzing experience] is to note how and why the whole of reality is distinguished into subject and object, nature and mental operations. Having done this, it is in a position to see *to what effect* the distinction is made: how the distinguished factors function in the further control and enrichment of the subject-matters of crude but total experience. Non-empirical method starts with a reflective product as if it were primary, as if it were the originally "given." To non-empirical method, therefore, object and subject, mind and matter (or whatever words and ideas are used) are separate and independent. Therefore it has upon its hands the problem of how it is possible to know at all; how an outer world can affect an inner mind; how the acts of mind can reach out and lay hold of objects defined in antithesis to them.[13]

These are concessions neither Davidson nor Rorty would be willing to make, and which McDowell evidently finds unnecessary.

I suggest that Dewey is a straightforward beneficiary of Hegel's supreme work,[14] without any of Hegel's extravagances. As early as 1929, Dewey had effectively outflanked Davidson's and Rorty's maneuver in advance; he was in a position to inform the various pragmatisms of Will and Putnam; he anticipated almost totally McDowell's correction of Putnam; and, given his remarkable clarity, Dewey now leads us to see that if we take Davidson's challenge on its face (as the academy obviously has) we lose the entire benefit of Hegel's stunning improvement of Kant's argument. For surely what Dewey says in his terribly prosaic way is the very nerve of Hegel's notion of *Geist* shorn of all Kantian and post-Kantian claptrap. *Geist*, we may say, is never more than the predicable qualification of perception or understanding: in effect, the adverbial color of our beliefs and cognitive claims along cultural and historical or horizoned lines—just what is missing in Davidson's naturalizing. That is the single most distinctive contribution of modern philosophy, a theme that cannot be found in Aristotle or Thomas Aquinas or Descartes or Kant but may be found in Dewey.

It is an extraordinary fact that Dewey was on to the fullest implications of this puzzle. He implicitly formulates both the naturalizers' and the pragmatists' conceptions of naturalism, *and* he identifies the decisive condition on which the second utterly defeats the first. I find myself obliged to regard the entire foregoing argument, therefore, as a footnote to *Experience and Nature*. For one thing, Dewey implicitly identifies what I have elsewhere termed a "benign antinomy" (within the space of physical cosmology), that is, the *ontic* priority of independent nature and the *epistemic* priority of the conditions of human cognition; for another, he smartly resolves the "antinomy" in terms of a pragmatist account of realism. In pondering Dewey's clever move, you must see that Davidson's "dualism" separating belief and world—hardly Descartes's mind/body dualism but Cartesian enough—could never resolve the antinomy *or* the skepticism of his own account, unless in reductionist terms stronger than any he would be willing to advance. I must be frank to say that Dewey is often tiresome in the defense of his doctrine. But that's not to deny that he is the master of the argument.

Here, then, is Dewey's resolution:

> It is sometimes contended . . . that since experience is a late comer in the history of our solar system and planet, and since these occupy a trivial place in the wide areas of celestial space, experience is at most a slight and insignificant incident in nature. No one with an honest respect for scientific conclusions can deny that experience as an existence is something that occurs only under highly specialized conditions, such as are formed in a highly organized creature which in turn requires a specialized environment. . . . But candid regard for scientific inquiry also compels the recognition that when experience does occur, no matter at what limited portion of time and space, it enters into possession of some portion of nature and in such manner as to render other of its precincts accessible. . . . experience is *of* as well as *in* nature. It is not experience which is experienced, but nature—stones, plants, animals, diseases, health, temperature, electricity, and so on. Linked in certain other ways with another natural object—the human organism—they are *how* things are experienced as well.[15]

I take this to posit and resolve in one stroke the antinomy between the ontic and epistemic priorities of world and experience within the symbiosis (of the subjective and the objective) that Dewey (also) calls "experience." We cannot improve much on the general lineaments of Dewey's argument. What in effect Dewey draws attention to is the inseparability of first- and second-order aspects of "experience," which, once reductionism's failure is acknowledged, signifies the total eclipse of naturalizing as well as the abiding need to complete a viable naturalism by favoring Hegel over Kant.

NOTES

1. Hilary Putnam, *Reason, Truth, and History* (Cambridge: Cambridge University Press, 1981).

2. Hilary Putnam, *The Many Faces of Realism* (La Salle, Ill.: Open Court, 1987).

3. See Putnam, "Sense, Nonsense, and the Senses: An Inquiry into the Powers of the Human Mind," *Journal of Philosophy* 91 (1994): 445–517, particularly Lecture I.

4. See Putnam, *The Many Faces of Realism*, Lecture II. Putnam, it should be said, had intended the term "internal realism" to cover an earlier position than the one now associated with his pragmatism, rightly ascribed to *Reason, Truth and History* and *The Many Faces of Realism*. But readers applied the pragmatist reading of the term to the thesis of the books mentioned. Hence, when, in "Sense, Nonsense, and the Senses," Putnam abandoned his "internal realism," he meant that he abandoned the doctrine of these last books. See, for instance, "Sense, Nonsense, and the Senses," pp. 461, n. 36 and 463, n. 41.

5. John McDowell, *Mind and World* (Cambridge, Mass.: Harvard University Press, 1996), Afterword, part I, pp. 146–47; see also the rest of this Afterword.

6. Richard Rorty, "Pragmatism, Davidson and Truth," in *Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson*, ed. Ernest Lepore (Oxford: Basil Blackwell, 1986), pp. 344–45. Donald Davidson's article, "A Coherence Theory of Truth and Knowledge," which Rorty is relying on, appears in the same collection.

7. See G. W. F. Hegel, *The Phenomenology of Spirit*, trans. A. V. Miller (Oxford: Clarendon, 1977), §166; and John Dewey, *The Later Works of John Dewey*, vol. 1: *Experience and Nature*, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1981), pp. 20–27.

8. Frederick L. Will, "Thoughts and Things," in *Pragmatism and Realism*, ed. Kenneth R. Westphal (Lanham, Md.: Rowman & Littlefield, 1997), p. 1.

9. Ibid., p. 16.

10. See Putnam, "Sense, Nonsense, and the Senses," Lecture I, which is largely a confession of his own closet Cartesianism, linking representationalism and his earlier use of the Skolem-Löwenheim theorem. The point is rather neatly perceived by Kenneth Westphal, in his Introduction to *Pragmatism and Realism*, pp. xxiii–xxxii. Putnam turns to the issue very briefly in "Mind and Body," which is published together with the John Dewey Lectures in Hilary Putnam, *The Threefold Cord: Mind, Body, and World* (New York: Columbia University Press, 1999); see, for instance, the summary at pp. 100–101.

11. Donald Davidson, "A Coherence Theory of Truth and Knowledge," pp. 308–309. See, further, "Afterthoughts, 1987" appended to the reprinting of Davidson's paper in *Reading Rorty: Critical Responses to Philosophy and the Mirror of Nature (and Beyond)*, ed. Alan R. Malachowski (Oxford: Blackwell, 1990), pp. 134–38.

12. Davidson, "A Coherence Theory of Truth and Knowledge," p. 307.

13. Dewey, *Experience and Nature*, pp. 19–20.

14. See Georg Wilhelm Friedrich Hegel, *Phenomenology of Spirit* (Oxford: Oxford University Press, 1979), Introduction.

15. Dewey, *Experience and Nature*, pp. 11–13. (Dewey added new material in these pages.)

2 The Pragmatic Reconstruction of Realism: *A Pathway for the Future*

Sandra B. Rosenthal

The uprootedness of experience from its ontological embeddedness in a natural world is at the core of much contemporary philosophy which, like pragmatism, aims to reject foundationalism in all its forms. Such positions all hold, in varying ways, that there is a bedrock basis on which to build an edifice of knowledge. That foundation is something objective which justifies rational arguments for making available or picturing the structure of reality as it exists independently of our various contextually set inquiries. There can be no nonperspectival framework within which differences—social, moral, scientific, etc., can be evaluated and resolved. These positions may, like pragmatism, focus on the pluralistic, contextualistic ways of dealing with life, on the role of novelty and diversity, on a turn away from abstract reason to imagination, feeling and practice, and on the need to solve the concrete problems of political, social, and moral life.

However, pragmatism, in rejecting foundationalism and its respective philosophic baggage, does not embrace the alternative of antifoundationalism or its equivalent dressed up in new linguistic garb. Rather, it rethinks the nature of foundations, standing the tradition on its head, so to speak. This rethinking is intertwined with the reconstructed realism that lies at the heart of pragmatic naturalism.

One of the most distinctive and most crucial aspects of pragmatism is its understanding of experience as a rich, ongoing, interactional or transactional unity between organism and environment, and only within the context of meanings which incorporate such an interactional unity does what is given emerge for conscious awareness. Such a transactional unity is more than a postulate of abstract thought for it has experiential dimensions. The interactive ontological unity of organism-environment transaction is reflected in the phenomenologically grasped features of experience. That which intrudes itself inexplicably into experience is not bare datum, but rather evidences itself as the over-againstness of a thick reality there for my activity.

Thus C. I. Lewis asserts that independent factuality "does not need to be assumed nor to be proved, but only to be acknowledged,"[1] while John Dewey observes that experience "reaches down into nature; it has depth."[2] This description of the ontological dimension of experience is well evinced in George H. Mead's claim that, in becoming an object, something has the character of "actually or potentially acting upon the organism from within itself." He calls this character that of having an inside.[3] Such an acting upon the organism cannot be understood as passive resistance, but as active resistance, resistance to our organic activity. Charles S. Peirce captures this ontological dimension of experience in his understanding of the Dynamical Object, which is "the Reality which by some means contrives to determine the Sign to its Representation."[4] Signs engage the interpreter with a dynamic reality through habits of action as living meanings. In this way habit creates the immediate object under the constraints of the dynamical object which is its ultimate referent, and provides the vital, living link between signs and the universe.

The interactional unity contains a two directional openness: the primordial openness of the character of experience itself opens in one direction toward the features of the human modes of grasping the independently real, and in the other direction toward the features of the independently real. The character of experience emerges from an interaction of these two poles and thus reflects characteris-

tics of each, though it mirrors neither exactly. In the interactional unity which constitutes our worldly experience, both poles are thus manifest: the independently-there otherness onto which worldly experience opens, and the structure of the human way of being within whose purposive activity worldly experience emerges.

The pervasive textures of experience, which are exemplified in every experience, are at the same time indications of the pervasive textures of the independent universe which, in every experience, gives itself for our responses and which provides the touchstone for the workability of our meanings. Peirce captures the import of this in his claim that though "everything which is present to us is a phenomenal manifestation of ourselves," this "does not prevent its being a phenomenon of something without us, just as a rainbow is at once a manifestation of the sun and the rain."[5] For all the pragmatists, the flux of life as it concretely occurs contains already a phenomenological dimension of human thrown-outness onto the universe through a vital intentionality constitutive of the nature of experience as experimental. Thus, the being of humans in the natural universe and the knowing by humans of the natural universe are inseparably connected within the structure of experience and its pervasive textures, which include the features of continuity, temporal flow, novelty, and vagueness.

In this way, there is an elusive resistance at the basis of meaning selection which must be acknowledged in our creative development of meaning systems and choices among them. Moreover, the very textures of experience indicate that this resistance cannot be understood in terms of discrete, structured realities as the furniture of the universe which we merely find, and the finding of which requires that we in some way escape our interpretations and the structures they provide. Rather, this resisting element provides a general compulsiveness which constrains the way networks of beliefs interrelate, and may at times lead to changes—sometimes radical changes—in our understanding of the world which our beliefs, both perceptual and more reflective, incorporate.

What we experience, what we know, then, is reducible neither

to what is antecedently there nor to a social construction. There is no sharp distinction between the natural and the social in the sense that one can situate particular objects exclusively within one or the other. The contextualism of pragmatic philosophy is rooted in a naturalism which both gives rise to interpretive activity and is the test of its adequacy. Our interpretive activity emerges within and embodies organic activity and is grounded in a world not exclusively of our own making. At the very heart of the temporal stretch of human behavior as anticipatory is a creativity, expressive of the experimental nature of experience, that is at once unified with an ontological presence but that renders its grasp in terms of any absolute grounding impossible.

As such, human awareness is at once theoretical, practical, and ontologically embedded. This rich epistemic-ontological unity at the heart of experience, rather than any falsely reified interpretive content emerging from it, provides the foundational level for ongoing human activity, both as a way of being and a way of knowing.

The passage from temporality as the basis of meaningful experience to process metaphysics as the basis for understanding its ontological character is operative in all the pragmatists. It is found in Lewis's claim that "The absolutely given is a specious present fading into the past and growing into the future with no genuine boundaries. The breaking of this up . . . marks already the activity of an interested mind."[6] Or, as Mead states in similar fashion, "At the future edge of experience, things pass, their characters change and they go to pieces."[7] The role of human constitutive activity in transforming a processive, "independently there" matrix into structured things unified by function within a world is succinctly indicated in Dewey's claim that "structure is constancy of means, of things used for consequences, not of things taken by themselves absolutely."[8] Further, the "isolation of structure from the changes whose stable ordering it is, renders it mysterious—something that is metaphysical in the popular sense of the word, a kind of ghostly queerness."[9]

The two-directional openness of experience carries temporality from one pole to the other, from a phenomenology of worldly

experience toward a process metaphysics. The temporal structure that belongs to our interpretive processes belongs as well to the universe within which they emerge. Human habits of response, which are for the pragmatist the living embodiment of meaning, are precisely "ontologically thick," dynamic tendencies structuring emerging activities in the context of alternative possibilities for ongoing actualization. Thus, when William James asks, "How far into the rest of nature may we have to go in order to get entirely beyond" the overflow of experience,[10] his answer is clear. One may "go into the heart of nature," one may grasp the most pervasive textures of its most characteristic features and one will not get beyond its overflow. Humans are natural beings in interaction with a natural universe. And at the heart of nature is process. Conversely, process metaphysics reinforces the pragmatic understanding of knowledge, for as James observes, "when the whole universe seems only . . . to be still incomplete (else why its ceaseless changing?) why, of all things, should knowing be exempt?"[11]

Within the dynamics of creativity and constraint, the search for fully determinate, the fully fixed, the fully discrete yields to the basic pragmatic intuition of the continuity and indeterminacy which pervades a radically temporal universe in the fullness of its space-time concreteness. Thus, Peirce and James alike stress the role of infinitesimals in ridding us of the notions of discreteness and determinacy, be it notions of experiential bits, ontological bits, or temporal bits.[12] As Dewey stresses, the indeterminate, problematic situation is objectively indeterminate and problematic, independent of consciousness.[13] In a similar vein, Peirce, James, and Lewis alike deny that the principles of noncontradiction and excluded middle apply to reality apart from the organizing mind.[14] As Peirce aptly encapsulates the character of this processive reality, it "swims in indeterminacy."[15]

Neither intelligibility nor truth requires either the ontologically discrete or the ontologically determinate. Neither the ceaselessly "becoming other" of reality nor its inherent indeterminacy leads to unintelligibility and/or the end of metaphysics. The postmodern tendency to so relate the two stems from the refusal to separate intel-

ligibility from discreteness and fixity. The reality of the continuity of becoming other and the indeterminacy this brings with it provides for rational discourse and ongoing inquiry which is rooted in and provides perspectival knowledge about reality, so long as knowledge is not understood as a direct, uninterpreted seizure of what immediately "is," and truth is not understood as conformity or correspondence to the fixed discretes of a fully determinate reality.

Underlying the supposedly necessary choice between the groundlessness of Derridian play or Rortyan conversation on the one hand and the grasp of reality in its "pristine purity" on the other is the assumption that without a "place" for the fully determinate, the groundless alternative wins out—an assumption that flourishes within frameworks that ignore the fundamental, creative, interactive unity at the heart of lived experience which is central to the spirit of pragmatic philosophy. Pragmatic naturalism demands realism, but also demands to be reconstructed to be rid of (1) all vestiges and trappings of the spectator theory of knowledge and (2) the concomitant correspondence theory of truth and fully structured reality of traditional realism. We do not *think to* a reality to which language or conceptual structures correspond, but rather we *live through* a reality with which we are intertwined, and the intertwining with which constitutes experience. Our primal interactive embeddedness in the world is something which can never be adequately objectified.

Truth is relative to a context of interpretation, then, not because truth is relative, but because without an interpretive context the concept of truth is meaningless. Truth is not an absolute grasp, a correspondence with an external reality, but neither is it relative. It is perspectival. We create the perspective, but whether or not it allows us to grasp in workable ways that which enters into experience is dependent not on our creativity but on the resistant features of that which enters our perspectival net and provides the touchstone for the workability of our interpretations. Truth as workability is understood in terms of answering. Peirce claims that a true thought is one which *answers*, which leads to thoughts in harmony with nature.[16] The relation of "answering" is ulti-

mately two directional. Reality answers our questions and determines the workability of our meaning structures, but the answers it gives are partially dependent on what questions we ask, and what meaning structures work are partially dependent upon the structures we bring. As Peirce stresses, "nothing else than a Fact possibly can be a 'witness' or 'testimony',"[17] and facts are not "a slice of the Universe"[18] but are always relative to the framework of a discriminating mind. Yet the "witness of a fact" is the real, "since it is truly in that which occurs."[19]

A true belief is a tool that fits—not the fitting of a copy corresponding to an original, but the fitting of a key opening a lock.[20] True beliefs allow us to engage reality in workable ways. Lewis captures the import of this interactional unity: "It may be that between a sufficiently critical idealism and a sufficiently critical realism there are no issues save false issues which arise from the insidious fallacies of a copy theory of knowledge."[21]

Dewey's own rejection of these alternatives and his frustration at being pushed into idealism by his critics is captured in one of his letters to James, in which he stresses that unless ideas take account and function in the transformation of independent existences his instrumental theory of knowledge is self-contradictory. As he summarizes, "I have repeated ad nauseam that there are existences prior to and subsequent to cognitive states and purposes, and that the whole meaning of the latter is the way they intervene in the control and revaluation of the independent existence."[22] Indeed, throughout his logical considerations Dewey presents a running attack on both idealism and what he calls analytic, presentative, and epistemological realisms. His objection to all of these realisms are variations of one theme, his objection to the "ubiquity of the knowledge relation" held by all of these spectator theories of knowledge, which involves the confusion between mediated and nonmediated knowledge.[23] As Peirce well expresses the significance of the ongoing, ontologically grounded creativity within the pragmatic position, "we are neither forced into *idealism*, nor yet into ontological ignorance."[24]

The failure to recognize the radically new paradigm offered by

the pragmatists leads to interpretations which ultimately pull them into alternatives that their reconstructed realism render useless, and also to criticisms both that various pragmatists cannot reconcile their discussions of process and physical objects and that they anthropomorphize the universe in general. Within the interactive context of creativity and constraint, however, these problems as well as many traditional alternatives fall by the wayside. Human experience is analogous to reality in that our activities are continuous with, and have emergent levels within, the reality which we attempt to characterize by the interpretive nets we cast upon it. Processes emerge as facts and objects within the interpretive context of organism-environment interaction. Knowledge, and human awareness in general, cannot be forced into the array of standard alternatives, whether expressed in older or newer fashion, of correspondence or coherence, traditional realism or idealism, empiricism or rationalism, foundationalism or antifoundationalism, realism or antirealism, objectivism or relativism, subjectivism or objectivism, play or pure presence, conversation or a mirror of nature.

Pragmatism attempts neither to create freely nor to free itself from ontological commitments, but rather to reveal the way in which there is an ontological committedness or rootedness at the very heart of the experience that grounds such alternative attempts. It attempts to draw one toward an awareness of the interactive openness, at the heart of experience, of humans and the natural universe in which they are embedded. In so doing it attempts to provide the path for freeing thinking from premature ontological assertions, illicit reifications, and a tradition of philosophy which, in its search for supposed foundations, lost the illusive but pervasive experiential-ontological foundations of its search. These latter tendencies of metaphysical thinking, as well as contemporary attempts to throw out the metaphysical baby with the objectionable bath water, ignore the fundamental, creative, indefinitely rich interactive epistemic and metaphysical unity at the heart of lived experience. The language of philosophy is born of a tradition which ignores this interactive unity, and hence it reinforces problems and alternative solutions which the present position eludes.

Pragmatism, in illuminating the creative interactive unity at the heart of experience, develops a position which eludes the false alternatives and misplaced dichotomies which still haunt philosophy today. It does this by forging a new pathway for its ongoing development, and what weaves its efforts into a systematic pattern is the sturdy thread of reconstructed realism that pervades it. If, as pragmatism holds, the pulse of human existence is at its very core ontologically, epistemically, creatively, and perspectivally intertwined, and thus attuned to an indeterminately rich processive universe which reveals itself in various ways both within and among various levels and modes of human activity, then attunement to this sense of human existence can yield at once both a more demanding and more tolerant master than any of the diverse second-level articulations to which it gives rise. Pragmatic process realism gives philosophical legitimacy to this prethematic sense that is born of our essential interactive unity with a thick, dynamic cosmic process which we must creatively engage in fruitful ways.

The combination of creativity and constraint at the heart of pragmatic naturalism is captured in Peirce's claim that, "In its proper meaning realism is a kind of idealism. It is the doctrine that ideas play a part in the real world."[25] This "realism that is an idealism" represents the pragmatic reconstruction of traditional realism that is part and parcel of its unique paradigmatic structure. Pragmatism and the reconstructed realism it offers are joined at the hip, as are the fates of their respective futures.

Notes

1. C. I. Lewis, *Mind and the World Order* (New York: Charles Scribner's Sons, 1929), pp. 425–26.

2. John Dewey, *The Later Works of John Dewey*, vol. 1: *Experience and Nature*, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1981), pp. 12–13.

3. George Mead, *The Philosophy of the Present*, ed. Arthur Murphy (La Salle, Ill.: Open Court, 1959), p. 137.

4. *The Collected Papers of Charles Peirce*, eds. Charles Hartshorne,

Paul Weiss, and Arthur W. Burks (Cambridge, Mass.: Harvard University Press, 1931–1958), vol. 4, paragraph 536. Henceforth references to *The Collected Papers of Charles Peirce* will follow the usual convention of *CP* followed by volume and paragraph numbers.

5. See also *CP* 8.314.

6. *CP* 5.283.

7. Lewis, *Mind and the World Order*, p. 58.

8. George Mead, *Philosophy of the Act*, ed. Charles W. Morris (Chicago: University of Chicago Press, 1938), p. 345.

9. John Dewey, *Experience and Nature*, pp. 64–65.

10. Ibid., p. 65.

11. *The Works of William James: A Pluralistic Universe*, ed. Frederick Burckhardt (Cambridge, Mass.: Harvard University Press, 1977), p. 129.

12. *The Works of William James: Essays in Radical Empiricism*, ed. Frederick Burckhardt (Cambridge, Mass.: Harvard University Press, 1976), p. 37.

13. William James, *A Pluralistic Universe*, pp. 153–54. Peirce, *CP* 6.109, *CP* 6.111, *CP* 6.87, *CP* 5.282, *CP* 6.138. For an integration of these references in terms of the above issue see my *Time, Continuity, and Indeterminacy: A Pragmatic Engagement with Contemporary Perspectives* (Albany, N.Y.: State University of New York Press, 2000), chaps. 8 and 9.

14. *The Later Works of John Dewey*, vol. 4: *The Quest for Certainty*, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1984), p. 194.

15. James, *A Pluralistic Universe*, p. 117. C. I. Lewis, "A Pragmatic Conception of the A Priori," in *Collected Papers of Clarence Irving Lewis*, ed. John Goheen and John Mothershead, Jr. (Stanford, Calif.: Stanford University Press, 1970), p. 232. Peirce asserts that the general is that to which the law of excluded middle does not apply, while the vague is that to which the principle of noncontradiction does not apply (*CP* 5.448). He then explicitly identifies continuity with generality. For the way continuity pervades all of reality, see my *Charles Peirce's Pragmatic Pluralism* (Albany, N.Y.: State University of New York Press, 1994).

16. *CP* 1.171–72.

17. *Manuscripts of Charles S. Peirce*, Microfilm Edition (Cambridge, Mass.: Harvard University Library Microreproduction Services, 1963), MS 934, p. 24.

18. Ibid., MS 647, p. 26.

19. Ibid., MS 647, p. 8.

20. Ibid., MS 647, p. 9. James uses this precise analogy.

21. Lewis, *Mind and the World Order*, p. 194.

22. Quoted in Herbert Schneider, *A History of American Philosophy*, 2nd ed. (New York: Columbia University Press, 1963), p. 473.

23. See especially "Brief Studies in Realism," *The Middle Works of John Dewey*, vol. 6, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1985), pp. 103–22.

24. *Writings of Charles S. Peirce*, vol. 1, ed. Max H. Fisch (Bloomington, Ind.: Indiana University Press, 1982), p. 489. Italics in text.

25. *Manuscripts of Charles S. Peirce*, Microfilm Edition, MS 967, p. 1.

3 RECONCILING PRAGMATISM AND NATURALISM

John Ryder

INTRODUCTION

There are two primary topics here. The first concerns the reconciliation of pragmatism and naturalism, and the second deals with the broader context of the relation between what I will call modernism and postmodernism. There is a relation between these two themes. It will be developed more below, but it can be expressed briefly by saying that pragmatism is a species of postmodernism, while naturalism is a species of modernism. If postmodernism can be meaningfully reconciled with modernism then it would become possible to talk about a way to reconcile aspects of naturalism with aspects of pragmatism. The reconciliation of pragmatism and naturalism is advantageous to those of us with an interest in these philosophic traditions, and a rapprochement between modernist and postmodernist points of view, while possibly unsettling to those who have put all their eggs in one basket or the other, would allow the rest of us to pursue philosophical issues consistently while drawing on both traditions.

It may sound strange to many even to talk about the reconciliation of pragmatism and naturalism. One reason might be that many people use the term "pragmatic naturalism" to refer to a cluster of ideas in American philosophy in the twentieth century.

There is indeed a place for this term, but one has to be careful in its use, if only because pragmatism and naturalism are not the same thing. There are, for example, pragmatists who are not naturalists. Charles Peirce comes to mind, certainly Josiah Royce, by extension C. I. Lewis, and probably William James as well. There are also naturalists who are not pragmatists. George Santayana was overtly critical of pragmatism; Frederick Woodbridge came at naturalist philosophy from an entirely other, Aristotelian angle; Roy Wood Sellars sounded more like a dialectical materialist than a pragmatist; and Justus Buchler, with his systematic approach to metaphysical generalization, thought that pragmatism missed the boat in a number of respects. If there are pragmatists who are not naturalists, and naturalists who are not pragmatists, then obviously it cannot be the case that pragmatism and naturalism are basically the same philosophic perspective.

The clearest example of an important philosopher who was both a pragmatist and a naturalist was John Dewey. He would have been content to have himself described in either or both ways, though he would probably have wanted to make sure that he had the last word in defining both terms. That would not have been unreasonable on his part, since in this case as in many others definitions matter. We will look more closely at the meaning of the two terms "pragmatism" and "naturalism" in a moment. There are clearly standard meanings, though, in which it is proper to say of Dewey that his philosophical inclinations tended in both directions. Since that is the case, it is therefore possible, assuming some significant degree of consistency on Dewey's part, for there to be something that can be called pragmatic naturalism. However, those who wish to use the expression would not want, I do not think, to have it refer only to Dewey or to the generally Deweyan way of thinking. They would like its meaning to be broader and for it to encompass more philosophical possibilities. It is therefore sensible to take a close look at the relation between the two.

DEFINITIONS

We turn now to definitions, and begin with pragmatism. First, when I use the term "pragmatism" I do not mean the work of Richard Rorty. Rorty has been enormously influential, and his appropriation of the term has given it a new currency. It is increasingly common in very recent years for philosophers in the Anglo-American tradition to refer to themselves as pragmatists or to some aspect of their work as pragmatic. Rorty's influence has been even stronger abroad. It is not uncommon in many places in Europe, for example, to find the term "pragmatism" virtually equated with his work. In the U.S. it is more common for Rorty and those whose work is influenced by his to be referred to as "neopragmatists," but the distinction seems to have been obliterated elsewhere in the world.

Let me say clearly that I do not have any deep antipathy toward Rorty's work, as many others do. I have my misgivings and disagreements, but there is nothing unique or unusual about that. In the end I do not think that he has made significant philosophical contributions that had not been made already by others, in many cases more profoundly. On the other hand, Rorty has made important contributions as a public intellectual. He has given a range of philosophical ideas a place in American intellectual culture and abroad they have not had previously. He has also brought reasoned philosophical judgments to bear on important contemporary social and cultural issues with an impact about which most of the rest of us could only dream. That is all to his credit, and his detractors unfairly fail to recognize the importance of such contributions.

Nevertheless, his pragmatism is philosophically anemic when it is compared with the older pragmatist tradition in America. The thinness of his version of pragmatism—or neopragmatism if it is necessary to make the distinction—is that he has no interest in many of the central questions that have interested philosophers, including the pragmatists and naturalists, for centuries. Rorty has made his mark by arguing against the value of considering tradi-

tional questions of the traits of nature and knowledge. By so doing, I would argue, Rorty abandons far too much of our intellectual tradition. He might treat our long-standing inclination to consider metaphysical and epistemological issues as analogous to medieval theological hairsplitting, and also believe that the one is no more valuable than the other. Time will tell, of course, but for now it seems to me that we give up far too much by refusing to consider, for example, whether it is more reasonable to regard nature as finite or infinite, as atomistic or relational. Similarly, we give up too much if we refuse to wonder about the character of knowledge in relation to belief or opinion or experience. Certainly many of the specific ways we have approached these questions have turned out to be dead ends, but it weakens one's intellectual power to reject the enterprises altogether.

Rorty's central objection to traditional metaphysics and epistemology is that they have presumed the wrong metaphor, that is the philosophers who have engaged in those enterprises have presumed that it was their task to "reflect" reality accurately, that mind serves as a mirror of reality. There is an important insight here, though again Rorty was not the first to notice it, as he himself makes plain. His own work is based on Wittgenstein, Heidegger, Dewey, and many others. He may not have been aware, though, that even in the American traditions other than Dewey's the point was made in almost the same language. Santayana in *Scepticism and Animal Faith* similarly rejected the metaphor of mind as "mirror."[1] In any case, Rorty does not seem to notice, or else he simply ignores, the possibility that the broadly pragmatist rejection of "correspondence" conceptions of knowledge does not compel one to abandon attempts to understand the world. One can continue to raise and pursue questions of the general character of nature or knowledge within a generally pragmatist framework. In such a case, the pragmatist dimension of the enterprise is relevant in determining the adequacy of one's answer to metaphysical or epistemological questions. For example, whether we regard nature to be finite or infinite may not be a matter of accurately reflecting reality, but more a question of determining which point of view

does the most work for us, which one gets us where we need to be. If our conception of things hangs together better by treating nature as infinite, if doing so helps to settle more questions than it creates, and does so in a way that helps push our inquiries further, then the value of that perspective resides precisely in its fruitfulness. In more overtly pragmatist language, it works better for us, and that, if not a definition of truth, is at least a critical criterion. The pragmatist turn, then, does not require, as Rorty would have it, a rejection of the more traditional philosophical enterprise of making sense of nature and knowledge.

It is to the credit of older pragmatists that they understood the continuing significance of traditional epistemological and metaphysical issues. Each in his own way, Peirce, James, Royce, Dewey, Lewis, and others have by their respective examinations of nature and knowledge shed light on many important aspects of human being and our surroundings. No one who has a glimmer of Dewey's account of experience, for example, can fail to appreciate its insights, even if one disagrees with aspects of it. The same is true for James on truth, or Peirce on meaning. For reasons like these it is the more traditional, more robust pragmatism of the tradition of Peirce, James, and Dewey through such contemporaries as John McDermott that I have in mind when considering a reconciliation of pragmatism and naturalism.

There is a similar complexity in defining "naturalism." In recent decades, stemming from the work of W. V. O. Quine more than from anywhere else, the term "naturalism" has assumed a meaning it had not had before. Quine argued in "Naturalizing Epistemology" that questions having to do with knowledge are best left to the empirical sciences, specifically in this case to psychology. The move from traditional epistemology and metaphysics to an exclusive reliance on the natural sciences is a generalization of Quine's recommendation, but it is precisely this that has in many contemporary philosophical circles come to be called naturalism. There is a school of thought today that calls itself naturalist, and it holds that only the natural and empirical sciences are capable of providing genuine knowledge of the world. In fact, in

Anglo-American philosophical circles this has come to be the dominant meaning of the term "naturalism."[2]

In the Wittgensteinian spirit of allowing use to determine meaning there would be little point in objecting to the term having assumed the meaning it has. Nonetheless, it is important to recognize that the term "naturalism" has been in use for a much longer time than the view it currently designates. There are various philosophers in the American tradition who would have referred to themselves as naturalists but who would never have accepted the primacy and certainly not the exclusivity of the natural sciences as a source of knowledge. That sort of scientistic view of things is far too narrow, and it has little in common with the American naturalism of George Santayana, Frederick Woodbridge, John Herman Randall Jr., Ernest Nagel, or Justus Buchler, to mention only a few.

American naturalism of this more traditional vintage has a broader, more tolerant conception of things, and it is willing, even eager, to allow for multiple ways of getting at them. This is in fact one of the intellectual virtues of American naturalism in this sense. Far too often scholars want to minimize or eliminate the significance of one or more aspects of human experience in the interest of promoting others. The motivation for this may be understandable in that scholars are, presumably, trying to understand things. But even given a defensible spirit, the result is that we eliminate, for example, the power of poetry or music to convey understanding, and relegate it to the "merely emotional" rather than the cognitive. But I can think of no good reason to follow anyone in this direction. In any given case it is quite possible that we can have more to learn from the poet than from the natural scientist, so that any conception that rules the poet out of court has missed the boat already. The American naturalists, despite their other differences, have tended to insist on this point, and their philosophy is the richer for it. It is this broader, more tolerant naturalism that I speak of when I raise the possibility of the reconciliation of pragmatism and naturalism.[3]

The Conflict Between Pragmatism and Naturalism

Here is the problem. For pragmatism, the central category or concept is experience. Remember that this is not the experience of the empiricists, the passive reception of sense data, but something broader and more inclusive. For Peirce, for example, experience is a function of need, and knowledge is what satisfies need. For James even the distinction between subject and object is secondary to "pure experience." Dewey, as we saw earlier, understands experience, or what he also calls culture, as the interaction of human beings and their environments. The environment, in other words, has its traits by virtue of that interaction. Experience in Dewey's hands is active, indeed constitutive of that with which it interacts. For the sort of pragmatism represented by James and Dewey at least, nature is understood in terms of experience. This is fairly strongly stated in James, and it is clear in Dewey as well. Both of them would have been reluctant to say simply that we "make the world up" in any simplistic sense, and in fact they both made some effort to insist on a degree of "objectivity," that is, independence from experience, on the part of the "things" of the world. Neither was able to do this very well, however. Dewey especially ran into trouble at this point, and found himself arguing in *Nature and Experience* for a brand of Kantianism.[4] But this is Dewey gone awry, and it certainly does not represent the main thrust of his ideas. That thrust for Dewey, as for James and other pragmatists, is that experience is the constitutive context in which nature takes its shape.

Naturalism goes at this quite the other way around. For the naturalist (remembering that this is the *American* naturalist tradition and not the scientistic tradition), the central category is nature, and experience is an aspect of it. Consider the view of someone like Santayana. As central as experience was for him—for example "animal faith"—it is to be understood within the context of broader categories, in his case the realms of being, or essence, matter, truth, and spirit. Justus Buchler provides another interesting example. Experience was a significant interpretive category for him. In fact it is crucial, as he develops it in his theory of judg-

ment, for an understanding of human being. Even given its importance, however, experience for Buchler resides in a broader theory of nature, in this case his ordinal ontology. Experience for the naturalist can only be understood if examined within a broader framework that includes, and in some cases is based on, a specific understanding of nature.

In a nutshell, for pragmatism experiences subsumes nature, and for naturalism nature subsumes experience. These appear to be contradictory philosophical perspectives, so that pragmatic naturalism looks like an oxymoron.

The problem can be solved in a way that allows for pragmatic naturalism, and in the process can help us to see more clearly some of the other issues of moment in contemporary philosophy. First another point about Rorty is in order, since he too confronts the problem. He deals with it, though, by abandoning the naturalist or realist side altogether, at least as a philosophical question. He argues, as we have seen, that it really does not make any sense to try to figure the world out in any naturalist or realist sense. For him, the pragmatist, or constructivist, side is all that is left.

This move is both unnecessary and unwise, because there is fairly obviously a world independent of us. It is worthwhile to understand how the world works and what, in general, it is like. But it is unnecessary because, in the end, it is possible to retain consistently the critical aspects of naturalism and the central insights of pragmatism, as we will go on to argue here. This is one of the reasons it is important to realize that in talking about pragmatism we do not mean to refer to Rorty. Rorty's neopragmatism makes naturalism irrelevant, and there is no point at all in talking about a reconciliation. Traditional pragmatism, by contrast, is mindful of the naturalist angle, and in figures like James and Dewey one can almost sense their desire for a reconciliation.

I have begun to refer to naturalism as a kind of realism, and I mean this in the sense that by relying on nature as the central category of analysis, naturalism will inevitably take the view that there are aspects of nature that are real and significantly independent of us. To this extent naturalism is a species of modernism. I

also refer to pragmatism as a form of constructivism in the sense that for the pragmatists—the James and Dewey versions especially—pragmatism involves the idea that the process of experience, in the broad sense of interaction, is constitutive of what is experienced. This is the interaction of the experiencer and the experienced that was mentioned earlier. To this extent, pragmatism is a species of postmodernism.

The reconciliation of pragmatism and naturalism will inevitably, then, take us through aspects of the modernist-postmodernist debate. After making our way through it we can return to pragmatism and naturalism directly.

The Reconciliation: Modernism and Postmodernism

There are, no doubt, those who would object even to the use of the terms "modernism" and "postmodernism" on the grounds, presumably, that in each case the term is too broad and therefore obscures too many important differences among a variety of related positions. There is something to be said for this concern, but there is no need to allow it to prevent us from moving forward. There are indeed many important differences between traditional empiricism and rationalism, or between Platonism and Aristotelianism, or between deconstructionism and Wittgensteinianism. And there may be one single train of ideas that runs through all the traditions that might fall under the umbrella of either modernism or postmodernism. But it is still the case that there are at least family resemblances among them, which means that there may be some sense in clarifying what those resemblances are. In the end there are pragmatic reasons for doing so, if for no other reason than that it helps us to see certain aspects of the problem that are otherwise obscured.

In fact, getting clear about the relationship between modernism and postmodernism is one of the more important technical issues facing contemporary philosophy. Unfortunately, many philosophers have either ignored or quickly dismissed those who do not hold

their views. Those working in the modernist tradition, especially in forms of analytic philosophy, have been dismissive of many of the insights of literary and philosophical postmodernism. Similarly, many who might be described as postmodernists have been too quick to abandon important and defensible aspects of modernism.

These extremes are mistakes because there is good reason to maintain aspects of both the modernist and postmodernist perspectives. The issue can be considered in terms of four key propositions that map out the family resemblances of many of the philosophical traditions that have prevailed during the past several centuries. The first two express a modernist point of view, while the second two embody a postmodernist angle of vision.

1. Natural phenomena have objectively determinate traits.
2. The traits of natural phenomena are knowable.
3. The process of inquiry is necessarily conditioned and perspectival.
4. Human interaction with the rest of nature, cognitive or otherwise, is active and creative.[5]

The first two propositions are modernist in the sense that they assert an independently existing reality and our ability to learn about it. The third and fourth propositions are postmodernist in the sense that they assert that we do not just encounter a world waiting for us, but rather that the processes we employ in investigating our world, in fact the process of experience itself, conditions what we find and is therefore constructive of what we find. And it is useful to point out here, so as not to lose the thread of the discussion, that naturalism shares the view expressed by propositions 1 and 2, while pragmatism shares the view embodied in propositions 3 and 4.

In an effort to defend the virtues of dispassionate inquiry many philosophers and scientists have supported propositions 1 and 2 by rejecting 3 and 4. Similarly, many philosophers, literary theorists, and others—in an effort to debunk the myth of simple and pure objectivity, either ontological or epistemological—have rejected 1 and 2 in support of 3 and 4.

In the end, though, it is both possible and desirable to endorse all four propositions simultaneously. It is desirable because there is certainly a world independent of us, and certainly components of that world have traits independently of our experience of them and independently of any purposes of ours. And certainly, aspects of that world and some of its traits are knowable to us. Engineering would be impossible otherwise. But it is equally certain that inquiry is conditioned and perspectival, if only in the sense that we inquire and think within a context, with a tradition and a history, as Peirce, James, Dewey, and many others have made abundantly clear, for reasons and with purposes. And it is equally true that our experience conditions the world in which we are related, more or less significantly depending on the circumstances, so that nature is altered as a consequence of its complex relations with us.

I confess that this all seems so abundantly clear to me that I am tempted, having made the point, to move on. I also realize, however, that it is not so obvious to many other people, so it is better to dwell here a bit longer. Propositions 1 and 2 assert the existence and knowability of traits of natural entities independent of our experience; and there is, I assume, little doubt that material objects at least possess independent and cognitively available traits. We may describe a room anyway we please, but we will only be able to enter or leave it through the doors or windows, and our description of the room does not alter their location. The obviousness of this point is the reason, I suspect, that natural scientists have so much trouble taking contemporary humanities professors seriously, in that they suspect that all the talk about constructing our experience means to deny it. If it does mean to deny it, then postmodernism understood in this way is in fact absurd. We examine, study, and learn about the material world, and of course we affect it, but we do not create it. We do not create planets and mountains; we do create buildings and roads and doors and windows, but we do not as a rule create the materials out of which they are made; when we do create the materials out which they are made, we do not create the elements out of which the materials are made. Even when we affect and alter the material world, we do so through

objects and natural entities that ultimately are not our creation, and to that extent their traits are determined objectively.

Things are less clear when we talk about the nonmaterial aspects of nature, which may be the reason some philosophers and others have been inclined to claim that matter is all that exists. But of course that cannot be true either. Fictional characters, for example, exist in their own right, and they have certain specific and identifiable traits. Don Quixote in his own romantic way rails against the injustices of the world. That Don Quixote is not a spatial entity, and is in fact a human creation, in no way suggests that he does not "exist." He exists as a fictional character, with all the general characteristics possessed by fictional characters and all the specific characteristics possessed by his own in particular. So even with respect to at least some nonmaterial entities there is every reason to posit independently possessed traits, about which we can know something.

The situation is more difficult still when we consider other types of nonmaterial entities, for example moral and aesthetic values, or laws of nature, or principles of logic.[6] Leave aside the question of whether they exist or not, though we will return to it. For now the question is whether, if they do exist, it is reasonable to say of them that they exist independently of our experience, or at least that they have some traits independently of our experience. The answer seems to be that they would possess at least some traits that could plausibly be described as objective, that is, independent of what we might say about them. If certain propositions are related to one another in certain ways, for example the way a conclusion is related to the premises of a standard sort of syllogism, then we cannot simply describe them differently and think that we have therefore reconstructed them. In fact we can discover new traits of logical principles, of natural laws, or of mathematical entities. And we do in fact discover them, we do not simply invent them. The recent solution of Fermat's Theorem was a discovery, notwithstanding the fact that new mathematics was invented to accomplish it.

It is at the very least plausible, then, to hold that natural enti-

ties possess traits independently of us and that we can know something about them. But what about propositions 3 and 4, which postulate that the process of inquiry is perspectival and conditioned, and that human interaction with the rest of nature is active and creative? To many philosophers who regard themselves as clear-thinking realists, it seems obvious that when one experiences a tree outside his window there is nothing in any significant sense constructive or creative about it. One perceives the tree simply enough, and therein lies the experience. While this may seem to some an illustration of experience plain and simple, there is in fact nothing plain or simple about it. The complexity derives from the fact that there are several assumptions built into the question, assumptions that if overlooked account for the apparent simplicity. For example, the question assumes that the object, in this case a tree, is a discrete individual entity that has no particularly complex relations with its environment. In fact it assumes a traditional physics whereby a discrete object is impinged upon by light, which is then reflected into the sensory mechanism of the perceiver, whose own neurobiological apparatus then transforms the sense data into an image. Without bothering with the details, it is easy enough to point out that this model of perception is simplistic at best. For one thing, the image we see in the end has as much to do with the characteristics of the specific sensory mechanism as it does with the sense data it receives. If our optical mechanism were differently constructed, there is every reason to believe that the image we see would be quite different. For that reason alone, the clear-thinking realist is missing something important when he gives the example of the perception of a tree outside his window as an illustration of a passive, inactive experience.

But there is another question we also need to ask: whether we should take a simple sense perception to be the paradigmatic case of experience? On the face of it there is no reason to do so, since there are clearly many kinds of experiences. When we say that someone is experienced, for example, we do not mean that she has received a large amount of sensory data. For one thing, experience in this sense is cumulative in a way that the simply receiving sense

data is not. Furthermore, a person who is experienced has not merely undergone something, even if cumulatively. Such a person has interacted with her environment in ways that resulted in knowledge, growth, and maturity. Social experience has the same general characteristics. The experience of being an American, for example, is not about receiving sense data, nor is it simply about receiving anything at all. It describes in a word an indefinitely broad range of interactions with one's social environment, with political distinctions and products of human activity. It denotes membership in a culture, perhaps more than one, to the nature of which one contributes in his experience. Cultures are not merely received, they are produced and reproduced, and surely to be a member of and participant in a culture is part of what it means to have experience.

Many other senses of experience are similarly interactive and creative. Having an aesthetic or religious experience, while it certainly includes a sense of undergoing, is not only an undergoing. If nothing else, the meaning of an aesthetic or religious experience is an important constituent of the experience, and meaning is not simply undergone or received, it is constructed. It is not constructed out of nothing, to be sure; on the contrary, it is constructed within a web of intersecting and interactive constituents that provide one having such an experience the raw material out of which meaning is generated. But the web of intersecting and interacting constituents is itself the product of countless people in ongoing interaction with their material, social, and historical environments. There is nothing remotely passive about an aesthetic or religious experience. The continuous interaction with one's environment, in some sense undergone and in others undertaken, is the broad context in which experience, in even the simplest sense, occurs. That experience is contextual, the fact that in various ways and in different situations it weaves together material, social, and historical factors, is the reason Dewey said that he might prefer to use the word "culture" to denote it. It is also the reason that it has been a shocking mistake on the part of traditional empiricism and its contemporary advocates to treat experience in general on the model of

sensory impressions. Even if the reception of sense data were a simple passive matter, which in any case it is not, such experience would hardly be the paradigmatic case.

I will assume that at least a plausible case has been made for proposition 4, that an individual's interaction with the rest of nature, with his environment broadly understood, is active and creative. Proposition 3 is logically an implication of this point. If experience, individual and communal, is located so to speak in a relational network of social, historical, and material factors, then the idea of abstract inquiry—inquiry undertaken outside of any context or from no perspective—is impossible. There are always and necessarily reasons we ask the questions that we do, and in the ways that we ask them. This is not a condition we should bemoan, as if we have lost something precious in the recognition of the meaninglessness of abstract inquiry. It simply describes the situation we are in. Realizing this, though, is extremely important for the legitimacy of the inquiry we do conduct. If our perspectives and purposes in asking questions condition the process of inquiry itself, then an as-clear-as-possible understanding of the nature of our perspectives and purposes is critical if we are to avoid overloading the results of our inquiry. It is also critically important if we are going to understand one another as well as possible. The full meaning of the perspectival and contextual nature of inquiry is an extremely rich and complicated matter. Perhaps the most important contribution of a good deal of postmodern writing has been the consideration of just this question. It is a thorny issue that traditional epistemology tried simply to argue away, but at that enterprise it cannot succeed.

So at the very least we have plausible reason for accepting the claim that the four propositions are all true. This means that two fundamental characteristics of both the modernist and postmodernist point of view are simultaneously plausible. They are all plausible enough, in fact, that we have every good reason to accept them. One implication of this is that those who would reject wholesale the modernist or the postmodernist perspectives are mistaken. At least at the level of these four fundamental character-

istics, the two broad contemporary approaches to nature and knowledge are compatible.

That is not the end of the story, however, because we are now led to ask what is basically a transcendental question in the Kantian sense: what is nature like such that the four propositions are true simultaneously? What are the traits of nature that make such a situation possible?

THE POSSIBILITY OF RECONCILIATION

We have seen that we have reason to accept the truth of the four propositions, and we now turn to the question of how that can be. The possibility of the truth of all four propositions—that is, the possibility of the reconciliation of modernism and postmodernism, and by extension pragmatism and naturalism—rests first on the distinction between the objective and the absolute. There is a widespread assumption that if inquiry (our access to the world) is always perspectival and conditioned, then it no longer makes sense to talk of objective inquiry, and, therefore, of knowable objective traits or characteristics of things. But this is a non sequitur. If our relation to the world around us is necessarily perspectival and conditioned, what follows is that neither we nor the world to which we are related possess absolute traits, and that knowledge is never absolute. This is so because whenever terms are in relation, the relation influences the terms. To say that there is a knowledge relation between a knower and a known is automatically to say that both the knower and the known are conditioned by each other as a result of that particular relation. But to say that there are no absolute traits is not the same as to say that there are no objective traits. In other words, conditionality and objectivity are not contradictory conditions.

The key to appreciating this point is to realize that objectivity in this sense does not mean "unconditioned." In other words, for traits to be determined objectively is not equivalent to traits being determined unconditionally. Objectivity in this sense means,

simply, not determined by the purposes or interests of the inquirer. An example may help to illustrate the point. As I write this there is a phenomenon occurring in the horse farms in Kentucky. Pregnant mares are mysteriously having spontaneous abortions at an alarming rate, worrying those whose livelihood depends on the birth of healthy foals. Analysis of the stillborn fetuses indicates that there is a high level of cyanide in their systems, and there is a correspondingly high level of cyanide in the mares' blood. It is clear that the poison is responsible for the deaths of the fetuses, but the question remains where the poison has come from. One possibility being explored is that the poison is coming from the tent caterpillars eaten inadvertently by the mares, though at this point other possible sources have not been ruled out. Entomologists, chemists, botanists, and veterinarians are at this moment busily trying to solve the mystery.

Here is a case where fairly sophisticated biological and chemical inquiry is called into play, and the interests and motivations of the inquirers and those connected to the horse farms is fairly clear. There is a strong financial interest is locating the source of the poison and eliminating it from the mares' diet. There are motivations and purposes in the inquiry that are far removed from pure, unconditioned inquiry. The process of inquiry, in other words, is conditioned and perspectival in easily identifiable respects. Nonetheless, whatever is discovered through such conditioned and perspectival inquiry will be objectively the case. Whatever is causing the poisoning of the mares' diet will be discovered, not invented or created, despite the conditionality of the process of inquiry. It will be a finding, not an invention, assuming of course that it is all done honestly. The point is that the chemical nature of the food source and its effects on the mares and their fetuses is objectively determined, despite the conditional and perspectival character of the process of inquiry undertaken to detect it. Those traits are not absolute, however. If it turns out to be the caterpillars, for example, it is the relation between the caterpillars and the foliage eaten by the mares, as well as the relation between the chemistry of the mares' and their fetuses' blood systems that deter-

mines the overall consequence. The traits of the constituent elements of the situation are relative, not absolute, but they are no less objectively determined.

The reason the distinction between the absolute and the objective is important is that it allows us to remove any mystery from the compatibility of conditioned inquiry and the objectivity of traits. This is of course an epistemological point, but the ontological also needs to be underscored. We have so far made an argument for allowing that perspectival and conditioned inquiry can yield objective results. The possibility of knowledge in some traditional sense is thereby assured, but the character of *what* we learn about, that is, the nature of the aspects of the world into which we inquire, is also important. As we have seen in the example of the Kentucky horses, the various factors of the mares' feeding habits, the food they are inclined to eat, and the possible effect of tent caterpillars on the food describe a web of interrelated entities. The factors themselves, that is, the various traits they possess and the effects of those traits on other constituents of the situation, are determined not by our wishes or our contexts, but by the relations themselves. There is what we can call, following Justus Buchler, a *natural definition* of the traits possessed by the constituents of the situation. That is to say that the characteristics of each of the constituents is defined not by us but by nature, by the relations in which they stand to one another regardless of us. Once we enter the picture, and new relations are established, now with us, the traits of the constituents of the situation alter to some extent. Their meanings are altered—in this case significantly for those involved in raising horses—and we may to some degree alter the way the nonhuman constituents are related to one another. This means that as human beings enter the situation we become another of its constituents, and we influence the natural definition of the constituents in any number of ways.

The picture is not appreciably different with respect to nonmaterial entities. Mathematical entities have the properties they do by virtue of natural definition, as do dreams, hopes, and fictional characters. Human beings may or may not interact with such enti-

ties in any given case; but if and when we do, we become, as in the case of the Kentucky horses, a factor in the natural definition, a contributing constituent in the objective determination of the traits of all the constituents.

The key to all of this is relationality. If we begin to think about natural entities, by which I mean anything at all, material or not, real or possible, general or particular, as relational rather than atomistically absolute, it becomes possible to see how things, and again that means anything and everything, are at the same time conditioned and in possession of objectively determined traits. And this is true both of entities that are related to people and those that are not.

It turns out that thinking about things relationally is not so easy, primarily, I suppose, because in the bulk of our intellectual traditions we are inclined to regard individuals as essentially or inherently unrelated to one another. The traditional philosophical concept of substance describes something with its traits, at least its primary traits, possessed entirely independently of anything else. The traditional concept of the atom was understood the same way. In fact the entire edifice of modern natural science, mathematics, and social science was constructed on this assumption. The Newtonian model of the physical world, and the mathematics that were invented to make it work, describe discrete individuals, each with its own traits independently of all the others, interacting with one another according to determinable and describable regularity. The success of this model of reality was so great that it permeated the social sciences that were developing in the eighteenth century. Societies came to be understood as collections of discrete, essentially unrelated individuals each in possession of certain traits, natural rights among the most important of them. Modern political theory was built on this assumption, in that from Locke through most of the eighteenth century, political theorists argued that the primary purpose of government was to protect the natural rights of individuals. Communities were either artificial constructs from inherently unrelated individuals or they were mere collections of human "atoms" held together by natural principles of one sort or another.

In economic theory, for example, the basic principles of the marketplace came to be described in terms of discrete individuals, each with its own inherent and independently determined economic interest, each acting independently to pursue its own interest. What one might expect to be a chaotic result is so partly because, like the ultimate elements of the physical world, the whole is held together by natural law, in the case of economic theory expressed metaphorically by Adam Smith's "invisible hand."

If modern science; philosophy; mathematics; and social, political, and economic theory have been rooted in the assumption of discrete and inherently unrelated individuals then it is little wonder that it might prove difficult to conceive of things differently. Nonetheless there is reason to do precisely that. Consider another example that lends itself easily to the point. Consider an ecosystem, for example a pond, one which for the moment has no relation to people. The constituents of the pond all exist in a web of relations such that each conditions the others. In some cases of an ecosystem like this the relations between two or more specific constituents may be so great that some are a condition of the very existence of others. If the chemical nature of the water is affected it may become impossible for certain plants and other organisms to survive. In a scenario like this it is impossible to conceive of the constituents as possessing entirely independent traits, even what used to be called "primary attributes." Size, shape, weight, and color, not to mention behavioral characteristics, are each conditioned by the relational web that constitutes the system. No constituent of the pond has its traits "absolutely." The constituents all exist and have the traits that they do by virtue of the specific relations among them.

If we introduce people into the system, either simply as constituent members or as inquirers, the general point does not change. The human constituents are related to other components of the ecosystem and their traits are therefore conditional in the same way. If the humans are inquirers or investigators, then the relation qualifies the inquiry in the sense that it provides a condition or perspective in which the inquiry is carried out.

A relational conception of nature invites us to abandon the Newtonian, atomistic conception of things in favor of a model expressed by an ecosystem. To do so of course raises many questions. Are all relations of the same sort? Are all relations equally constitutive? Is the web of relations infinitely complex, or is there a limit? What is the role of stability and change? If individuals are constituted relationally then how are they individuated, that is, how is identity determined? These and questions like them are the substance of philosophical inquiry. I am suggesting that a philosophical naturalism, particularly one that may have a pragmatic, constructivist dimension, needs a relational view of nature. In that case it becomes the task of a naturalist philosophy to take up the general question raised by the shift to a relational perspective. Some such work has been done already, most extensively by the Columbia University naturalist Justus Buchler in his ordinal naturalism, but there is more to do.[7]

In any case, the point here is that a relational view of nature allows us to posit both conditionality and objectivity. With respect to the pond, it is true simultaneously that the constituents of the system have objectively determined traits, that the traits are knowable, that the inquirer's activity is perspectival, and that the inquirer's activity is itself one of the conditioning elements of the system. By generalizing the relational character of the ecosystem to all of nature it becomes possible for propositions 1 to 4 to be true.

The Reconciliation: The Possibility of Pragmatic Naturalism

One of the advantages of the example of an ecosystem, other than the fact that it is rather obviously relational, is that it is the kind of model Dewey himself used as a cornerstone of his pragmatic naturalism. This is the significance of the claim often made that unlike most philosophers of the modern age, who have worked from a conceptual model drawn from traditional Newtonian physics, Dewey's conceptual model was drawn from biology, specifically

Darwinian biology. For Dewey it is precisely the biological model that emphasizes relationality. When Dewey used the concept of a situation, or more specifically a problematic situation, this is the sort of thing he had in mind. It is not surprising, then, that he could develop a pragmatic naturalism, in that he was working with the idea of relational, mutually constitutive elements of a situation. Dewey, the primary example of a pragmatic naturalist, was able to develop a coherent philosophical perspective because he was working with a relational conceptual model that made it possible.

We have shown that our experience indicates the desirability of the constructivism inherent in pragmatism as well as the objectivity that is a characteristic of naturalism. We have also shown that through a relational understanding of nature it is possible for the two to coexist in a single, coherent philosophical position, a relational perspective that itself has been developed most fully within the American naturalist tradition. In the end the philosophical adequacy of a pragmatic naturalism, and the relational view of nature implicit in it, will itself be determined pragmatically. There are no empirical tests we can conduct to determine whether nature is constituted by simples or complexes, whether entities possess their traits absolutely or relationally, whether experience is passive or interactional, and whether inquiry is perspectival and constructionist or pure and merely reflective of reality. There are also no deductively rigorous arguments we can use to demonstrate one or the other general perspective. The adequacy of a pragmatic naturalism, the sort that has been shown here to be both desirable and possible, will in the end be determined by the conceptual work it can do.

NOTES

1. George Santayana, *Scepticism and Animal Faith* (New York: Dover, 1955), p. 179.

2. There is an interesting collection of essays critical of naturalism in this sense, though after reading the articles one gets the distinct impression that the authors are not even aware of the tradition of American naturalism. See *Naturalism: A Critical Appraisal*, eds. Steven J. Wagner and

Richard Warner (Notre Dame, Ind.: University of Notre Dame Press, 1993).

3. I have gathered together essays from the most important and influential American naturalist philosophers in *American Philosophic Naturalism in the Twentieth Century*, ed. John Ryder (Buffalo, N.Y.: Prometheus Books, 1994).

4. See in particular Dewey, "Existence, Ideas and Consciousness," in *The Later Works of John Dewey*, vol. 1, chapter 8: *Experience and Nature*, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1988).

5. I have used these propositions in other places to make similar points. See John Ryder, "The Use and Abuse of Modernity: Postmodernism and the American Philosophic Tradition," in *Philosophy in Experience: American Philosophy in Transition*, eds. Richard E. Hart and Douglas R. Anderson (New York: Fordham University Press, 1997), pp. 225–40; and John Ryder, *Interpreting America: Russian and Soviet Studies of the History of American Thought* (Nashville, Tenn.: Vanderbilt University Press, 1999), p. 146.

6. A related discussion of logic and natural laws can be found in Igor Hanzel, *The Concept of Scientific Law in the Philosophy of Science and Epistemology: A Study of Theoretical Reason* (Dordrecht, The Netherlands: Kluwer, 1999).

7. See Justus Buchler, *Metaphysics of Natural Complexes*, 2nd ed., eds. Kathleen Wallace and Armen Marsoobian (Albany, N.Y.: State University of New York Press, 1990). This edition contains the full text of the 1st edition, along with several articles and essays in which Buchler further develops some of the book's themes. For extensive secondary discussion of Buchler's work and its impact see Beth Singer, *Ordinal Naturalism* (Lewisburg, Penn.: Bucknell University Press, 1983), and *Nature's Perspectives: Prospects for Ordinal Metaphysics*, eds. Armen Marsoobian, Kathleen Wallace, and Robert Corrington (Albany, N.Y.: State University of New York Press, 1991).

4 NATURALISM AND SUBJECTIVISM: *Philosophy for the Future?*

Peter T. Manicas

I take my title from Marvin Farber. And because this volume is a celebration of Peter Hare's efforts on behalf of philosophy and of the State University of New York (SUNY) at Buffalo, before I engage the main argument (but not utterly irrelevant to it!), I will make a few remarks on my relation to SUNY at Buffalo and to Peter.

When I arrived at UB, the department consisted of Marvin Farber, William T. Parry, Shia Moser, and Neal Gilbert. I did not know that Bill Parry, who taught me to be suspicious of material implication and of Hume, was a managing editor and a founder of *Science and Society: A Marxian Quarterly* and that Marvin had gone to bat against the efforts of the House Un-American Activities Committee to keep America's universities "American." Marvin was my mentor. From him, I got a left-wing Hegel, Dewey, a keen awareness of the importance of concrete history (everyone in the department encouraged this), an introduction to the philosophy of the social sciences, and relentless criticism of Edmund Husserl and Martin Heidegger, but especially Heidegger. All of this remains very much with me. No one taught Marx.[1] I wanted to work on American socialism. Marvin would not let me on grounds that I would then be unemployable. I did a dissertation on the concept of the individual in James, Royce, Lester Ward, and William Graham Sumner. There probably was no other Ph.D. program in

philosophy at that time (or now!) which would have considered this an appropriate topic. When Marvin rejected my wish to follow him to Pennsylvania (he thought that I would be eaten alive there), the dissertation was completed under Rollo Handy. John Anton, Newton Garver, and Peter Hare had recently joined the faculty. I took two seminars with Newton (to fill in some gaps in the Oxonian style), but never had a course with Peter. Anton convinced Loyd Easton at Ohio Wesleyan to take me on there, to teach logic and the philosophy of science—something which also remains with me. Loyd was then working on his new translations (with Kurt Guddat) of the writings of the young Marx. I was by then some sort of Marxist. Perhaps getting jerked from my class in 314 Crosby Hall to join my reserve squadron for the invasion of Cuba did that. (While I was donning Air Force blue, Newton Garver was demonstrating on Buffalo's Main Street.)

Four degrees of separation link me and Peter philosophically. He collaborated with Ed Madden (*Evil and the Concept of God*); Madden collaborated with Rom Harré (*Causal Powers*); Harré collaborated with Paul Secord (*The Explanation of Social Behavior*), and Secord and I wrote a programmatic essay for the *American Psychologist* which argued that critical realist theory of science had important implications for inquiry in psychology.

So I am some sort of naturalist (both some sort of Deweyan and some sort Marxist which, given Hegel's influence on both, coheres), and some sort of realist as well. But what do these confessions entail?

PHILOSOPHY AND THE PHILOSOPHY OF THE RECENT PAST

In order, eventually, to make some claims about realism and naturalism, I begin with a view of philosophy and with a very brief sketch of the philosophy of the recent past. For me, philosophical labels, like the term "philosophy" itself, do not discriminate natural kinds. Accordingly, with Jonathan Ree, I think of philosophy as part of literature and general history.[2] And with Rorty, I think

that we need to appeal to contingent arrangements to explain both what counts as philosophy and its problems, and to understand the meaning of philosophical terms of art in use at any given time and place.[3] Even given some historical continuities in the use of some terms, this implies that what counts as a philosophical problem in one period need not be one in some other. The present period owes directly to contingent arrangements in the late nineteenth century, as I shall argue—and it is important to acknowledge this if we are to understand philosophy's current situation. Rorty comments: "We need to realize that the questions which 'the contingent arrangements' of the present time lead us to regard as the questions are questions 'which may be better than those which our ancestors asked, but need not be the *same*.'" Of course, they *may* be better, but they may also be worse.

I would not go so far as to say that there are no perennial philosophical problems, but they are ethical and political. Dewey had something like this mind, I would guess, in urging philosophers to forego struggle with problems of philosophers for struggle with the problems of humans.

Many who are not recognized by anybody's canon as philosophers have spoken, sometimes wisely, to my two perennial problems. But those traditionally deemed philosophers have tended to provide a *ground* for their views on questions in ethics and politics, generally a metaphysics and sometimes an epistemology. Two further observations: first, recent philosophy has tended to be antimetaphysical, and much more interested in epistemology than in ethics or politics. In the limiting case characteristic of much analytic philosophy, ethical and political claims are deemed, on epistemological grounds, noncognitive. I am especially interested in denying this, but here I only assume that the arguments of naturalists like Dewey, Abraham Edel, and Farber can be sustained. Second, by virtue of this, it is not implausible to follow Farber and assert that the only serious alternatives for philosophy are naturalism—or alternatively, materialism, and subjectivism—in his special senses.[4]

Farber used materialism and naturalism interchangeably,

"having the advantage of flexibility" and acknowledged, of course, that there are alternative versions of both. He included as "subjectivisms" all forms of idealism, including absolute idealism, and phenomenology, and various types of existential philosophy. But what is most striking about his dichotomy is the absence of reference to positivism. We need some history.

IDEALISM

Maurice Mandelbaum argued that during the nineteenth century there were "only two main streams of philosophical thought, each of which possessed a relatively high degree of continuity, and each of which tended to deal with similar problems, although from opposed points of view."[5] The problems regarded knowledge and especially the nature and role of science. The two positions were metaphysical idealism and positivism. His definition of idealism is useful: "metaphysical idealism holds that within natural human experience one can find the clue to an understanding of the ultimate nature of reality, and this clue is revealed through those traits which distinguish man as a spiritual being."[6] Epistemology, a new philosophical discipline which derived from Kant, was the critical feature of *the forms of argument* of idealism but as Mandelbaum argues, the movement was "part of a more general rebellion against the conceptions of man and nature which characterized the Enlightenment."[7] As in Kant, idealism was motivated by distress that God, freedom, and immortality were being undermined by the new science. Neither the forms of argument nor the general rebellion have gone away, even while, especially as regards the rebellion, there are now at least two important anti-Enlightenment postures: premodern theisms, which for the most part are not defended by academic philosophers; and ethical nihilisms, aided and abetted both by positivist epistemology and subjectivist postmodernisms, both very much academic positions. But we need to fill in positivism, and then to get back to Farber by defining materialism and naturalism.

Positivism

The nineteenth century battleground was over science and what it had to say about man and nature. Positivisms and materialisms both stood on science—critically, a very much contested concept until very late in the century. And both positivisms and materialisms were opposed to traditional theologies. But it would be wrong to suppose that nineteenth century positivisms were all materialisms.[8] Friedrich Engels and then V. I. Lenin, who had an antipositivist conception of science, were closer to the truth in asserting that positivists were covert idealists.

Farber's dichotomy, of course, follows Engels who had argued that there are but "two great camps" in philosophy: idealists and materialists. "Those who asserted the primacy of spirit to nature and, therefore, in the last instance, assumed world creation in some form . . . comprised the camp of idealism. The others, who regarded nature as primary, belong to the various schools of materialism."[9] For Engels, "the great basic question of all philosophy, especially of modern philosophy, is that concerning the relation of thinking to being." Engels's dichotomy was Lenin's point of departure against the Machists, and the entire cast of empiricist philosophers of science of the period. In his infrequently read *Materialism and Empirio-criticism* (1908), Lenin defended Engels's materialism against those "bold warriors, who proudly allude to the 'modern theory of knowledge,' 'recent philosophy' (or 'recent positivism'), the 'philosophy of the natural sciences' or even more boldly, 'the philosophy of natural science of the twentieth century.'" Lenin was quite correct to identify positivist theory of science as hegemonic, to link it with "modern theory of knowledge," and to see that it rejected the realism of materialisms, of which more in a moment.[10]

Positivists put forward a distinct and amazingly influential conception of science. They accepted Kant's claim that science is restricted to "phenomena" and asserted also that it is a mistake to think that metaphysics can provide knowledge of some deeper or ultimate reality. Some, like Kant, assume a reality which is not

knowable; some deny this. And some, perhaps more consistently, reject all discussion of the question as useless. Mandelbaum well summarized the distinct feature of positive philosophy. "Since positivism confines all human knowledge to what has been experienced or can be experienced, it claims that a science which has freed itself from metaphysical preconceptions will restrict itself to discovering reliable correlations within experience. . . . According to this view, a scientific explanation does not involve appeal to any immanent forces nor to any transcendent entities; to explain a phenomena is to be able subsume it under one or more laws of which it is an instance."[11]

Positivists are manifestly empiricists, and it is easy enough to see how, as Mandelbaum put it, the positivist interpretation of science "even came to be absorbed into the idealist tradition."[12] As he notes in another place, common to all forms of idealism and phenomenalism is subjectivism, understood as the idea that all we can know are the contents of consciousness (what Rorty later referred to as the "veil of ideas"). If, then, reference to transcendent reality is to be rejected and all knowledge is restricted to what is in experience, then what is to be gained by holding that the objects of experience exist independently of it? As Farber well said: "The methodological restriction of the objects of reality to a relationship with an experiencing subject—the subject-object limitation—serves as a wheelhorse for idealistic arguments at critical points."[13]

It is very critical to also see that causality figures hugely in the positivist vision. What is rejected as causation, of course, is any sort of metaphysical notion of causes as productive powers. Instead, we have a Humean conception of causality as an empirically available constant conjunction. Hence even in the "transfigured realism" of Spencer, reality was unknowable exactly because, on his empiricist premises, there was no way to get from objective reality to experience. As Mandelbaum summarizes:

> Science would be transcended and metaphysics would set in if one tried to form any conception of how motions in the nerves "produce" sensations, or how complex associations of ideas can lead to those efferent nerve-impulses which eventuate in action.

> To attempt to go beyond the verifiable correlations between these utterly different types of concept would be to introduce notions which it is not in any way possible to verify within experience.[14]

Accordingly, despite large differences between them, British empiricists, e.g., John Stuart Mill, Herbert Spencer, Gustav Kirchoff, Ernst Mach, Richard Avenarius, Pierre Duhem, and Henri Poincare, and, of course, the logical positivists, logical empiricists, neopositivists, and antirealists of today are all "positivist" (in August Comte's sense). Indeed, since their conception of science is perfectly comfortable with the extensionalist logic of Alfred North Whitehead and Bertrand Russell, it came to define "logical positivism"; and despite fatal challenges, this conception remains the unquestioned assumption of both most current discussions in epistemology and the philosophy of science. Naturalists take their stand with science, but the critical point then is precisely how science is to be understood. The naturalism (and realism) which I will defend follows Rom Harré and Edward Madden's groundbreaking *Causal Powers* and Harré's revolutionary assault on deductivism in the philosophy of science.[15] But before pursuing this idea, we need to comment on the nineteenth century contender, materialism.

Materialism

Although materialism was a widely held view in the eighteenth century, Mandelbaum notes that despite some confusion on this issue, there were very few materialists in the nineteenth century, most of them German. The obvious materialism, and from the point of view of later global philosophy, is, of course, Marxism. We can usefully begin with Mandelbaum's definition:

> Taken in its broadest sense, materialism is only committed to holding that the nature of that which is self-existent is material in character, there being no entities which exist independently of matter. Thus, in this sense, we would class as a materialist

> anyone who accepts all of the following propositions: that there is an independently existing world; that human beings, like all other objects, are material entities; that the human mind does not exist as an entity distinct from the human body; and that there is no God (nor any other non-human being) whose mode of existence is not that of material entities.[16]

This is plainly Farber's sense and explains why naturalism and materialism are usefully interchangeable. Thus, reductionist forms of materialism, as in Ernest Haeckel, or Jakob Moleschott and Friedrich Büchner, are easily distinguished from Engels's dialectical reading of science—and are even more important from the present point of view, from the nonreductionist naturalisms of Marx and Dewey.

As important, the definition leaves open questions about the nature or character of the material world, including whether matter is a substance (as per Descartes) or an underlying substratum (as per Locke). As is well known, these positions are subject to Berkeleyan criticisms. But the nature or character of the material world may be understood as an entirely scientific question. If so, a realist and antipositivist theory of science will be required (see below). Materialisms, of course, are realisms in the first important sense that, in contrast to idealisms which make reality mind-dependent, the world exists independently of minds, God's included.

RESIDUAL PROBLEMS OF THE DEBATE OVER IDEALISM

As the twentieth century began, positivism had won the battle over the character of the physical sciences.[17] But the existential status of the external world had not been resolved. It informs, of course, the problem articulation of G. E. Moore and Russell, James and Dewey, and all the American realists (in their several varieties), with variant forms of positivism confounding matters further. I shall not attempt a review of the often puerile debates which characterize this battle and why it has been so difficult to be clear about the pertinent issues.

But I would insist that this debate is a philosopher's problem in the sense that first, "the things that we see, hear, and touch—and to a significant degree also what we taste or smell—appear as independent of our seeing, hearing, or touching them."[18] Only a philosopher could raise questions about this. Second, we cannot doubt that we can learn from experiences in this world, even if philosophy *and* science remain puzzled as to just how this occurs. Thus, in no human community, however different, have persons failed to make judgments about the resources and dangers of this world. Papaya was identified as nourishing before there was any understanding of metabolism and cold was avoided before we understood its mechanisms. But even more than this, only a philosopher could doubt that the modern natural sciences produce genuine knowledge of this world. I take it as fundamental not merely that nature exists independently of at least human experience, but that nature is structured in some way independent of human inquiry and that we can have some knowledge of it.[19]

But this does not mean that debate between idealists and their opponents has left no residual problems. I find two: the one which motivates Farber; and the other, the paradigmatic philosopher's problem (or nest of philosopher's problems). I begin with the latter.

EPISTEMOLOGY: THE PHILOSOPHER'S PROBLEM PAR EXCELLENCE

Epistemological problems, either in traditional foundationalist or in more recent nonfoundationalist analytic variations, are philosopher's problems. The discipline of epistemology is of recent vintage, achieving self-consciousness only after Kant; indeed, as part and parcel of the emergence of metaphysical idealism. Since eighteenth century thinkers did not distinguish science and philosophy in the Enlightenment vision of man and nature, metaphysics and physics were not distinguishable. Thus Isaac Newton, Robert Boyle, and Locke could assume that scientific inference offers evidence that there were nonperceivable, independently existing

objects which could be known.[20] And since they worked prior to the development of empiricist criticisms of causality, they could also seek causal explanations of experience. Evidently, these *could not* be understood as correlations of directly observed sequences.

After Kant, claims about knowing would preempt claims about being (what Roy Bhaskar called "the epistemic fallacy"), leaving room only for an idealistic metaphysics or a positivism, including forms of Kantianism, phenomenalism, naïve realism, or doctrines of "pure experience." And, as part of this, despite struggles by Hermann von Helmholtz, Herbert Spencer, and James (in his *Principles of Psychology*), science could offer nothing of interest about knowing. The question, "How is our knowledge possible?" was, thereafter, nothing like the question: "How are telephones possible?" As a philosophical problem, it could be answered in either one of two ways: either by taking a "transcendental turn" (phenomenology), or in terms of evidential relations between basic and nonbasic propositions.[21]

DEWEY AND THE EPISTEMOLOGY PROBLEM

There have been some modern philosophers who tried to avoid this regressive pursuit. Indeed, one can argue that this is what is most distinctive about American pragmatism, from Peirce to Dewey.[22] But none, including Dewey, entirely escaped the Kantian epistemological problematic. This explains the odd character of Peirce's philosophy, James's shift to "radical empiricism," the frustrating debates that Dewey had with American realists of various sorts, his frustration with them on grounds that he was not offering but another epistemology, and the failure to see also that he was not offering just another "scientism."[23]

Dewey was surely correct to reject "the spectator theory of knowledge" and to deny the assumption of at least some realisms that truth was to be determined by its relation to the independently existing reality. He was correct in his effort to displace epistemology for "inquiry into inquiry," comprehended as a practical, social activity which made science continuous with common

sense. But his naturalism was burdened by his commitment to experience.[24] The problem was not, however, his defense of naïve realism or even his postulate or criterion of immediate empiricism (properly understood). Rather the problem was his unwillingness to accept a strong version of scientific realism, necessary (if I am correct) to carry out the program of his groundbreaking and little understood *Logic: The Theory of Inquiry*. And this amounts to saying that he could find no grounds on which to assert that the "thing-in-itself" was knowable and causally pertinent.

Experience had been corrupted by the tradition which gave us epistemology. As John Shook points out, Dewey saw this by the time he was ninety-one years old. As a good empiricist, he had intended "to liberate philosophy from desiccated abstractions" (a task also set by Marx.) But experience "had become effectively identified with experiencing in the sense of the psychological, and the psychological had become established as that which is intrinsically psychical, mental, private." Accordingly, his insistence that "'experience' also designates that what is experienced was a mere ideological thundering in the Index for it ignored the ironical twist which made this use of 'experience' strange and incomprehensible."[25] If indeed instrumentalism was an epistemology, then this move was "strange and incomprehensible" exactly because it denied the starting point of "the epistemological problem." Either Dewey, like Moore in his famous refutation of idealism, missed the point, or he was a covert idealist, perhaps a Hegelian of some sort.[26]

There is nothing fatal about Dewey's postulate of immediate empiricism, that "things—anything, everything, in the ordinary or nontechnical use of the term 'thing'—are what they are experienced as." The postulate not only allowed for but required that we recognize that the experiences of individuals may well differ, so "if it is a horse which is to be described, or the *equus* which is to be defined, then must the horse-trader, or the jockey, or . . . the paleontologist tell us what the horse is which is experienced." These accounts may differ, but none is privileged as "real" against others which are deemed "phenomenal." For Dewey, it is clear that each account is from *some* point of view and that the conditions neces-

sary for understanding the differences as well as the agreements can be provided. This plainly will be a problem for psychology and the sociology of knowledge—an inquiry demanded by Dewey's theory of knowledge and welcomed by myself. But, presumably, there is *something* independent of each of these experiences which is causally pertinent to the having of them—and, if so, why not independent of anybody's? And if not, why was this not an idealism? Indeed, on Dewey's own naturalistic premises, cats, bats, and beetles each have "worlds" which are enabled and constrained by their particular sensory (and mental) capacities.[27]

Indeed, not only was Dewey's use of experience to denote what was experienced peculiar, but so too was his entirely sound effort to deny that experience was equivalent to *cognitive* experience, that experiencing was the same as knowing. Ralph B. Perry got this right and was happy, as am I, to accept the view that knowings, including the subject-object relation and the relations of truth and meaning, are "arrangements into which experiences fall owing to certain practical exigencies, such as the interruption of habit, of the insufficiency of immediate knowledge."[28] But this only raised another question. Perry continued: "It would appear that while Dewey . . . rescues reality from dependence on intellect, he is satisfied to leave it in the grasp of more universal experience which is 'a matter of functions and habits, of active adjustments and re-adjustments, of coordinations and activities, rather than of states of consciousness.'"[29] Some defenders of Dewey would, I think, also be satisfied. Perry was not, since he persisted that "a thoroughgoing realism must assert independence not only of thought, but any variety of whatsoever of *experience*, whether it be perception, feeling, or even the instinctive response of the organism to its environment."[30]

NATURALISTIC EPISTEMOLOGY AND SCIENTIFIC REALISM

Tom Burke is quite correct, I think, to argue that the naturalism of Dewey's *Logic* joins with the ecological psychology of J. J. Gibson.[31] Burke summarizes:

> In contrast with a classical empiricist view of perception (involving so-called, sense data, sense impression, stimulations or nerve endings, irritations of body surfaces, and so forth), ecological psychology emphasizes a different array of theoretical concepts; one being the concept of "invariants" and another the concept of affordances. . . .
>
> Ecological psychology treats the perceiving agent as a dynamic organism/environment system, continually engaged in various sorts of actions designed for exploring the world and utilizing its resources. Controlled sampling of the world gives evidence of possible uses of things (and of ways to orchestrate subsequent actions) by virtue of the agent's being attuned to lawlike relations which involve stable associations of different sorts of possible experiences.[32]

Now, my point is just this: the idea of "invariants"—lawlike relations—and the concept of "affordances"—possibilities as determined by invariants—*requires* a realist theory of causal powers.

Affordances are dispositional properties of things which refer to a thing's powers construed as per Harré and Madden, *Causal Powers,* and Mario Bunge, *Causality and Modern Science.* It is to assert a categorical referring to the nature (structure) of the thing and to tendencies true of the thing by virtue of its nature. Dispositions manifest themselves (minimally) in pairs: salt dissolves in water, clay is molded with the hands. Affordances are dispositions in an organism-populated world. As Malcolm T. Turvey et al write: "Possibilities for action, or more precisely, things with possibilities for action, are among the kinds of things that populate an animal's niche and are, contrary to received wisdom, things to be heard, or smelt, etc." This is most easily seen with an example:

> Sharks electrically detect things to eat and things that impede locomotion. . . . An edible thing such as flatfish differs in ionic composition from the surrounding water, producing a bioelectric field partially modulated in the rhythm of the living thing's respiratory movements. A flatfish that has buried in the sand will be detectable by a shark swimming just above it. Reproducing the bioelectric field of the flatfish artificially, by passing a current

> between two electrodes buried in the sand, invites the same behavior. The shark digs tenaciously at the source of the field departing from the site when the act fails to reveal an edible thing. . . . Now there is no intelligible sense in which it can be claimed that the source ought to have appeared *edible* if the shark's perception of affordances were direct. In the niche of the shark, 'edible thing' and 'electric field of, say, type F' are nomically related. To predicate of the shark (a) 'detects electrical field of type F' and (b) 'takes to be an edible thing' is not to refer to two different states of affairs, one [viz. (b)] that is reached from the other [viz. (a)] by an inference. Rather, it is to make reference to a single state of affairs of the shark-niche system. The linking of (a) and (b) is not something that goes on in the "mind" of the shark, as the Establishment would have it. The linking of (a) and (b) is in the physics of an ecological world. . . .[33]

Dewey would, I think, strongly agree that ecological psychology picks up on themes that he articulated, especially, in the *Logic*.[34] And it is perfectly clear that for Dewey, even perception is profoundly affected by the fact that humans are social beings, a fact which raises immense problems for empirical psychology.[35] But we need to ask: how did Dewey stand on what is now termed "scientific realism"? Unfortunately, as with earlier realism debates, it is not perfectly clear what this implies. A large part of the problem, moreover, turns on whether the claims mean to provide an account of the actual practices of the physical sciences, especially physics, chemistry, biochemistry, and whether if they do, the accounts are constrained by traditional epistemological assumptions, for example, as in Quine, whose understanding of "empirical" and of "logic" (as extensional and providing the canonical form of scientific sentences) gives his understanding of scientific realism a most distinctive empiricist emphasis.[36] So as to be as clear as possible on my position, let me merely assert one of Margolis's conclusions (as I understand it.)

Margolis has argued convincingly, I think, that a strong form of scientific realism need not be either foundationist or cognitivist, as he explicates these. To do this, one needs to assert "*ontic externalism,* the view that 'the world consists of some fixed totality of mind-

independent objects,'" that "the question the way the world is" makes sense "relative to one conceptual theme or another," and finally, that "objectivity in the cognitive sense is only '*objectivity for us.*'"[37] Dewey would, I think, agree with all three, even while taking what amounts to an antirealist position regarding unobservables and even if he denies that causality is an ontological category.

We can notice, first, that Dewey's prose leaves us with some questions on the pertinent issues. This results, in part at least, from his willingness to incorporate into his own highly idiosyncratic theory of science elements from competing historical traditions, especially empiricism and rationalism. Thus, it is clear enough that he was not a Humean (although Mill is usually his target), that he joined nominalism and realism, and that he supposed that one could settle most of the questions about inquiry, and, accordingly, about science, by paying close attention to the *function* of propositions in use in science.

Dewey clearly rejected the regularity determinist ontology of events so characteristic of Hume and positivism. For him, "there are no such things as uniform sequences of events"[38] and hence "scientific laws" could not be "formulations of uniform and unconditional sequences of events."[39] This would seem to encourage the view that, for him, science assumed an ontology of "things." Similarly, in *Experience and Nature*, he held that "atoms and molecules show a selective bias in their indifferences, affinities and repulsions . . . to other events"[40] "Selective biases" are surely "tendencies" in the sense of Harré and Madden, and "atoms," if not molecules, are not "observable"—at least as ordinarily understood.

On the other hand, he denies explicitly that causality is an ontological category; for him, it is a "logical category" (in his special sense) and "the term 'causal laws' is . . . in spite of its general use, a figure of speech," "a case of metonymy."[41] Indeed, he gave an account of what he took to be the confusion regarding causality. There is, upon reflection, "a qualitative gap" between "gross qualitative objects (which are the objects of direct perception)," e. g., the lighted match and the burning of the paper. "Forces" were introduced to get over this difficulty. Thus, "the match was supposed to

have a certain calorific power."[42] But "the time came when it was seen that forces by definition are such as to be incapable of scientific observation. They were then ruled out of science. . . ."[43] "Then there grew up the hybrid notion which took from common sense the idea of succession and from science the idea of invariability of conjunction."[44] If Dewey is not a Humean, neither, it seems, would he accept the idea "things" have causal powers.

But if so, his alternative is anything but clear. It turns, I think, on his critical distinction between generic propositions and universal propositions. Generic propositions, e.g., "sugar is sweet" and "iron rusts," are existential and (as with singular propositions, e.g., "this is sweet") "predicates represent potentialities which *will be actualized* when certain further operations are performed . . ."[45] Universal propositions e.g., "if a particle at rest is acted upon by a single moving particle, then . . ."[46] and, ambiguously, sentences of the form, "All A is B" (rendered as in modern logic as conditionals) lack existential import. They are "valid, if valid at all" because they express "a necessary relation of abstract characters."[47]

Ernest Nagel was correct, it seems, in saying that the "function" of generic propositions "is to organize perceptual materials. . . ."[48] They are, accordingly, the heart of our commonsense understanding of nature. The formulation just quoted suggests a reading of them as dispositions, nonrealistically analyzed: if X is tasted, then if X is sugar, X will taste sweet. But "*will be actualized*" (even *ceteris paribus*) suggests also that there is some sort of necessity attached to them. If so, this is an odd mix. It is easy to see how one could have "natural necessity" if generic propositions are analyzed realistically.[49]

Universal propositions, by contrast, formulate necessary relations between abstract characters and "their function in inquiry is to propose possible operations which, if carried out, might solve the problem under inquiry."[50] This, of course, grapples with the medieval conflict between realism and nominalism. Nagel was quite understandably puzzled by the putative necessity in such laws. Such necessity surely is not a priori for Dewey, even though he calls the relation "logical" and "definitional," nor does it seem to square with standard "logicist" efforts (unsuccessful!) to dis-

criminate between "accidental generalizations" and "laws." But neither does it represent what Harré and Madden termed "natural necessity," for this is ontological.[51]

Dewey seems to think that the pertinent issues are resolved once we accept that "conceptual subject-matter is [to be] interpreted solely and wholly on the ground of the function it performs on the conduct of inquiry."[52] We can, he says, then reject as spurious an exclusive dichotomy between "conceptions [as] mere devices of practical convenience," or as "descriptive of something actually existing in the material dealt with."[53] The former is an "instrumentalist" reading; the latter, realist. And, of course, depending on what they are "devices" *for*, they may be *both* "descriptive" *and* "of practical convenience," perhaps useful also as guides to inquiry. But are these conceptions "descriptions"? And if so, what are they descriptions of?

Dewey sees rightly that the notion of "abstraction" is part of the problem. As he sees it, if conceptions are "descriptions," "abstract characters" are "abstracted" from "existents" in the sense of "selective discrimination." But, he insists, this is quite impossible as regards an abstract character as a "scientific conception." He gives an example: "smooth*ness*, as an instance of a scientific conception, is not capable of observation and hence of selective discrimination."[54] Hence, as *scientific* conceptions, such "abstract characters" are not descriptions.

But the scientific realist, not bound by positivist predilections, will agree that while "abstraction" is part of the problem, we should not be looking at "abstract characters" at all, but at *models* of things as abstractions from the real and concrete. We experience water as fluid and clear and capable of many sorts of transactions. H_2O, an abstraction, identifies the model for a molecule of water, and molecular chemistry develops the theory which explains these powers. The model is not a fiction, but an abstracted real structure. Experienced water is H_2O but it is not *only* H_2O. The water of immediate experience does what it does by virtue of being H_2O. Hence, *ceteris paribus*, because it *is* NaCl, ordinary (experienced) table salt *must* dissolve in the water in my boiling pot.[55]

Perhaps Dewey's account can be rescued, and perhaps it is sound as it stands. John Shook[56] seems to bite the bullet. He argues that while Dewey allowed that the sciences should be permitted to postulate unexperienceable transcendent entities that permit scientific explanation of experienced events, Dewey refuses to take a realistic stand toward such "objects," while Quine [e.g.,] encourages realism here. But if as he says, "scientific theories are used to guide inferences toward predictions," and universal propositions "function in science regardless of whether their terms actually refer to anything at all," then as Mach, Poincare, and Duhem each insisted, why cling to the idea that science seeks to *explain*? It is the core of realist theories of science that science explains and could not unless we accept that inquiry gives us knowledge of the causal powers of the things which exist independently of us.

HUMAN PROBLEMS

I noted that there were two residual problems of the idealism/realism debate. The second regards not philosopher's problems, but problems of how we should live. I want to support Dewey's theory of inquiry as a naturalism because, as Farber insisted, there are only two ways to address these problems. One is either a naturalist who holds that naturalist inquiry can answer these questions or one is antinaturalist and denies this. Today, antinaturalism has two main forms: the appeals to authority of traditional theology, and the subjectivisms of positivism and postmodernist theory.

Our daily papers are filled with examples of the first.[57] But a central issue is provided by Hare and Madden in their book *Evil and the Concept of God*.[58] They argue that, however understood, evils should be eliminated as far as humanly possible; but if indeed, they are not remediable, and if, worse, they serve some theological values not obvious to us, then why make the effort? Or as Parry writes in his short rejoinder to Father Clarke's defense of theism:

> There is no need to blame Jupiter for the lightening, nor jealous god for natural death. Violent homicide is indeed blameworthy, especially wholesale slaughter. Though "the system" is undoubtedly faulty, yet it operates only through individuals, who must be held morally responsible. The rulers of the world, on my view, must be held primarily responsible for such horrors as burning civilians by gas chambers, atom bombs, and napalm; and all of us are jointly responsible to the extent that we support our rulers.[59]

That this needs saying is, itself, shameful.

Positivisms accept science, but on its understanding of knowledge, science becomes irrelevant to questions of morals and politics. So, for example, the eminent Harvard zoologist, Stephen Jay Gould, argues that religion and science are complementary: "Science tries to document the factual character of the natural world. . . . Religion, on the other hand, operates in the equally important, *but utterly different* (my emphasis) realm of human purposes, meanings and values. . . ."[60]

Postmodernists deny nature and hold that science—generally misunderstood—is but one among many "discourses," including, then, the discourses of multiplied "communities," "faith," "ethnic," and otherwise. Like the New Age quest for a new "inwardness" with its "metaphysical dissolvent" of "Transcendental Individualism,"[61] the postmodernist obliterates objectivity and licenses equally whatever beliefs are shared by these self-defined communities, however belief gets fixed. Moreover, positivism and postmodernism are consistent with and propelled by capitalist ambiance, flexible accumulation, and consumerism.[62] Marvin Farber had it right:

> The philosophical Pandora's box [of subjectivism] is one more fairy tale. . . . It is, however, a fairy tale with sociohistorical linkage and consequences, for it is an ingenious philosophy of renunciation that leaves the *status quo* unexamined and unchallenged and that may even be accommodated to reactionary ideas.[63]

Dewey is pertinent here. But, bringing me full circle back to Farber, the naturalism of Marx is even more pertinent:

> The great thing in Hegel's *Phenomenology* . . . is simply that Hegel grasps the self-creation of man as a process, objectification as loss of the object, as alienation and transcendence of this alienation; that he thus grasps the nature of *work*, and comprehends objective man, authentic because actual, as the result of his *own work*. The *actual*, active relation of man to himself as a species-being or the confirmation of his species-being as an actual, that is, human, being is only possible so far as he really brings forth all his *species-powers*—which in turn is only possible through the collective effort of mankind, only as the result of history. . . .
>
> We see here how a consistent naturalism or humanism is distinguished from both idealism and materialism, as well and at the same time the unifying truth of both. We also see that only naturalism is able to comprehend the act of world history. . . .[64]

Evidently, although I would need at least another paper to elaborate these most pregnant insights and to demonstrate their connection to alienation, the problem of democracy and the analysis of capitalist society, nothing that I am likely to say would add much to what is, by now, a rich and still relevant literature.

NOTES

1. In Farber's marvelous lecture course, "The Philosophy of the Recent Past" (modeled, I think, on a course given by Ralph Barton Perry at Harvard), we read August Cornu's brief but excellent book *The Origins of Marxian Thought*, published in 1957 by Charles Thomas in the series "American Lectures in Philosophy," edited by Farber. Cornu was one of the first writers to study carefully the "young Marx." The manuscripts were not then available in English translation. With Farber I also read Dewey's *Logic*, and Felix Kaufman's *Methodology of the Social Sciences*. We read *no* Husserl or Heidegger.

2. "History, Philosophy, and Interpretation: Some Reactions to Jonathan Bennett's Study of Spinoza's Ethics," in *Doing Philosophy Histor-*

ically, ed. Peter H. Hare (Buffalo, N.Y.: Prometheus Books, 1988). In his review of the multivolume *Dictionary of Eighteenth Century British Philosophers*, James Harris remarks that "just as it is usually hard to distinguish 'philosophy' from science in the eighteenth century, then so also it is difficult to hold apart science and theology for long. That is why, if the character and significance of their work is to be properly understood, men such as Hume and Reid have to be surrounded by so many relatively obscure figures from disciplines which today have little or nothing to do with philosophy. For the truth is that there are no 'purely philosophical' questions in eighteenth century Britain." (*Times Literary Supplement*, 5 May 2000). See below as regards Locke, Boyle, and Newton.

3. Richard Rorty, "The Historiography of Philosophy: Four Genres," in *Philosophy in History*, ed. Richard Rorty, J. B. Schneewind, and Quentin Skinner (Cambridge, England: Cambridge University Press, 1984), 49–75.

4. Especially, Marvin Farber, *Naturalism and Subjectivism* (Springfield, Ill.: Charles C. Thomas, 1959); *The Search for an Alternative* (Philadelphia: University of Pennsylvania Press, 1984). The extraordinary volume, *Philosophy for the Future* (New York: Macmillan, 1949), edited by Roy Wood Sellars, McGill, and Farber, was also on Farber's reading list. As defenses of materialism, the essays, many authored by the distinguished list who contributed regularly to *Science and Society: A Marxian Quarterly*, are remarkably pertinent.

5. Maurice Mandelbaum, *History, Man and Reason: A Study in Nineteenth Century Thought* (Baltimore: Johns Hopkins Press, 1971), p. 5.

6. Ibid., p. 6.

7. Ibid., p. 7.

8. Mandelbaum notes that the confusion persists despite explicit disavowals on the part of Comte, Spencer, Bernard, Huxley, and Mach—and the positivists of the very recent past.

9. Friedrich Engels, *Ludwig Feuerbach and the Outcome of Classical German Philosophy* (New York: International Publishers, 1935), p. 31.

10. V. I. Lenin, *Materialism and Empirio-criticism* (Moscow: Progress Publishers, 1970), p. 7. Farber and I would agree with Lenin's attack on the Machists, but it seems clear that neither Engels nor Lenin provided a plausible answer to the question of the relation of thought to being: the "reflection theory" surely will not do. Nor, tragically in my view, did either Engels or Lenin provide a convincing alternative philosophy of science. I have discussed this, along with Engels's relation to competing materialisms, in my "Engels's Philosophy of Science," in *Engels After*

Marx, ed. Terrell Carver and Manfred Steger (University Park, Penn.: Pennsylvania State University Press, 2000). For a beautifully wrought criticism of logical positivism from a Marxist perspective see V. J. McGill, "An Evaluation of Logical Positivism," in *Science and Society: A Marxian Quarterly* 1 (1936): 45–80. Parry and Albert Blumberg are thanked by McGill who was, of course, a close associate of Farber's. See also Lewis Feuer's excellent account, "The Development of Logical Empiricism," in *Science and Society: A Marxian Quarterly* 5 (1941): 222–33.

11. Mandelbaum, *History, Man and Reason*, p. 11. Comte had put matters squarely. "For the 'positivist,' the mind have given over the vain search for Absolute notions . . . and the causes of phenomena, and applies itself only to the study of their laws,—that is, their invariable relations of succession and resemblance. . . . What is now understood when we speak of an explanation of facts is simply the establishment of a connection between single phenomena and some general facts. . . ." Auguste Comte, *System of Positive Polity*, vol. 1 (London: Longmans, Green, 1875), p. 2.

12. Ibid., p. 11.

13. Farber, *The Search for an Alternative*, p. 130.

14. Mandelbaum, *History, Man and Reason*, p. 304. I have discussed these issues in connection with James's *Principles of Psychology*. See my "Modest Realism, Experience and Evolution," in *Harré and His Critics*, ed. Roy Bhaskar (Oxford: Basil Blackwell, 1990), pp. 23–40. James was caught in the same dilemma, but he could not accept Spencer's "solution" to the problem of "inner" and "outer" that evolution would guarantee a convergence between the two. James argued, rightly, that this was "barren truism," since there was no way to determine whether the experienced world corresponded to the nonexperienced world. Mandelbaum notes, correctly, that having established that science had demonstrated that what we directly experience never gives us the characteristics of what exists independently of us, both Spencer and Helmholtz "reversed themselves and spoke as if it were a *defect* in knowledge that we do not directly experience the world as it exists independently of us" (*History, Man and Reason*, p. 362). The solution, available to both, was to admit that "transdiction, or inference to what is in principle not experienceable is scientifically justified. McGill gave a very similar argument, briefly that one cannot argue coherently *from* the causal argument that "sensations cannot be regarded as copies or direct representations of . . . the material object" (which McGill holds to be true) *to* either "agnosticism" or "phenomenalism." ("An Evaluation of Logical Positivism," p. 51).

15. Rom Harré and Edward Madden, *Causal Powers* (Oxford: Blackwell, 1974) and Harré, *Principles of Scientific Thinking* (Chicago: University of Chicago Press, 1970). Also see Mario Bunge's infrequently noticed book *Causality and Modern Science*, 3rd rev. ed. (New York: Dover, 1979) and Michael Scriven's essays in *Minnesota Studies in the Philosophy of Science*. Parry is acknowledged by Harré and Madden. As noted, Bill Parry's critique of extensionalist difficulties with entailment and the contrary-to-fact conditional was a lasting influence on me, but I do not remember whether he raised this with particular reference to causality. See also Roderick Chisholm, "The Contrary-To-Fact Conditional," *Mind* 55 (1946): 289–307, reprinted in *Logic as Philosophy*, ed. Peter Manicas (New York: D. Van Nostrand, 1971), pp. 118–28.

16. Mandelbaum, *History, Man and Reason*, p. 22.

17. The story of the human or social sciences is different and more complicated. See my *A History and Philosophy of the Social Sciences* (Oxford: Basil Blackwell, 1987), and "Nature and Culture," in *American Philosophic Naturalism in the Twentieth Century*, ed. John Ryder (Buffalo, N.Y.: Prometheus Books, 1994), pp. 540–63.

18. Maurice Mandelbaum, *Philosophy, Science and Sense Perception* (Baltimore: Johns Hopkins University Press, 1964), p. 222. Mandelbaum notes that this, probably, catches the element of truth in Moore's famous refutation. On the same page he writes, "In direct experience we are all realists and cannot avoid being so." He insists, rightly, that this is only the beginning of an argument, for me, a philosopher's argument. Moreover, as part of this, it is not true that "everything we experience exists precisely as we experience it."

19. As Farber many times insisted, "the philosophical problem of existence . . . arises when a method is adopted that does not proceed from the basic fact of experience." *Phenomenology and Existence: Toward a Philosophy Within Nature* (New York: Harper Torchbooks, 1967), p. 70. It is a "methogenic problem." Indeed, "the fact of nondependent existence is basic of philosophical thought. Not to recognize that fact is to incur the error of illicit ignorance . . ." (p. 72). See also another student of Farber's, Wilfrid Sellars. But we should not go as far as Sellar's "macho-realism" (Roy Bhaskar's term) and argue that if "the scientific image" is true, then "the manifest image" is false. See *Science, Perception and Reality* (London: Routledge and Kegan Paul, 1963), p. 96. Farber might argue that Sellars's startling conclusion is also a "methogenic" result.

20. See Mandelbaum, *Philosophy, Science and Sense Perception* and Rom

Harré, *Matter and Method* (London: Macmillan, 1964). It is a serious error to read Boyle and Newton as "positivists." Their "corpuscularism" depended on their perfect comfort with "transdictive" inferences: inference to what lies beyond the scope of all possible experience (Mandelbaum, chapter 2).

21. Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton, N.J.: Princeton University Press, 1979), chap. 3. See also his useful footnote on the historiography of philosophy, p. 132.

22. See my essay, "Pragmatic Philosophy of Science and the Charge of Scientism," *Transactions of the Charles S. Peirce Society* 24 (1988): 179–222. For me, Peirce recast the epistemological problem by rejecting the transcendental move while accepting the Kantian insulation against skepticism. See also Murray G. Murphey, *The Development of Peirce's Philosophy* (Cambridge, Mass.: Harvard University Press, 1961) and the essay by my former associate at University of Buffalo, Robert G. Meyers, "Peirce on Cartesian Doubt," *Transactions of the Charles S. Peirce Society* 3 (1967): 13–23. I argue also that James's *Principles of Psychology* was an ambivalent naturalistic epistemology which did not restrict itself to the "phenomena" of mental life, but aimed to investigate its "conditions," physiologically and in "the outer world." But, strapped by empiricist and antimetaphysical assumptions about science, James utterly abandoned that goal. If in his *Principles of Psychology* knowing was deemed "the most mysterious thing in the world," for his doctrine of "radical empiricism" knowing could "easily be explained as a particular sort of relation towards one another into which portions of pure experience enter." See "Pragmatic Philosophy of Science and the Charge of Scientism," p. 202.

23. Most recently, by Dorothy Ross, *The Origins of American Social Science* (Cambridge, England: Cambridge University Press, 1991).

24. This is, of course, an old argument, beautifully confronted by Shook. See John R. Shook, *Dewey's Empirical Theory of Knowledge and Reality* (Nashville, Tenn.: Vanderbilt University Press, 2000).

25. John Dewey, *The Later Works of John Dewey*, vol. 1: *Experience and Nature*, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1981), p. 362. Henceforth, citations for *The Later Works of John Dewey* will be referenced by *LW* followed by volume and page numbers.

26. To anticipate, I think that ultimately Shook is right that Dewey's is a metaphysics of experience (as held by John McDermott), despite the best efforts of "naturalists" (for example, Ralph Sleeper) to hold that it is a metaphysics of existence. Arguments over this issue in the Queens College philosophy department go back many years. I can here add another

debt of gratitude. For a wonderful account of Russian and Soviet efforts at coming to grips with Dewey, see John Ryder's erudite *Interpreting America* (Nashville, Tenn.: Vanderbilt University Press, 1999). Ryder offers a thoughtful, critical, and frequently persuasive look at the whole of American philosophy, including early American political thought, from the perspective of Soviet scholarship.

26. See Kenneth R. Westphal's excellent *Hegel's Epistemological Realism* (Dordrecht, The Netherlands: Kluwer, 1989).

27. As Burke notes, we must distinguish "operational perspectivity from subjectivity." The former is impossible to avoid; the latter in a Deweyan frame is not the starting point, but needs to be explained. See Tom Burke, *Dewey's New Logic: A Reply to Russell* (Chicago: University of Chicago Press, 1994), and below.

28. Ralph B. Perry, *Present Philosophical Tendencies* (New York: George Braziller, 1955), p. 314.

29. Ibid., p. 315.

30. Ibid. Perry's version of direct realism is, to be sure, untenable. See Shook, *Dewey's Empirical Theory of Knowledge and Reality*. But see Roy Wood Sellar's "Materialism and Human Knowing," in *Philosophy for the Future*, pp. 75–105.

31. Burke, *Dewey's New Logic*, pp. 83–96.

32. Ibid., p. 84.

33. M. T. Turvey, R. E. Shaw, E. S. Reed and W. M. Mace, "Ecological Laws of Perceiving and Acting: In Reply to Fodor and Pylyshyn," *Cognition* 9 (1981): 237–304. I have used this example before. For very useful additional discussion of current literature, see Burke, *Dewey's New Logic*.

34. We may note, in passing, that this orientation remains a very minority position in current "cognitive" psychology—essentially because it violates fundamental assumptions derived from traditional epistemology. The critique of Fodor and Pylyshyn is a case example. Also see my "John Dewey and American Psychology," in *Journal for the Theory of Social Behavior* 32 (2002): 267–94.

35. See Peter Manicas and Paul F. Secord, "Implications for Psychology of the New Philosophy of Science, A Topology for Psychology," *American Psychologist* 38 (1984): 399–413, and Peter Manicas, "Modest Realism, Experience and Evolution."

36. See my "W. V. Quine,"in *A Companion to American Philosophy*, ed. John Ryder and Armen Marsoobian (Oxford: Basil Blackwell), forthcoming.

37. Joseph Margolis, *Pragmatism Without Foundations* (Oxford: Basil Blackwell, 1986), p. 285–86. Since "nature" exists mind-independently, we are part of it, and *all* claims are critically accessible; "us" for me is twentieth century *homo sapiens*. Fifty thousand Frenchmen can be wrong. See note 22.

38. *LW* 12: 445.

39. *LW* 12: 437.

40. *LW* 1: 162.

41. *LW* 12: 440.

42. *LW* 12: 445.

43. Perhaps it is unnecessary to note here that Dewey endorses this "ruling out," and that it was precisely this move which defines positivism and which burdened Spencer, Helmholtz, and James.

44. *LW* 12: 445.

45. *LW* 12: 251.

46. *LW* 12: 254.

47. *LW* 12: 255.

48. *LW* 12: xvi.

49. A power ascription can be analysed as: "X has the power to A" means X can do A, in the appropriate conditions, *in virtue of its intrinsic nature* (Harré and Madden, *Casual Powers*, p. 86). Empirical investigation is needed to fill in the italicized clause. This will require theory and, as well, construction of a model, perhaps detailing the microstructure of the "thing." See below. In contrast to nonrealist ascription, "things" have powers even if never exercised, as was held by Peirce. See also Everett J. Nelson's powerful "The Category of Substance," in Sellars, McGill, and Farber, *Philosophy for the Future*, pp. 106–24.

50. *LW* 12: xvi.

51. See Harré and Madden, *Causal Powers*, pp. 19f.

52. *LW* 12: 462.

53. Ibid.

54. Ibid.

55. We need theory to fill in the *ceteris paribus* clause, and we experiment to test the model. See Roy Bhaskar, *A Realist Theory of Science* (Sussex, England: Harvester Press, 1978). If we drop the *ceteris paribus* clause, this becomes a "tendency." On models, see Harré, *Principles of Scientific Thinking*, esp. chap. 2. Derek Sayer has offered a reconstruction of Marx's theory of science along these lines. Thus, Marx criticizes Ricardo and others as engaging in "violent abstraction." He summarizes:

> It conveys the idea of precipitate abstraction from manifest phenomena to their alleged essences, without the mechanisms by means of which the latter cause the former to assume the forms they do being adequately specified; or, to use different terminology, an idea of immediate identification of phenomena as supposed instantiations of general laws, when in fact these laws operate only in mediate fashion through a series of intervening links which the analysis ought to specify.
>
> 'True abstract thinking' . . . entails elaborating the mechanisms linking laws and phenomena in such a way that their apparent divergence is consistently explained. *Marx's Method* (Sussex, England: Harvester Press, 1979), pp. 121, 122.

See also the several essays in *Idealization IV: Intelligibility in Science*, ed. Craig Dilworth (Amsterdam: Editions Rodopi, 1992), including my essay, "Intelligibility and Idealization: Marx and Weber" and references therein.

56. In addition to his book, see the extended discussion in Shook's essay, "Dewey and Quine on the Logic of What There Is," in *Dewey's Logical Theory: New Studies and Interpretations*, ed. Tom Burke, D. Micah Hester, and Robert Talisse (Nashville, Tenn.: Vanderbilt University Press, 2002), pp. 93–118.

57. Writing in the *New York Times* (19 June 2000), the president of the Southern Baptist Theological Seminary held that arguments over creation, women's roles, homosexuality, abortion, etc. are, for his 16 million parishioners, "settled by the word of God."

58. Edward H. Madden and Peter H. Hare, *Evil and the Concept of God* (Springfield, Ill.: Charles C. Thomas, 1968). The book offers a powerful critique of both theism and "quasi-theism" as regards evil.

59. "Comment on Father Clarke's Paper," in *The Idea of God: Philosophical Perspectives*, ed. Edward H. Madden, Rollo Handy, and Marvin Farber (Springfield, Ill.: Charles C. Thomas, 1968).

60. Quoted by Jerry A. Coyne, "Is NOMA a no man's land?" *Times Literary Supplement*, 9 June 2000. Gould seems not to have noticed that the idea that religion and science complement one another is both factually false and founders on the assumption that facts and values can be bifurcated. One may hope that the surveys are flawed, but Coyne notes that "nearly 50 percent of Americans believe that humans were directly created by God within the past 100,000 years, and 40 percent think that cre-

ationism should replace evolution [not just be taught!] in the biology classroom. The *New York Times* helps this along when it publishes an essay by Richard Rothstein (7 June 2000), which argues that "facts are only what we observe." Evolution is not a fact: "There could be other theories." Perhaps Rothstein took a course in philosophy at one of our more distinguished institutions?

61. The term is Irving Kristol's, an ally here. See his excellent "Faith à la carte," *Times Literary Supplement*, 26 May 2000.

62. The best treatment is David Harvey, *The Condition of Postmodernity* (Oxford: Blackwell, 1989).

63. Marvin Farber, *The Search for an Alternative*, p. 130.

64. Karl Marx, "Critique of Hegelian Dialectic and Philosophy in General," in *Writings of the Young Marx on Philosophy and Society*, eds. and trans. Loyd D. Easton and Kurt H. Guddat (Garden City, N.Y.: Doubleday, 1967), pp. 321, 325.

Realism Thick and Thin

Vincent Colapietro

Introduction

The title of my paper carries an echo of William James, while the substance develops a distinction drawn by another classical pragmatist, Charles Peirce. I develop this distinction, however, in directions suggested by the contemporary feminist Naomi Scheman and, to a greater degree, by the psychoanalytic theorist Hans Loewald. The distinction is that between the abstract definition and pragmatic clarification of the real. Abstractly defined, reality means otherness; but pragmatically clarified, its meaning is bound up with the efficacy and frustration of our habits. The direction in which I would like to push the pragmatic clarification of the real is a psychoanalytic consideration of the psyche: *pragmatically*, coming to terms with reality entails coming to terms with our selves and doing so in a manner expressly attentive to the human psyche as a somewhat involuted career of erotic attachments. James would likely have approved (perhaps even applauded) my doing so, though Peirce would almost assuredly have had reservations. So, at the outset, I will call on James to assist me in inaugurating this talk.

In *A Pluralistic Universe* (that is, in 1908, the year of its delivery as a lecture), James suggested that it is high time for the basis of

philosophical discussion "to be broadened and thickened up."[1] Recall the fact that, in these lectures presented at Oxford University, James urged upon his listeners not only Henri Bergson but also Gustav Theodor Fechner. He argued that the questions being addressed by philosophers would be better framed and thus better addressed only when philosophers moved beyond the tightly drawn circle of respectable interlocutors. Here, as in so many other contexts, James was making a bid for those whom he suspected would be deemed "cranks."[2] But thickening the bases of philosophical discussion required broadening the array of relevant voices. In particular, it meant consulting voices lacking standing or (worse) credibility in the refined ears of professional philosophers.[3]

James also urged his listeners, especially the younger ones, to draw their conclusions "from *the particulars of life*."[4] Professional philosophers have devoted themselves too exclusively to discovering what must hold in any conceivable world, thus paying too scant attention to what actually holds in our particular world(s), filled with our own rather peculiar lives. He suggests that:

> Owing possibly to the fact that Plato and Aristotle, with their intellectualism, are the basis of philosophic study here, the Oxford brand of transcendentalism seems to me to have confined itself too exclusively to thin logical considerations, that would hold good in all conceivable worlds, worlds of an empirical constitution entirely different from ours.[5]

James immediately goes on to stress that: "*It is as if the actual peculiarities of the world that is were entirely irrelevant to the content of truth*" (emphasis added). But, in the name of nothing less than reality, philosophers should work to overcome their fixation on the defining necessities of logical possible worlds, thereby freeing their philosophical imaginations to delineate the fateful contingencies of the actual world in which humans compose themselves "through doing and suffering and creating."[6] Reality and philosophy would be served by overcoming this fixation. This is in effect the counsel of James, at least.

To broaden the basis of our discussion of realism will result in

defending a thicker form of realism than ordinarily goes by this name. In particular, to broaden this to include the voice of a contemporary feminist and a psychoanalytic theorist seems especially promising for articulating a sufficiently thick realism. At any rate, that is my thesis.

A Central Tenet of Peircean Orthodoxy

But such thick realism might strike at least some of you as a wild growth, threatening to destroy the carefully cultivated flowers of more disciplined gardeners. And so it may turn out! This growth however can trace its roots to a distinction drawn by Peirce, at the public inauguration of the pragmatic movement. In other words, I can make a show of respectability, since I can offer evidence for my thick realism having its ancestry in a central tent of Peircean orthodoxy.[7] Such realism might turn out to be an unwanted offspring, but it is nonetheless a legitimate one. *Or*, in a more Jamesian spirit, I might say: If this form of realism comes to be judged as simply one other unruly offspring from the brood of bastards spawned by pragmatism, so much the worse for propriety and legitimacy!

In "How To Make Our Ideas Clear" Peirce distinguished three grades of conceptual clarity and, then, used four examples to make this distinction itself clear (hardness, weight, force, and reality).[8] The truly massive, largely inarticulate comprehension or grasp of things, embodied in our habits, is the most rudimentary level of human conceptuality, though hardly deserving the name. This underlying, orienting familiarity *does* entail a grasp of things and, to that extent, performs the function of concepts (or *Begriff*). The second level of conceptual clarity is that attained by abstract definitions, while the third (and highest) level is that won through pragmatic clarifications. Our abstract definitions are articulated against a vast background of largely tacit understanding.[9] The most rudimentary level of human understanding is thus one that I like to call "dumb smarts." For it is characteristically inarticulate. In turn, our pragmatic clarifications are attempts to move beyond

the purely verbal or even symbolic order, for they involve translating our signs into habits of action, expectation, etcetera.

The fourth of Peirce's examples (the idea of reality) is obviously directly relevant to the theme of our conference and moreover to the thesis of my paper. His own efforts to make this idea clearer than it ordinarily is deserve our attention here. But first, as background, a word about the relationship between experience and reality.

Reality as it is encountered in our experience suggests, invites, and on some occasions demands an explanation. It prompts us to ask such questions as "How can this be?" "What accounts for this?" and "What's going on here?"[10] Reality as it exists *apart from* the limitations and vagaries so characteristic of our experience[11] is an idea generated by the very course of our experience: experience attests to its own shortcomings and even mendacity in attesting to a reality independent of it.[12] Our conceptions "do not apply beyond the limits of possible experience,"[13] though by virtue of their implications they almost always transcend the limitations of our actual experience. The *force majeure*[14] inherent in (indeed, definitive of) our actual experience insures that experience is perpetually transcending and transforming itself. Noumena, as the name for things in themselves, is returned to its original meaning: noumena *are* noumena, beings intelligible *in themselves* and thus to some degree intelligible *to us*. To make noumena in principle unknowable is a violation of logic and experience. For "we have direct experience of things in themselves. Nothing can be more completely false than that we can experience only our own ideas. That is, indeed without exaggeration the very epitome of falsity." But our experience of things in themselves and the knowledge derived from this experience "is entirely relative."[15] More fully stated, our experience and knowledge are relative to our histories and the somatic, cultural, semiotic (including linguistic) forms acquired in the course of these histories. By virtue of these histories, we are beings equipped with these sensory organs (more generally, this somatic constitution) and endowed with this symbolic heritage. Our experience of things in themselves is direct yet

mediated[16] by a host of factors. A description of experience truly based on the disclosures of experience, rather than preconceptions, prompts us to move in precisely the direction Peirce's categories (used as tools of inquiry) prompt us to move—toward the recognition of experience as direct encounter with what is other than us, though encounters always mediated by expectations, memories, desires, and countless other factors.

Abstractly defined,[17] reality is other than what you or I or any other finite individual or group of such individuals happens to think; and insofar as experience is itself a mode of cognition, we might add that reality is what might turn out to be other than what such individuals or groups happen to experience. Pragmatically conceived,[18] reality is what calls forth processes of inquiry or interpretation: it is what has the power to thwart or frustrate our habits and thereby the power to inaugurate the struggle to fix our beliefs (including our tendency to cling tenaciously to the beliefs or habits being challenged by experience). This struggle to secure our beliefs in the face of challenges issued by reality, through its intermediary or representative (namely, experience), is a process Peirce called *inquiry*. At the level of abstract definition, the independence of the real vis-à-vis the cognitive processes of finite beings is stressed; at the level of pragmatic clarification, the connection between reality and thought is emphasized (not your thought or my thought, but thought in general). To make the real wholly other than thought would make it completely inaccessible to thought, just as making it utterly dependent on thought would make the real indistinguishable from the imaginary (or fictive). The abstract definition of reality depicts the secondness of the real (the real in its irreducible otherness), whereas the pragmatic clarification highlights the thirdness of the real (the real in its inherent intelligibility). The distinction between appearance and reality must not be conceived as a brute opposition. No dualism in the strict sense[19] should be allowed, though distinctions must be drawn.

What is needed here is nothing less than a conception of reality in its firstness, secondness, and thirdness. But, for the purpose of offering an account of explanation, the aspects of secondness and

thirdness are the most salient. This should not be taken to imply that the facet of firstness is insignificant. This facet might have, in this context, greater importance than Peirce himself tended to accord it.[20]

What is also needed is an account of experience in its firstness, secondness, and thirdness. This is however not the place to offer such an account. Suffice it to say here that Peirce's insistence on the *logical* force inherent in experience, a force operating in unstable conjunction with the *brute* force structuring our experience, is enough to warrant our claim that experience is an instance of semiosis.[21] The process of experience reveals, even at its most primitive level, the action of signs: experience *is* semiosis, or one of its forms. The object of any particular experience is some aspect of our immediate environment, while the object of experience in its totality is nothing less than the universe, the largely unimaginable and incomprehensible arena of human aspiration, solicitude, and striving.[22] "Experience is the course of life. The world is that which experience inculcates."[23]

ROBUST REALISM

Thick realism in my sense is akin to robust realism in Scheman's, for it too insists that a "world that exists in complex interdependence with those who know it (who are, of course, also part of it) is nonetheless real."[24] But a crucial dimension of this complex interdependency is the necessity, on various occasions, to deconstruct the private, projected world in which we are unknowingly imprisoned. Whatever else realism might mean, it must mean that the world may turn out to be other than any one of us, or finite group, happens to suppose. At countless turns, the world actually does turn out to be quite different than we imagined; and it often does so in a manner suggesting that we were not merely mistaken or ignorant, but truly deluded by artifices bearing traces of our own complicity. Thick realism thus should be an expansive realism: it should be stretched to encompass the processes by which the darker tendencies of a trickster self can be seen oper-

ating in conjunction with the complex seductions of a trickster world.[25] Our troubled love affair with the world is, at bottom, just that—a passionate engagement, an erotic attachment or (more accurately) an ongoing series of finely interwoven, erotically charged attachments and detachments.

The pragmatic critique of the aloof spectator, that sovereign subject of traditional epistemology, does not (or should not) yield a coolly dispassionate organism. Rather the human organism is characteristically a passionately engaged agent. The torpor and stupor, the lethargy and deadness so often characteristic of our days might be read as symptoms of passions foolishly spent, hence life unwisely lived. When we are dispirited or deadened, pragmatism is inclined to join psychoanalysis (and, indeed, countless other orientations) in guessing that passion has here gone awry and, of greater moment, continues to be misplaced (see, for example, John Dewey). It is arguable that, at such times, we have put our lives in the service of death and we have done so in ways unacknowledged by us. The only way out is *through*: the liberation of our passions requires the deconstruction of the world in which we have imprisoned ourselves, therein locked in a death grip with some dead thing.

The contrast between tender- and tough-minded thinkers (James) is irrelevant here, but another contrast *is* pertinent. We can contrast thick-headed realists and tough-minded Socratics. Such realists suppose not only that the lumps on their heads, the bruises on their shins, etcetera, are a sufficient testimony to external reality but also that the question of realism reduces to the acknowledgment of the real world in its brute—in fact, brutal—otherness. In contrast, tough-minded Socratics are those who realize that working out the logic of the soul entails confronting the madness of Eros. Thick-headed realists are those unimaginative advocates of an exceedingly thin doctrine, summed up in their definition of reality: the real is whatever is independent of what you, or I, or anyone else happens to think or imagine. For them, the mark of the real is accordingly a form of independence: reality goes its way, taking no heed of our desires or expectations. Indeed, our dis-

covery of reality is made *because* our desires are so often frustrated and expectations confounded; but the operative, ineliminable presence and thus reality of these desires demand recognition.

EROTIC INVOLVEMENT: THE (LARGELY) UNWITTING COMPLICITY OF TRICKSTERS

The world is not primarily an object of knowledge.[26] It is—if not always a theater for heroism—a scene of striving, of passions and pursuits, thus one of consummations and frustrations, thus a place of respites and retreats. The world to which we are ineluctably attached, and with which we are erotically involved, is protean in both the forms it has assumed in the course of our attempts to imagine it (cf. James) *and* our felt but ordinary unexpressed sense of its shape at any moment during our lives. This world is a trickster.[27] But then, so too is the self who the world so often can play for the fool.

As Dewey notes, the organism is, on the one hand, simply one "object" among others, no more subjective for being the subject of experience; but, on the other hand, "the function of organic factors is so distinctive that it has to be discriminated."[28] As misleading as the word "subjective" is to identify this function, it nonetheless has "the advantage of calling attention to the particular agency through which the function is exercised: a singular organism, an organism that has been subjected to acculturation and is aware of itself as a social subject and agent."[29] This point is in effect an echo of one made by Dewey three decades before: "It is impossible to overstate the significance, the reality, of the relation of self as knower to things when it is thought of as a moral relation, a deliberate and responsible undertaking of a self. Ultimately the modern insistence on the self in reference to knowledge . . . will be found to reside precisely here."[30]

According to Peirce, the sane person lives in two worlds. Our sanity is bound up with our ability to draw the distinction between the fictive and the real.

Being in its firstness suggests a mode of being in which differen-

tiation and otherness are absent. Existence or actuality stands in brutal contrast to undifferentiated withness. A robust or thick realism is one in which the reality of the world is not imagined solely in terms of actuality. Stated positively, it is one in which the being of the world is illuminated in reference to the irreducible modes of ontological standing. The airy nothings of "might-be"s and the truly efficacious but often gentle force of "would-be"s are granted a place in our theories in accord with their standing in our experience.

Realism as an abstract philosophical doctrine has its roots in the dark, uneven soil of the human psyche. Its roots, however, are not in the psyche in isolation from the world, and thus not apart from its erotic attachments. Realism concerns the human psyche entangled in its (at least potentially) troubled love affair with a protean world. It can become less abstract and more concrete—truly thicker—only when it accords *withness* and *betweenness* the same recognition as it accords *againstness*.[31]

The world of course does not consciously or intentionally set out to trick us, though there are individual agents whom it shelters who decidedly do! Nor do we consciously try to trick ourselves. Indeed, we could not even if we tried (see Peirce on surprising ourselves).

The pip-squeak of human consciousness, insisting on itself, according itself nothing less than a standing in the universe, is, for us pip-squeaks at least, no trifling matter. The adaptability of our psyches to the demands of a world so often utterly baffling and indifferent, even aggressively hostile, has permitted our survival. But, as Loewald suggests, to frame our conception of reality solely or even principally in reference to what must be taken into account in this and related struggles results in an impoverished conception of reality.[32] My own demands for recognition, my own insistence on myself in the face of others for whom I am completely negligible (for whom I in effect simply do not exist), have their own ontological weight.[33] "What mistrusts itself deserves mistrust"[34] and what demands recognition on its own terms alone stands a chance of winning such recognition. That to which I must adapt is no thoroughly alien tyrant to whom I can only passively submit: it is a trickster who might be itself tricked into acting in my behalf.

Adaptability is found on both sides of the divide between self and other; and such is the character of this divide that it is, in truth, no divide at all. It is an ever shifting line in an inherently unstable relationship, intensely and pervasively charged by Eros. Coming to terms with reality requires us, time and time again, to come to terms with ourselves; and to offer an unblinking self-portrait (that is, one "realistic" in the colloquial sense). The courage to own up to unflattering and disturbing truths about our selves is definitive of realism understood not so much as an abstract philosophical doctrine as a concrete personal stance. But, so too, is an unapologetic affirmation of our own constitutive passions.[35]

James once suggested that "the whole originality of pragmatism, the whole point in it, is its use of the concrete way of seeing. It begins with concreteness and returns and ends with it."[36] If we try to give an account of reality by abstracting from our complex attachments and involvements, we are doomed to offer a viciously abstract[37] and ridiculously thin account. Just as the divine is too sacred to entrust to theologians, and the care of the soul too complex and momentous to leave to psychologists and psychoanalysts, so reality is too subtle and wily to put in the hands of philosophers, especially those who most loudly proclaim themselves to be "realists"!

CONCLUSION

In *A Pluralistic Universe*, James feared that he offered far too thin a formulation of the thick doctrines for which he so desired to win a hearing. That is, he feared that he was, in this regard, too close to the source from whence he derived his distinction. In one of the earlier chapters *of A Pluralistic Universe*, the first one devoted to Fechner, James recalled that

> Among the philosophic cranks of my acquaintance in the past was a lady all the tenets of whose system I have forgotten except one. Had she been born in the ionian archipelago some three thousand years ago, that one doctrine would probably have

> made her name sure of a place in every university curriculum and examination-paper. The world, she said, is composed of only two elements, the Thick, namely, and the Thin. No one can deny the truth of this analysis (tho . . . it has itself a rather "thin" sound). . . .[38]

Then, at the conclusion of this work, he expressed the fear that his lectures sounded "rambling and inclusive,"[39] thereby implying that in lacking more systematic, developed articulation they could not but sound thin. My fears are far graver than his, for I lack the scope not only of a series of lectures but also the vivid sensibility of that "lovable genius," as Whitehead called him. I nonetheless stake my hope exactly where James staked his: if my proposal of a thick realism, no matter how thinly realized here, contains fruitful suggestions for how to broaden the basis of this philosophical discussion—in particular, if I have made somewhat plausible the hypothesis that a pragmatic realism needs to incorporate the central insights of the psychoanalytic perspective, though modified by the reservations of a feminist perspective—(if my proposal contains such suggestions and my hypothesis carries a measure of plausibility), I will be "the cheerfullest of hearts."[40]

Notes

1. William James, *The Works of William James: A Pluralistic Universe*, ed. Frederick Burckhardt (Cambridge, Mass.: Harvard University Press, 1977), p. 149 (emphasis omitted); cf. p. 64.

2. It is worth recalling here, if only in passing, that Charles Peirce was, in William James's judgment, "a hopeless crank"! See Ralph B. Perry, *The Thought and Character of William James*, vol. 2 (Boston: Little, Brown and Co., 1935), p. 375.

3. Here is, of course, an instance of James's characteristic antiprofessionalism.

4. James, *A Pluralistic Universe*, p. 149.

5. Ibid. I suspect that out of politeness to his audience James dropped the modifier "vicious" though this adjective is perhaps redundant, for intellectualism by its very nature is—in his judgment, at least—blind to its

own blindness, unwittingly abstracted from its own conscious abstractions. This is relevant to the question of realism, when that doctrine is understood principally as affirming the independence of the real. James defines "vicious abstractionism" as the tendency displayed when "we conceive a concrete situation by singling out some salient or important feature in it, and classing it under that; then, instead of adding to its previous characters all the positive consequences which the new way of conceiving it may bring, we proceed to use our concept privatively; reducing the originally rich phenomenon to the naked suggestion of that name abstractly taken, treating it as a case of 'nothing but' that concept, and acting as if all the other characters from out of which the concept is abstracted were expunged. Abstraction, functioning in this way, becomes a means of arrest far more than a means of advance in thought." William James, *The Works of William James: The Meaning of Truth*, ed. Frederick Burckhardt (Cambridge, Mass.: Harvard University Press, 1975), pp. 135–36.

6. From James's diary on 30 April 1870, as quoted in *The Writings of William James: A Comprehensive Edition*, ed. John J. McDermott (Chicago: University of Chicago Press, 1977), p. 8.

7. See *The Collected Papers of Charles Peirce*, eds. Charles Hartshorne, Paul Weiss, and Arthur W. Burks, vol. 5 (Cambridge, Mass.: Harvard University Press, 1931–1958), paragraphs 11–12. Henceforth references to *The Collected Papers of Charles Peirce* will follow the usual convention of *CP* followed by volume and paragraph numbers.

8. Both Peirce and James thought that, in the end, one could get the hang of pragmatism only by means of examples. For example, James stressed: "To take in the importance of this principle, one must get accustomed to applying it to concrete cases. Etc." in McDermott, "Philosophical Conceptions and Practical Results" *The Writings of William James*, p. 349.

9. See Robert E. Innis, "Polanyi and Peirce: Perceptual Consciousness and the Structures of Meaning," in *The Peirce Seminar Papers*, ed. Michael Shapiro and Michael Haley, vol. 4 (New York and Oxford: Berghahn, 1999), pp. 531–61.

10. James insightfully notes: "The germinal question concerning things brought for the first time before consciousness is not the theoretic 'What is that?' but the practical 'Who goes here?' or rather, as Horwicz has admirably put it, 'What is to be done?'—'*Was fang' ich an?*'." *The Works of William James: The Will to Believe and Other Essays in Popular Philosophy*, ed. Frederick Burkhardt (Cambridge, Mass.: Harvard University Press, 1979), p. 7.

11. "The experience of ignorance, or of error, which we have, and which we gain by means of correcting our errors, or enlarging our knowledge, does enable us to experience and conceive something which is independent of our own limited views; but as there can be no correction of the sum total of opinions, and no enlargement of the sum total of knowledge, we have no such means, and can have no such means of acquiring a conception of something independent of all opinion and thought" (*CP* 7.345).

12. Peirce does insist that "direct experience is neither certain nor uncertain, because it affirms nothing—it just is. There are delusions, hallucinations, dreams. But there is no mistake that such things really do appear, and direct experience means simply their appearance. It involves no error [nor could it involve even the possibility of error], because it testifies to nothing but its own appearance" (*CP* 1.145). But experience as lived does testify to the world being the way to which it attests. We instinctively take the presentations of experience to be representations of reality (cf. *CP* 1.146). Science is a self-corrective process because its source, experience, can also be a self-corrective process; but what makes experience able to correct itself is that its own finite, fragmentary, and misleading promptings are subjected to wider experience and critical examination. In its immediacy, then, experience might not testify to anything beyond appearances in their firstness, but in its actuality experience takes these appearances to be signs. The principle of fallibilism can thus be traced to the corrigible signs of our actual experience. A sign is anything that might be the basis of error, the occasion for a mistake. Our experience, as lived, is replete with such occasions.

13. *CP* 6.95.

14. Experience "is the *enforced* element in the history of our lives. It is that by which we are constrained to be conscious of an occult force residing in an object which we contemplate. The act of observation is the deliberate yielding of ourselves to that *force majeure*—an early surrender at discretion, due to our foreseeing that we must, whatever we do, be borne down by that power, at last. Now the surrender which we make in Retroduction [or abduction], is a surrender to the insistence of an Idea" (*CP* 5.581, emphasis added). This nicely brings out the brute and logical elements inherent in experience.

15. *CP* 6.95. See also Sandra Rosenthal, *Charles Peirce's Pragmatic Pluralism* (Albany: State University of New York Press, 1994), and Innis, "Polanyi and Peirce: Perceptual Consciousness and the Structures of Meaning."

16. This distinction is largely implicit in Peirce and when it is made explicit the terms used can be misleading. No doubt, the assertion that experience is *direct yet mediated* might itself seem confusing or, worse, contradictory, for *direct* is often taken to be synonymous with immediate. But I directly see the road by means of my glasses: the mediation of these optically corrective lenses are dynamic signs, making possible a connection between two factors otherwise cut off from each other! On the one hand, Peirce insists that we *directly* experience things in themselves: we are not imprisoned within our own perceptions or even our own language(s) because we are utterly dependent on perceptual experience and the symbolic elaboration of our perceptual judgments. Percepts and words are signs by which reality is rendered accessible, not screens falling between us and the world we posit but pronounce ever unknowable. On the other hand, he explicitly acknowledges that our experience is mediated, though he uses *indirect* rather than *mediated* to designate this aspect: *experience* "means nothing but just that of a cognitive nature which the history of our lives has forced upon us. It is indirect, if the medium of some other experience or thought is required to bring it out. Duality, thought abstractly, no doubt requires the intervention of reflection; but that upon which this reflection is based, the concrete duality [the direct encounter of self and other in their brute secondness] is there in the very experience itself" (*CP* 5.539). But any experience carries echoes of past experiences and anticipations of future ones that in a way—and to a degree—forces us to see how memory and expectation are woven into the very fabric of experience. Our present experience is significant through the mediation of its retrospective and prospective tendencies.

17. There are for Peirce three grades of clarity: that of unquestioned, effective familiarity; that of explicit, abstract definition; and that of pragmatic clarification. Our efforts at formal definition and pragmatic clarification always take place against a vast, vague background. This is the starting point from which we set out. Since there is ultimately nothing with which it might be set in contrast, it always remains largely indistinct and unnoticed.

18. Peirce thought that it was crucial for us to "be on our guard against the deceptions of abstract definitions" (*CP* 7.362). His efforts in the direction of pragmatic clarification were partly motivated by his awareness of these deceptions and their consequences for inquiry. The abstract definition of reality as that which is independent of thought can be deceptive in its own way, suggesting too simple a relation between

thought and reality. Many realists take the reality of reality, as it were, to be compromised the moment it is connected conjunctively (rather than disjunctively) with thought, inquiry, or experience. Clearly Peirce was not such a "realist"; he thought that the pragmatic clarification of this pivotal notion required highlighting just this conjunction or connection.

19. Here, as in virtually every other context, we see Peirce's synechism (or principle of continuity) at work. "Synechism, even in its less stalwart forms, can never abide dualism, properly so called. It does not wish to terminate the conception of twoness. . . . But dualism in its broadest legitimate meaning as the philosophy which performs its analyses with an axe, leaving as the ultimate elements, unrelated chunks of being, this is most hostile to synechism" (*CP* 7.570). The distinctions between appearance and reality need to be drawn in such a way as the connections between appearance and reality become evident or at least allow for the possibility of being made intelligible.

20. "If all things are continuous, the universe must be undergoing a continuous growth from non-existence to existence. There is no difficulty in conceived existence as a matter of degree. The reality of things consists in their persistent forcing themselves upon our recognition. If a thing has no such persistence, it is a mere dream. Reality, then, is persistence, is regularity. In the original chaos, where there was no regularity, there was no existence. It was all a confused dream" (*CP* 1.175). But here Peirce is not sufficiently careful in drawing the distinction between reality and existence (or actuality) that he so often insists on. "The modern philosophers . . . recognize but one mode of being, the being of an individual thing or fact, the being which consists in the objects crowding a place out for itself in the universe so to speak, and reacting by brute force of fact, against all other things. I call that [mode of being] existence" (*CP* 1.21). But dreams are real in their own way, even if their mode of being is markedly different from that of a spatio-temporal object. Reality in its firstness is akin to a dream: it is marked by neither brute actuality nor growing regularity but rather by sporting spontaneity. Peirce the logician goes so far as to assert that "logic teaches us to expect some residue of dreaminess in the world, and even self-contradictions . . ." (*CP* 4.79).

21. See, for example, *CP* 1.220.

22. Unlike so many of his contemporaries, Peirce did not feel that the outlines of the cosmos had been discovered, only requiring later generations to fill in the details. Quite the contrary. He believed that, "notwithstanding all that has been discovered since Newton's time, his

[Newton's] saying that we are little children picking up pretty pebbles on the beach while the whole ocean lies before us unexplored remains substantially as true as ever, and will do so though we shovel up the pebbles by steam shovels and carry them off in carloads. An infinitesimal ratio may be multiplied indefinitely and remain infinitesimal still" (*CP* 1.117).

23. *CP* 1.426.

24. Naomi Scheman, *Engenderings: Constructions of Knowledge, Power, and Privilege* (New York and London: Routledge, 1993), p. 99.

25. Ibid., pp. 101–102.

26. In *The Quest for Certainty*, John Dewey asserts that: "The world as we experience it is a real world. But it is not in its primary phases a world that is known, a world that is understood, and is intellectually coherent and secure." *The Later Works of John Dewey*, vol. 4: *The Quest for Certainty*, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1984), p. 235.

27. "The world as real is the world as precisely not dead or mechanistic the world as trickster, as protean, is always slipping out from under our best attempts to pin it down. The real world is not the world of our best physics but the world that defeats any physics that would be final, that would desire to be the last word." Scheman, *Engenderings*, p. 100.

28. Dewey, "The Objectivism-Subjectivism of Modern Philosophy," in *The Later Works of John Dewey*, ed. Jo Ann Boydston, vol. 14 (Carbondale, Ill.: Southern Illinois University Press, 1988), p. 198.

29. Ibid., p. 198–99.

30. Dewey, "Epistemological Realism: The Alleged Ubiquity of the Knowledge Relation," in *The Middle Works of John Dewey*, ed. Jo Ann Boydston, vol. 6 (Carbondale, Ill.: Southern Illinois University Press, 1978), pp. 120–21.

31. What James said about the conflict between materialism and idealism seems equally applicable to that between realism and idealism. "The strife of these two kinds of mental temper will, I think, always be seen in philosophy. Some men will keep insisting on the reason, the atonement, that lies in the heart of things, and that we can act *with*; others, on the opacity of brute fact that we must react *against*." *The Will to Believe*, p. 76.

32. Hans Loewald, *Papers on Psychoanalysis* (New Haven, Conn.: Yale University Press, 1980), pp. 3–20.

33. This is a characteristically—one might say, definitively—Jamesian point, which he made at the outset of his intellectual career and

reaffirmed ever after. In his "Remarks on Spencer's Definition of Mind as Correspondence," James concludes by stressing that "the knower is not simply a mirror floating with no foot-hold anywhere, and passively reflecting an order that he comes upon and finds simply existing. The knower is an actor, and coefficient of the truth on one side, whilst on the other he registers the truth which he helps to create. . . . In other words, there belongs to mind, from its birth upward, a spontaneity, a vote. It is in the game, and not a mere looker-on; and its judgments of the *should-be,* its ideals, cannot be peeled off from the body of the *cogitandum* as if they were mere excrescences. . . ." *Works of William James: Essays in Philosophy,* ed. Frederick Burckhardt (Cambridge, Mass.: Harvard University Press, 1978), p. 21. See also *A Pluralistic Universe,* p. 143.

34. James, *A Pluralistic Universe,* p. 143.

35. "May I, composed like them / Of Eros and of dust, / Beleaguered by the same / Negation and despair, / Show an affirming flame." W. H. Auden, "September 1, 1939" in *The English Auden: Poems, Essays, and Dramatic Writings, 1927–1939,* ed. Edward Menelson (New York: Random House, 1977), p. 247.

36. James, *The Meaning of Truth,* pp. 115–16.

37. Ibid., pp. 135–36.

38. James, *A Pluralistic Universe,* p. 64.

39. Ibid., p. 149.

40. Ibid.

The Varieties of Realism Worth Wanting

Randall R. Dipert

Realism. Pragmatism. Throw in naturalism for good measure. It would be difficult to cite names for philosophical positions that stretch over so much territory. Other names for philosophical positions seem to have more of a precise and definite use, such as nominalism or idealism. One can point to single thinkers who are paradigmatic or even the founders of nominalism and idealism. What thinker is the paradigmatic realist? Who is the founder of the position we celebrate as realism?[1]

One source[2] wisely describes realism as not so much a philosophical position or belief as a direction. Can a direction be *true*, or *false*? Is a direction to be *believed*? Well, maybe a direction can be correctly said to be wrong, but on a globe and maybe in the strangely curved spaces where we philosophers operate, this means only that one direction might be shorter than others.

If I look from the outside at the practices of a discipline—any discipline—and see members of an intellectual position declaring themselves to be the upholder of one "ism," or labeling others' views as representatives of some other failed or flawed ism, then I would frankly form the suspicion that this is a puerile profession, not quite developed and falling into modes of discourse that are more characteristic of religious or political fealty and factionalism. Holders of isms believe in things, and accuse others of believing in

the wrong things.[3] (Philosophical naturalism is another one of the problematic labelings and seems to be especially missionary-like in its zeal: science is good.) A part of me wants to say: this is not how a good discipline—a morally good and intellectually respectable one—should conduct its business. It is hard for me to imagine wise theoretical physicists of past or present labeling each other "spacists" or "neutrono-ists" or "unificationists." Part of the problem with responsibly using isms is in so casually describing people together as having a certain intellectual allegiance or tendency, and part of the difficulty is in lumping people together in terms they themselves don't recognize—such as describing Davidson and Quine as pragmatists, let's say. Then too, when it is not self-declared, classification of others seems to be a between-the-lines and at the same time possibly sloppy reading of what thinkers *do* claim. It is paying attention not to what people do say, and their careful articulations and arguments, but to our sociological predilections. Perhaps it is ultimately not to respect people's words and conceptions of their own views.

My hesitation and queasiness becomes still more intense when it turns out there is no widespread agreement what the core of an intellectual ism is. And when we try, our definitions founder on even more obscure and dubious terms. Consider pragmatism. Has anyone ever proceeded—acted—with regard only for theory and not for practice? Could one possibly proceed only by heeding practice and not theory? Is there a viable distinction here?[4] Consider now realism. What about mind-independence? The pivotal role played in this definition by minds and their activities, explicitly conceived as nonphysical or internal, is a notoriously difficult and also a fairly recent—and hence suspect—notion in the history of philosophy.

Now I don't want to appear too sanctimonious, but you might say that I am too good of a pragmatist to be much interested in pragmat*ism* or real*ism*. I want to know about wise ways of acting and philosophizing, not merely how to talk or label, myself or others. What are the distinctive intellectual and behavioral practices of mathematical realist for example, or of a pragmatist? I wonder. I

strongly suspect that a similar reaction might have been part of Peirce's strange outburst when asked to acknowledge his grownup intellectual child, that is, when it had been entified—ism-ified—by James (and F. C. S. Schiller). Then too, Peirce was constitutionally hypersensitive to whiffs of seminary philosophy (of *believing in*) that I suspect may have reinfected philosophy, and hypersensitive to tendencies of viewing philosophical debates sociologically and merely as clashes of schools with opposing Doctor-väter.

I apologize for opening this essay with such a raw feeling—an ill feeling—about my subject matter. I know that is not normally how we like to think of ourselves as proceeding. During my recent service in the federal government, I had to determine when I was acting strictly as a private citizen and when as a Department of Defense employee, when it was a private concern and when a professional, down to classifying individual e-mails. I tried to proceed in a certain open and fair way, and this strange mode has begun to creep into my philosophy as well. When is the argument sincere, and when is it a feeling or hunch decorated with philosophical argumentation? My peculiar resolution has been to examine and declare as best I can my own relevant emotional baggage, and let the listener decide. (This worked well in my encounters with the Judge Advocate General's (JAG) office. I would describe an activity to my assigned JAG officer as best I could. The office couldn't usually decide whether it was official or unofficial either, but at least it wasn't my fault!)

The Varieties of Realisms

In some ways, the pluralism about realism is worse than about pragmatism. The realists tell us what they are being realistic about. We have at least these positions:

Scientific realism
Mathematical realism
Moral (or ethical) realism
"Physical" Realism (vs. idealism)

There are many more: legal, aesthetic, as well as more narrowly domain-specific realisms, such as set-theoretic or possible-world realism.[5] These realisms are all types classified along the lines of an attribute or domain: for some kind of attribute or family of attribute, these attributes are held to be "real" or "not real." This is one dimension to the realism debate. Pragmatists tend to be pragmatic about everything.

A couple of comments. One might suspect that my analysis of the cleavage or dimensions of realism does injustice to the spirit of some realisms or irrealisms. Someone might claim that it is not attributes that are real, but things or kinds of things.[6] Thus someone might claim that it is physical things and not physical attributes that are real. However, this claim is overly sensitive to the hint of Platonism; I have deliberately not spoken of realism with respect to properties in order not to beg questions. By using the word "attribute" I do not mean to suggest that the attribute is real in the manner of a universal or other Platonic entity. There are other ways in which attributes may be real, really instantiated for example, without being ideal, or merely nominal or conceptual. A physical realist claims that physical things are real (whatever this means), without thereby admitting that physicality as a universal is real.

I also do not think it is clear or even coherent to say physical things as individuals are real, but not their attributes (in my weak sense). What is it to be a distinctively *physical* thing? Surely it is to have certain distinctive attributes, such as being perceivable or being in space and time. Thus to be a physical realist, or maybe better, a physical-object realist, is to claim that physical attributes are not dependent on will or mind. The emphasis, the only coherent emphasis, is on the *physical*-object realism, not on the *objecthood*. All, or at least most, of what appear to be realisms about things or objects are thus realisms about attributes or families of attributes.

Even this is a very problematic aspect of the debate. I am claiming that we do not know, cannot conceive of, and cannot meaningfully refer to "things" independently of attributes that distinguish them. This leads us straightaway into difficult debates about bare, naked, or otherwise indiscernible individuals. It is only

about objects' attributes that we can think or talk, and thus we may hold convictions only about whether such attributes are real. This is not precisely to say that naked individuals do not exist, but rather to say that the content of a naked-individualist realist's convictions would be inscrutable. (There might be indirect arguments for such entities.) I myself have attempted to articulate the view that our very notions of individual and object are artifacts of our language and logic; I am an individual/object irrealist. To me, nominalism seems grotesquely excessive. Therefore, we can separate two strands, two distinct issues, in what we may call "physical object realism." One is the status of physical attributes, about which I personally tend toward a species of realism that I will shortly discuss. The other is the reality of objects or individuals that have these attributes. Here, I am an object or individual irrealist. I do not think there is a mind-independent thing which is, say, the apple. Maintaining that the physical attributes of the apple are in some sense real, whereas the thing—the logical individual—that *has* these attributes is not real is surely a great of perversion of everyday thought. It is also one I think I can defend. But that is a long story.[7]

Philosophers have recently shown little reluctance to name or endorse the kind of realist or irrealist they are or aren't, using the word "real." One strange exception is in the philosophy of mind. We do not have mind, consciousness, or mental-state realists and irrealists—at least not in that terminology. We have critics of folk-psychological notions, and defenders of folk psychology: there are or not beliefs, desires, and so on. Where have all the crusading missionary realists and antirealists in the philosophy of mind gone?

This is puzzling, but I think I have external and nonsuperficial explanations of this professional phenomenon of nomenclature.[8] The first and I think salient explanation is this. Realism has by and large been used to describe whether an attribute is mind-independent, in the world, and not a creation of our minds. I think we are hesitant to debate whether "minds are real" because we are aware this translates into asking: "Are minds mind-independent?" One test condition for mind independence begins: "If there were no minds, would there still be <some attribute>." I think most people

realize there is some peculiarity with the question: if there were no minds, would there still be minds?

Exactly this odd problem points up difficulties with the precise definition of "realism." Describing the mind independence that is the core idea of realism is a tricky business. To be mind-independent, and thus real, is to be beyond the mind's ability to create or to change—consciously or unconsciously, intentionally and willfully, or not. It is to be out of reach of the mind's influence.[9] However we cannot determine, in this or any case, this influence and connection by any sort of direct inspection, let alone introspection.

Certainly part of the difficulty is describing, referring to, or thinking about things that could be mind-independent. What is that like? When we try to think about these things, all that comes to mind, so to speak, are thoughts. And these are obviously mind-independent, at least my thoughts on an occasion. Instead, we must resort to what we might call symptomatic criteria, or indicators, or mind independence.

Efforts to devise criteria leads us to pose a difficult subjective question about thought and minds: could the world be thought of coherently or usefully otherwise, that is, without the questioned attribute? The test then is much like one for a causal influence: we vary the possible influence—the mind's relation through conceiving—to see if there is a change of effect. This effect is roughly our ability to get along in the world, to manipulate and explain it, as a whole.

For our peculiar test question, "Are minds real?" we do not ask if minds are independent of minds. Instead we ask: are there ways of thinking about the world that are equally or more coherent or useful such that we do not refer to, or think about, what we now call "minds"?

The section of this description having to do with ways of thinking is a subjective invocation of mental activity—what we as philosophical wonderers are to do—and is distinct from the consideration of the concept or name of "mind" as part of the alternative, as part of the fabric of the "object" we are inquiring about.

This humble exercise in the consideration of a concocted type

of realism, mental realism, ultimately shows that there is not something wrong with mental realism, but instead something wrong with the occasional description of the meaning of being "real" and "realism."[10] Mental realism is (relatively) coherent, while our application of the usual criteria or definitions of realism turns it into gibberish. Some delicacy is required. Now I want to look at my proposed, supposedly more delicate, criterion as a schematized formula. It says roughly: if there are

<1: alternative ways of thinking; conceptual schemes; theories . . .>
such that
< 2: they are equally coherent, useful, etc.>
and they are such that attributes P are
<3: not used, not basic, . . .>,
then such attributes are *not* real.

If there are no such alternative ways of thinking, then the attributes *are* real.

The first schematic placeholder I will call the "systematic alternative mode of thought"; the second is the "constraint" or value condition on this thought; and the third the "absence condition," a description of the alternative mode of thought as not having, or not using centrally, the considered attribute.

Some Comments

This is not an attempt to define what we mean by something's being real. Instead it is an attempt to formulate a criterion. Its point is rather simple. To say something is unreal means it might be comfortable and common imputation of our minds, but matters could be thought of otherwise. The criterion requires a notion of mental or thinkable possibility or alternatives that is well known from the possible world chatter.

On close inspection, passing the criterion for reality in any concrete instances (there are no alternatives so far as I can determine) does not establish with certainty the reality of anything. Instead, it merely marks failure to pass the criterion as suggestive of reality. It assumes that features, demarcations, or theories for which thinkable alternatives exist are dubiously real. The criterion articulates a kind of highly indirect evidence, but the best we can hope to get, about the relationship between our language and thought on the one hand, and reality itself on the other hand.

A full and fair application of the criterion would require us to survey all—including highly imaginative—alternatives in order to show something real. Evidence for nonreality is easier to come by. But useful indications of reality require some verification through a negative existential: there seem to exist no thinkable alternatives. As the history of Euclidean geometry shows, this may require feats of imagination that elude the best thinkers for millennia.

The application of the criteria for reality requires the application of three philosophical notions. Each is somewhat difficult (and has alternative versions depending on one's scrupulousness and methodology). First, the notion of a way of thinking; second, some value by which we measure alternative ways of thinking; and third, some criteria of what it is to have, and to lack, the use of an attribute[11] in some way of thinking.

One formidable difficulty is that this criterion does not consider that the unthinkability of alternatives might arise from sources other than the nature of reality. Some features may be a logical or analytical part of what it is to be a way of thought, such as consistency or mathematical attributes. Some other features may have this mind independence in ways that are otherwise a priori. There may even be organizations of reality that are highly convenient or necessary for creatures like ourselves in order to think about the world, but that are not (in some sense) there. This is the territory of what was called before Kant a mere *entia rationis*, and after him and in a more precise sense, synthetic a priori.[12]

Let us return for a moment to what I see as the odd absence of a position called "mental realism." My first line of explanation is

that the phrase "mental realism" would be puzzling if we use our usual vague criterion for being real, an inexact gloss of mind independence. My second explanation is this. The issues of the ontological status of minds, their contents, and processes have recently been locked into terms of a debate that involve delicate shading among reductionism, eliminitivism, supervenience, and so on. Except perhaps for some forms of eliminitivism, there have been no sustained arguments that minds or mental states don't exist or are not real. They are not outright fictions, delusions, or mental creations. A simple mental antirealism is thus rare—who could we hope to convince of that? What we instead have in the philosophy of mind is a far more complicated, and to my mind more useful, debate about the exact relationship of mental entities to other entities. There is little appetite for declaring mental entities to be lacking reality altogether. Rather, they have a reality that we might mistake for distinctive mental reality that is, or could be, a manifestation of another category of real things, such as physical reality. This debate has centered more on questions not of out-and-out reality and nonreality, but on the relative basicness of various forms of reality.

We can transplant such considerations into the physical realist debates. When Quine claims that enduring physical objects are "posits," and cites Rudolf Carnap for a unempiricist naïveté on this point, we might interpret him not as saying that physical objects lack reality altogether. Instead, he could be taken to suggest that their status as physical objects is not purely real; that some of our views of things come from (supervene on) what's out there, and some accrue merely from the useful framework. We can't tell which, or can't have evidence to settle the question (this duplicates the Kantian distinction between noumenal and phenomenal), making it fairly worthless to discuss.[13]

This then points to two different ways in which something could be real. One is that it is primarily real: roughly, no remotely useful or coherent conceptual scheme lacks this attribute. The other is that it is secondarily real (as perhaps minds are with respect to physical reality): they are possibly conventional and cre-

ated descriptions that are reducible to or supervene on attributes that *are* real. Since they are certain arrangements of physical reality, we can't think that away. Although things get fussy and somewhat strange, we can see some admissibility to Quine's irrealism with respect to numbers but realism with respect to sets. If one has sets, one can devise notions that serve as numbers for our scientific purposes. It doesn't particularly matter which sets so serve, but it would be odd and an overdramatization of one's position[14] to say that numbers have no reality, since numbers are, perhaps stipulatively, sets or set-theoretical features, and sets are real. Or perhaps: the sets which exemplify the number relations are real enough.[15]

SOME APPLICATIONS

In a recent course on the philosophy of science, I found myself saying that I believed that the development and proof of the internal consistency of non-Euclidean geometries spawned the greatest identifiable shift in our understanding of science, theory, and ultimately reality itself in modern natural philosophy.

The issue is the reality of space. Are our spatial notions, or space itself, created by the mind, or are they real features of the world? If space and time are unreal, then we will certainly have difficulties with the reality of other notions, such as physical objects, physical events, and causes.

Before I continue, note that the terms of this debate on space and time give some evidence for preferring my "attribute over thing" portrayal of realisms. I have met many self-declared realists about cause, space, time, and so on, although I think they are not really realists but common-sensists. None of them, indeed no philosopher since Thomas Hobbes, has been inclined to claim that space was a real thing. It must be spatial, and causal, relations that people think are real (or not).

It is one of the more astounding developments in the history of thought that Leibniz, Hume, and Kant could contemplate something like the possible unreality of space and time before alternative

geometries were clearly understood. In the case of Leibniz, I suspect we have a mathematician who was aware of the general phenomenon of various possible ordering or structuring relationships. Although he did not know, in the sense of Riemann and after, that there existed perfectly consistent alternative geometries, and certainly did not know that some of these might have equal or even greater utility when applied to physical space (that is, in some interpretations of the General Theory of Relativity), he clearly suspected viable alternatives. In the case of Kant, it was the strong necessity and universality of Euclidean and causal modes of thought that appeared to him to be suspicious of a mere empirical reality.[16]

After Hilbert's axiomatization of geometry (1899) especially, it became clear by implication that we could not speak simply of space being unreal or not. Rather, the traditional notions of space have various components that are separable (into axioms or subsets of axioms[17]): aspects of a dimensional manifold and their independence; various aspects of metrical structure (Euclidean, Lobachevskian, Riemannian); topological, affine, and projective characteristics; and measures of how the basic elements, points, are articulated and ordered—its Archimedian or continuous character, for example.

Still later, Albert Einstein's Special Theory of Relativity, with its integration of time into the supposedly purely spatial dimensions, was a blow to common-sense notions of space, but not to the idea of a spatial reality—of *a* space—at some level of mathematical generality. Likewise, recent proposals in superstring theory that space has many more dimensions than previously considered is a blow to superficial aspects of our traditional notions of geometry and classical mechanics but not to the idea that things are in *some* space or other.

I happen to believe that the tweaking of these various parameters of space, while holding on to, or trying to hold on to, the idea of physical events occurring, and bodies existing, in a space and time, are the last stages of a degenerate paradigm of classical physics. I think we will find that there are mathematical structures other than the now horribly perverted "space" we inherited from

our forefathers that do a better job of precisely and usefully describing physical reality. (Steven Weinberg has suggested future developments along these lines, and underscored the difficulty they will pose for our intuitional faculties.) My prediction is thus not of a Grand Unification but of a Grand Collapse and rebirth of dramatically nonspatio-temporal mathematizations of physics. You need not follow me in these views to admit that it has been unclear for some time exactly which spatial attributes are real and which are not.

But the lessons from the debates over the reality of space are not heartwarming. We failed to see alternatives to Euclidean geometry for thousands of years because we did not commit ourselves to the development of alternatives. Their eventual development took an odd twist of mind, imagination, and then persistence.[18] This means, for me, that tests of alternative nonthinkability, and hence, purported reality, are likely to be passed much too easily. As theorists about possible theories, we are a lazy and unimaginative species. However, the alternative hypothesis that there are always other, thinkable, and useful conceptual schemes likewise has come too easily after the geometry wars and conventionalist crises of the nineteenth century. Instead of having to show that there truly are alternative, satisfactory conceptualizations, some of our philosophers now just assume that there typically are. One should have to prove, for example, that we can indeed do without the posit of physical object and not just declare that it is just like the case with geometries.[19]

In my unguarded moments I would say that I do not believe in the reality of space. However, I realize now that this is not precisely accurate. I believe that many spatial attributes are probably mind-imposed, because of the existence of clear, and sometimes more useful, alternative attributions of spatial structure. But there are some features of traditional spatial structure that strike me as suspiciously and abidingly useful. For example, the fact that almost all meso- and macroscopic phenomena are adequately describable in exactly three dimensions strikes me as suspicious, as it has Henri Poincaré and superstring theorists. There must be

some feature of the ordering of events and objects that brings this about, regardless of whether other aspects of spatial structure are conventional and hence irreal, or not. I have a hunch based on the evidence that this is either an a priori feature of structures that we usefully impose on reality, or that it is a feature of physical reality. But it is not a convention, a mere posit. Even in my most fanciful and extreme effort to apply a far-fetched mathematical structure to the world, namely my monorelational combinatoric (graph) theory, there must be some constraint on the permissible graph structures that allow spacelike, dimensional structure to supervene on these deeper and simpler structures.[20] Tridimensionality has some sort of reality, even if it might not be basic.

Despite my considerable efforts to be perverse and iconoclastic, precisely in order to stretch the idea of imaginable and adequately describable far beyond the common-sense humdrum in which I think most of my philosophical and scientific colleagues are sometimes utterly mired, I have not been able to eliminate all the traditional attributes of spatial structure. Some of the features of this conception persist in having the "odor" of reality.

Pragmatism and Realism

In his admirably succinct *The Last Word,* Thomas Nagel is evidently more than a little surprised to find that Charles S. Peirce was both a realist and pragmatist. He, like most people, seems to have presumed that pragmatism would most naturally engender a near universal irrealism, for we might guess that what is useful changes in a variety of ways. But Nagel encounters this passage by Peirce from his *Reasoning and the Logic of Things*:

> The soul's deeper parts can only be reached through its surface. In this way, the eternal forms, that mathematics and philosophy and the other sciences make us acquainted with[,] will by slow percolation gradually reach the very core of one's being, not because they involve truths of merely vital importance, but because they are ideal and eternal verities.[21]

Of this passage, and despite his evident surprise, Nagel writes: "Now I find these declarations not only eloquent but entirely congenial; they have a radically antireductionist and realist tendency quite out of keeping with present fashion." Likewise Nagel is inclined, as am I, to see Peirce's notorious social-convergence description of truth not as a definition of truth but as a characterization, a mere derivative property, of both truth and of the scientific community.

I am less surprised than Nagel that a pragmatist would be a realist. Realism, understood as some shade of mind independence, cannot be established directly. Hence it must be indicators, or symptomatic criteria. This is what I called the test of alternative conceivability. But merely being a consistent way of thought and that somehow lacks a given attribute or kind of thing is not sufficient to count as a viable alternative. That there exist only numbers as described by the Peano postulates—no physical objects, no minds—is as consistent as one could get.[22] However it lacks some other feature, such as workability in bequeathing conceptualizers a meaningful life, or of explanatory capacity. Except perhaps for Pythagoreans.

It is what I'm calling here the "workability" of a theory lacking an attribute that gives us evidence (apparently the only evidence) of that attribute's unreality. Consequently, the meaningfulness of any claims for the reality, or irreality, of an attribute, are inextricably tied to what we might call a pragmatic methodology. It is then not at all surprising that a pragmatist such as Peirce could be a realist about something. If I am right, only pragmatists are entitled to be realists, or irrealists. Others are whistling in the wind.

My claim is this. If one seriously makes realist or irrealist claims about anything, then one is some sort of pragmatist. This is not to say that if one is a pragmatist then one makes serious realist or irrealist claims. There are pragmatists, and others, who avoid making any claims about what is real or what is not real. We could call this position, with a bit of justice perhaps, Rortyism. It is, I believe, a consistent position; indeed, it has a certain integrity.

Obviously I need to say something about the value that gets applied to the alternative conceptual schemes in order to deter-

mine whether an attribute has symptoms that indicate reality or irreality. This is what I called "workability."[23] I hope you will have sympathy with my admission that I cannot here satisfactorily explain what this might be. Roughly it is some sort of judgment about the broad usefulness for human purposes of a system of attributes and distinction, and laws about them.[24] It is systematic to be sure, involving not merely the "local" satisfactoriness of the attribute, but its interaction with all other attributes. I do not think its satisfactoriness is simply explanatory: an attribute is not useful merely because it aids in explanation, nor is it useless if it does not add to our explanation.[25] There are other human activities besides explanation. To think otherwise is to dwell on the passive, epistemic, contemplative side of our nature at the expense of the active side. There are action-guiding formulas that do not aid our explanation of the world, and have little or no evidence of the ordinary sort in their favor, but that they are useful to follow. One is Peirce's maxim, "Do not block the road of inquiry." Others are corollaries of this maxim, such as a drive to acquire data, including data against our theories; the assumption that there *is* a reality to investigate; that reality is humanly understandable; that we cannot be certain, should not be certain, we have yet understood it fully, and so on. These are methodological or metascientific principles of action and investigation, but there is no reason to think that they do not have a belief content like any lower-level theoretical belief.

I believe this view distinctively separates a serious pragmatism from positivism and neopragmatism, as Peirce realized to his horror with his first formulations of pragmatism in "How to Make Our Ideas Clear." The value of a belief consists entirely in its action-guiding character, its subsequent effects and effectiveness,[26] rather than in its sources and causes. (However, some kinds of sources may generally be effectiveness enhancing, such as "rational" ones that permit verification.) The pragmatic, action-guiding characterization is forward looking, beyond a belief to the induced actions; the epistemological, evidential criterion of rationality is backward looking, to a belief's origins or basis.

CONCLUSION

In my now admittedly "sociological" view there are very roughly three positions one may take on the issue of realism. There are those who are advocates of some sort of realism. There are those who are advocates of some sort of irrealism, or even of a sweeping irrealism. (I do not think one could be a sweeping realist about all manner of distinctions and attributes.[27]) And there are those who refuse to wade into any realist/irrealist claims. This is the position that Crispin Wright terms quietism.[28]

Before I began this paper, I tended to be inclined toward some sort of realism. I also tended to reject out of hand the third category of abstainers as some sort of irenic debate avoiders that were not really philosophers but diplomats, hoping to sidestep altogether the more ferocious philosophical debates. I myself have had little personal inclination to diplomacy and conflict avoidance, although I'm slowly acquiring such an inclination.

However, given the extreme difficulties with the usual meanings of realism that are bandied about and that I have here reflected upon, I do not now reject the agnostic position with anything like my former vehemence. I think it still lacks a certain *je ne sais quoi* that I will shortly try to pinpoint, but it is not broadly objectionable.

My problem, as I now see it, is with two bands I'll call "cheap realists" and "banal irrealists." In my conception of how to adjudicate an assertion of the reality of an attribute, one must have good reasons to believe: (1) there is no workable conception of the world without this attribute, and (2) the indispensability of the attribute is not so a priori. Additionally, depending on the variety of realism one is claiming, one may have to show that the feature is a basic, and not reducible to a more basic, real feature of the world.

The ubiquity of names or concepts for an attribute in one's own or other cultures is but feeble evidence for this. The deeply felt unimaginability of its alternative counts for little. Even the centrality of it for life or language as one can imagine means little. Our best mathematicians had to struggle for thousands of years before the awkward concept of the "curvature of space" could make sense—

before it could become, in some sense, imaginable. It took another hundred years before its workability in mathematical physics could be shown, to some degree. I believe this historical incident counts as a grave warning against the folly of commonsense philosophy.

This is not to say that we can't conjecture about what is, and what is not real, based on what highly indirect evidence we have. But we should keep in perspective the fragility of this reasoning and the inadequacy of common-sense realism, about which we have such strong feelings.

The cheap realists are those who have learned little from the geometrical and conventionalist debates of the nineteenth century.[29] The banal irrealists have I think learned too much: they have generalized the case of alternative geometries, and assumed that alternatives are always possible. But I think it is extraordinarily difficult to determine from the proverbial armchair the implications for human actions of changes in this or that belief, or in conceptualization.[30] Changes in beliefs, like changes in governmental laws and regulations, have more untoward effects than they have "toward" ones. Consequently, we cannot just suppose that a conceptual scheme without physical objects, for example, is sure to be just as workable as was one with a non-Euclidean geometry instead of a Euclidean one. For one thing, I do not think we understand how the "physical object" is used in our conceptual scheme and what exactly an alternative would be. We cannot say with the cheap realist that we cannot imagine there not being physical objects, and therefore they're real. But we also cannot say, with the banal irrealists, that of course there are imaginable and fully workable alternatives for (almost) any attribute or type of thing.[31] The banal irrealists have generally shunned the heavy lifting of (1) describing in detail an alternative conceptual scheme, such as one without physical objects, and (2) of showing how such a scheme is—not might be—truly workable across a wide range of human purposes. Although I am caged in by my previous utterances about the ethics of name calling, I owe you some hint of those whom I might mean by the phrase "banal irrealists." I have in mind the Harvard philosophy I so admired in my philosophical

youth, at least as I understood it. Despite what I am calling its "banality," the view has in a sense been enormously productive. Some of its disciples have turned into radical realists, such as David Lewis's possible-world realism, and others seem really to have undertaken the onerous task of constructing alternative worldviews and demonstrating their workability. Here I have in mind a work such as Hartry Field's *Science without Numbers*.[32]

But there is another problem with the irrealist position. It is one of the post-positivistic triumphs of the latter half of the twentieth century to have relearned how to separate the epistemological question of the means by which we show a statement to be justified, from the metaphysical one question of whether it is true. Truth conditions might be, and typically are, independent of how we ascertain whether these conditions are met. For the issue at hand, what realism is can be rather straightforward: it is mind independence, existing independently of what you, I, or anyone thinks or says. However, how we determine evidence for or against this independence is a different matter. This, I argued, requires something like the criterion of alternative workability.

However, there is another aspect of a statement, such as "Numbers are real." What is it exactly to *believe* it? How are the neurons, the actions, practices, emotions, and lives of people affected who believe numbers are real, as opposed to those who do not? At first blush it seems only to be a kind of nervous linguistic tick: when we ask "Are numbers real?" they blurt out "Yes!" while others say "No," and still others frown at the question or laugh aloud.

Things are not so bad, however; although Number Realism is a tough case. I think that someone who believes that numbers are real will display a certain commitment to investigating them. The very topic of the attributes of numbers will create wonder and curiosity. This curiosity will seem naïve to the irrealist. While irrealists might believe it is a useful career exercise to investigate the implications of what people think about numbers, they will not have genuine curiosity about the numbers per se. Instead, it is a somewhat arbitrary sociological affair. Likewise, there is not likely to be a single-minded commitment to investigating what numbers

are. Irrealists may, like all of us, be motivated, even driven, to investigate something, and succeed at it as a sort of arbitrary high bar. But their motivation will be exterior—for institutional success, perhaps—or in any case of a restrained interior sort. It is an arbitrarily or accidentally chosen cultural feature we are investigating. It is impossible to imagine an intrinsic, fully aware, commitment or motivation to the project. Finally, whatever success is achieved by the irrealist in formulating an account of the phenomenon will have a kind of hollow triumph. We realize the nominal nature of the "facts" we have discovered.

Irrealism, and especially a programmatic irrealism, is a kind of stingy, error-shunning project. It stifles the motivation, at least for some kinds of motivation, of what Plato considered philosophical *wonder*. Realism has driving, motivating forces to it, at least in theory. This enhanced motivation is more likely to impel us to new discoveries. It also has the capacity to bring nonillusory satisfactions that a thoughtful self-aware person has, which no irrealist can feel in contemplating the same subject matter. In short, I have argued that realism about something, perhaps about many things, is more workable than programmatic irrealism. A view short of quietism suggests that if our whole welter of concepts, beliefs, motivations, and emotions is somewhat successful, then there is something in them that accurately fits reality. This has been called "minimal realism," but it might be better called minimal, unspecific realism.[33] The tuning of mind to world could be worse.

But the problems with programmatic irrealism are deeper than exceeding its evidential warrant.[34] A human life, in order to be a full human life, or for us to imagine another as having a life such as ours, is one which we see as motivated by habits of action to which there are attached certain feeling. It is not just behavior patterns, induced by whatever sort of rule following. They will tell us they do not believe numbers or physical objects are real. But we see them intensely calculating, upset at a mistake, struggling to measure irregular carpet, and so on. In such circumstances, it is difficult not to say that they are misdescribing their own beliefs—that they say they do not verbally assent to the statement that

numbers are real when they in fact believe it, or that they do not know their own beliefs. While we can imagine a lack of commitment to even investigate or ponder the evidence for supernatural or extraterrestrial creatures, we cannot imagine a life without wonder at or commitment to anything.

There really are commitments, enthusiasms, and beliefs, whatever people think.

NOTES

1. We might think of Peirce as a paradigmatic pragmatist, but this is illusory and merely "nominal" on Peirce's own account. He was quick to see clear pragmatic strains, even self-conscious ones, in his predecessors, such as Kant and Aristotle. Peirce was not the first pragmatist, in his own account, so much as the one first to use the name that has stuck.

2. A recent encyclopedia of philosophy I consulted.

3. George Santayana attempted a retrograde legitimization of "believing in [a thing]" over "believing that [a proposition]" but with a different set of concerns. He was interested in showing the necessary assumption of the existence of things as part of "animal faith"; and not, at least not explicitly, in bringing back the full thunder of the *Credo in unum Deum*.

4. Although I will scarcely touch on it, a sophisticated attempt to describe pragmatism that is roughly correct is to be found in Joseph Margolis's *Pragmatism Without Foundations* (Oxford: Blackwell, 1986), pp. 201–202. My own criterion of pragmatism emerges at the end of the paper. I think that antifoundationalism is entailed by key pragmatic doctrines, and is not part of these core doctrines, as Margolis would have it.

5. For a current inventory I have consulted the index of the *Routledge Encyclopedia of Philosophy*, vol. 10, pp. 340–41. One author sensitive to the manifold kinds of realism is Sami Pihlström in *Structuring the World* (Helsinki: Philosophical Society of Finland, 1996), pp. 20ff.

6. Dummett says that realism is a doctrine applying to sentences; Edward Craig says that it applies to things, or facts or states of affairs involving them ("Realism and Antirealism," *Routledge Encyclopedia of Philosophy*, p. 116). I believe this is quite confused, since many types of things could involve both features that are real and features that are unreal, for example, mass and "apparent color."

7. Namely in my "The Mathematical Structure of the World: The World as Graph," *Journal of Philosophy* 94 (1997): 329–58. Roughly, I think that structures or patterns are real, whereas "entities" required for their description (nodes in my graphs; grammatical subjects and individuals) are pure artifacts.

8. I am somewhat curious if there are cases where the terms of "realism" and "reality" are used for minds. But even isolated cases would not dissuade me from my general claim, since, for example, in contemporary disputes over consciousness, the issue is just not framed that way. Nor, for that matter, is it framed in any way that is metaphysically bold and open.

9. The influence is not precisely causal. The mind does not bring about some change in the world, but rather contributes to our very description and grasping of the phenomenon.

10. A number of authors have commented upon, or implicitly acknowledged, this difficulty (such as Sami Pihlström in *Structuring the World*). However, I think not enough thought has been directed at stating the precise criteria for indicating reality, and the extraordinary difficulties that I find with the exercise should make us far less sanguine in even talking about realism and antirealism.

11. There are some issues of philosophical types that I am glossing over. What we *use* are not attributes, but concepts or words.

12. Michael Dummett in *Truth and Other Enigmas* (London: Duckworth, 1978) avoids this difficulty of collapsing "empirical" reality together with uninteresting nonempirical reality by saying that realism is with respect to a set of sentences and that realism is the thesis that the truth conditions of these transcend the recognitional capacities possessed by their users. Colin McGee refers to this in *Knowledge and Reality* (Oxford: Oxford University Press, 1999) as the "standard view" but separates carefully the ways in which truth conditions outstrip this recognitional character. He also suggests that what count as recognitional capacities—strange intuitions—must be fixed. This approach strikes me as anything but standard in the history of philosophy, and far too much hangs on what one means by "sentence" or "truth conditions"—not to mention "transcend" and "recognitional capacity."

13. There are some reasons to believe that Quine is a programmatic irrealist, rather than holding the evasive realism I here consider: physical objects are in a sense real, but not basic, or their being basic is not necessary for all science.

14. As I think Quine and his followers sometimes are.

15. I find the position of arithmetical irrealism and set-theoretic

realism to be (barely) conceivable but not at all attractive. My reason is that concepts of sets are a good deal less clear-headed than those of numbers, so explanation of numerical features cannot be accomplished by appealing to set theory. The case for the irreality of numbers but the reality of sets involve claims about the centrality of sets for science that are scarcely possible to adjudicate here, and the notion of centrality for science Quine uses seems to me to be a very thin pragmatic notion that amounts to guessing what might, or might not be, useful or necessary.

16. We might say that passing the "usable and thinkable alternative test" too easily gives evidence of an attribute's unreality in the sense of more likely or possibly arising from a binding regularity of our minds. It is when alternative modes of thinking do not have this compulsive or necessarily unthinkable quality, and yet are not preferred in some vital respect, that we have evidence of reality.

17. Even this is complicated by the more unusual alternative axiomatizations that resulted from work by the Postulate Theorists, Tarski, and others. There do not even appear to be unique, nonconventional descriptions of the separable subproperties of a geometry.

18. Perhaps we had to wait not only for the right individual thinkers to come along, but also for large-scale changes in culture and intellectual framework.

19. To be sure, I think many of the finer developments in this philosophy of conceptual frameworks and scientific theories have also arisen from careful consideration and comparison of natural languages (starting with the Whorf Hypothesis), and with the development of formal languages and their semantics. However, I think that the very idea of semantics and interpretations first arose in the "interpretations" of geometries by Riemann and Beltrami, and thus the crisis of non-Euclidean geometry also spawned the development of semantic theory in some broad sense.

20. An especially attractive take on preconditions for realism is noted by Margolis: "To theorize about the structure of the world is to theorize about our competence to grasp that structure, and to claim any competence is to claim that its exercise entails some grasp of the actual world's structure." *Pragmatism Without Foundations*, p. 141. If taken very seriously, this requires an examination of the structures we can contemplate, all possible structures, and by what techniques the structures we attribute to the world are delimited—whether for our convenience or from what appears to be a compulsion "from without." Now structures are not predicates, or lists of sentences; they are holistic attributes of our conceptual schemes that are

extremely difficult to describe. This is the purpose of my graph-theoretic structuralism: to begin this investigation, since logic, even set theory, is at best a language for these structures, not descriptions of these structures.

21. Peirce's quotation may be found in *The Collected Papers of Charles Peirce*, eds. Charles Hartshorne, Paul Weiss, and Arthur W. Burks, vol. 5 (Cambridge, Mass.: Harvard University Press, 1931–1958), paragraph 648; and in variant form in *Reasoning and the Logic of Things*, ed. Kenneth L. Ketner (Cambridge, Mass.: Harvard University Press, 1992), pp. 121–22. I read the strange locution "merely vital importance" as a rejection of James's instructions for the lecture series to Peirce and of his shallower conception of "usefulness" and "vital importance."

22. Though not provably consistent, of course.

23. A less satisfactory criterion for the reality of an attribute is that it is an ineliminable part of the "best explanation," a view arising from Gilbert Harman and discussed in Crispin Wright, *Truth and Objectivity* (Cambridge, Mass.: Harvard University Press, 1992), p. 174. Another criterion is apparent convergence of opinion—a view that could be taken to have been Peirce's suggestion. But convergence of opinion can first of all only be local, a momentary blip in the static of changes in opinion; and secondly convergence can be sociological, rather than "scientific" in the sense of Peirce. That is, we would first have to establish that there *is* convergence, second that it is *long-term* convergence, and third that is strictly within a community of *scientifically motivated* inquirers.

24. I thus distinguish between what it is useful, in some specific context, for a *single* human to believe and act upon, and the general case of what is most workable for human purposes broadly construed. The special cases are the territory where some have argued the "will to believe" should be employed: where a belief for which there is a great deal of evidence—explanatory satisfactoriness—such as one's lover's unfaithfulness, should not be accepted, because of its emotional or actional unworkability. It would destroy this human life. However, I see human purposes as guided by broad stratagems, and a local exception comes into conflict with useful general stratagems, for example, "believe that for which there is considerable evidence," that even this individual should generally employ, and conflicts with stratagems that have society-wide workability for most people most of the time, and which help them to resist believing merely according to what is most comfortable in their own judgment at that moment. To accept a localized will-to-believe doctrine is ultimately to advocate impulsiveness. That is, such a proposal

lacks diachronic-individual and culturally general workability, and it is epistemic habit-stratagems, not "perfect" individual judgments, that we should cultivate and train.

25. The conflation of general satisfactoriness with explanatory satisfactoriness is a dominant theme of analytical philosophy that is driven by the philosophy of science. "[T]heoretical or inductive reasoning is an attempt to improve one's overall view of the world by increasing its explanatory coherence. . . . Similar considerations are relevant to practical reasoning." Gilbert Harman, "Practical Reasoning" in *The Philosophy of Action*, ed. Alfred Mele (Oxford: Oxford University Press, 1997), pp. 149–50.

26. This is not quite right, even for my exaggeration of Peirce's view. Avoiding the irritation of doubt and achieving the satisfaction of belief, any belief, as a feeling, a Firstness, may have *some* intrinsic value. However the stability of beliefs, their doubt-resilience over time, is of still higher value. What is important, I believe, is to see rationality of belief in traditional senses (justification, evidence, and so on) as only *derivatively* valuable from its *likely* capacity for effective action-guiding.

27. My teacher Hector Castañeda occasionally sounded broadly realistic, with his maxim to "complicate" and his rejection of Ockham's Razor. However, this was at what he called a protophilosophical stage, or at an early stage of philosophizing. His considerations of what *might* be real were profligate, but his judgments about what is demonstrably real were far more restrained (in fact, I could never tell what he did believe).

28. Wright, *Truth and Objectivity*, p. 202.

29. Although it is part of a longer dialectic, Pihlström's utterance is problematic: "We need to postulate unobservable entities for explanatory purpose, and there is no good reason to adopt any skeptical attitude to the existence of these entities." *Structuring the World*, p. 380. We may indeed need to postulate some entities, but need they be the ones of present-day science? Usefulness is not synonymous with holding to be real, let alone with "existing."

30. Those who think of a worldview, a way of life, as just a set of sentences that are taken to be true, have a far too superficial view of human mental life. Sentences, and their component concepts are not simply "believed" or not. For this reason, I reject realism as being about sentences, or even as language-relative in any formal sense. If anything like this is true, "internal realism" is not a serious view, and is not "realism" in any case.

31. Except the sets of set theory? This sounds preposterous.

32. With which I disagree in the main, but it is a sound application of an irrealist program.

33. It is perhaps suggested by Santayana's idea that we presuppose the reality of "substance."

34. By being an analogical argument from the case of geometry.

7 Can Pragmatic Realists Argue Transcendentally?

Kenneth R. Westphal

A priori argument has been in disfavor among pragmatists ever since Charles Peirce characterized the a priori method as adopting metaphysical systems "chiefly . . . because their fundamental propositions seemed 'agreeable to reason'," where "agreeable to reason" principally means "agreeable to *one's own* reason," that is, agreeable to one's own antecedent intellectual predilections.[1] If that is the a priori method, it is just as untenable as Peirce claims. Kant's transcendental arguments are a special kind of a priori argument, involving strong modal claims about necessary conditions for the possibility of integrated self-conscious experience. Alleged requirements for the very possibility of self-conscious experience would appear to raise precisely the specter Peirce warned against, the implicit use of antecedent predilections as criteria of acceptability. Kant's strong modal claims may also appear incompatible with another hallmark of pragmatism, namely fallibilism. How is it possible to have fallible knowledge of necessary truths? Simply raising this question leads many philosophers to dismiss the whole topic. That is unfortunate, for there are very powerful pragmatic accounts of our knowledge of mathematical and natural necessity in Peirce, John Dewey, and Frederick Will.[2] Indeed, our knowledge of logic and mathematics is fallible,[3] as is our knowledge of epistemic principles, including criteria of

justification.[4] I shall return to this issue later in order to focus now on an issue central to this volume: pragmatic realism.

Recently Sami Pihlström has argued that pragmatists ought to return to their Kantian roots.[5] I wish to endorse and extend his proposal. Why? Because recent analytic philosophy has smothered the naturalism and realism of classical pragmatism under conceptual scheming. The roots of classical pragmatism indeed lie in Kant—and Hegel, who was the original pragmatic realist.[6] I mention Hegel here because he was the first to identify the argument in Kant that I shall discuss below and to recognize that it provides a genuinely transcendental argument for realism *sans phrase*.[7] In contemporary terms, the argument is a transcendental argument for mental content externalism.

PUTNAM'S "INTERNAL REALISM"

To focus my main issues about realism, consider Hilary Putnam's contrast between metaphysical and internal realism. According to Putnam, each comprises of three theses.

Metaphysical realism holds that:

MR1 The natural world exists and possesses its own determinate properties, regardless of our conceptualizations, beliefs, theories, or epistemic perspectives.

MR2 In principle, there can be a single unique, complete, true description of the natural world.

MR3 Truth is nonepistemic correspondence between our beliefs, theories, statements, or judgments and parts, features, or aspects of the natural world itself.

Internal realism holds that:

IR1 The natural world and whatever exists within it can be meaningfully discussed or thought about only within a conceptual scheme, linguistic framework, or description.

IR2 There cannot be any single, unique, complete, true, and hence privileged description of the world.

IR3 Truth is epistemic, and is a matter of ideal rational justification or acceptability.

Many contemporary philosophers, including Putnam, regard pragmatism as a version of internal realism. Perhaps some versions of pragmatism are internal realisms. However, internal realism doesn't capture the (nonreductive) naturalism so central to the American tradition of pragmatic realism. Genuine realists are impressed by such facts that, e.g., rock maple can only be turned and joined in certain ways; otherwise either the wood shatters or the fasteners bend, break, or simply fail to enter the wood. Do what you like to your conceptual scheme, it won't change this characteristic of rock maple. Similar facts are found throughout engineering and materials science, and they provide a much more sober view of the reality of the natural world than does, e.g., high energy physics—at least when the latter is read through the lenses of recent philosophical semantics or theories of confirmation. As Dewey noted, one of the key features of objects is that they ob-ject.[8] These remarks gesture toward a certain way of defending MR1. Before proceeding further, I should indicate that I aim to uphold MR3—truth is a nonepistemic notion—and yet to reject MR2, the ideal of one complete description of the world. Those of us committed to MR1 and MR3 would also dearly like to know how internal realists propose to explain why we so often make—and detect!—errors, both theoretical and practical (e.g., in engineering), in our investigations or reconstructions of nature.

Note that IR1 is not the contradictory of MR1. IR1 is compatible with MR1. Appearances to the contrary are generated by either of two assumptions.[9] One assumption is the long-standing, if often implicit, empiricist assumption that realism requires some

form of knowledge by acquaintance. This assumption is false,[10] but that has not prevented it from being extremely influential, as witnessed by how many philosophers reject MR1 by adopting IR1.

The other assumption involves a very particular approach to questions of ontology, canonized in Quine's notion (following Carnap) of "ontological commitment." This is a commitment to the existence of whatever entities can serve as arguments or values for the bound variables in one's choice theory, or by (extreme) extension, one's whole conceptual scheme.[11] In effect, "To be is to be the value of a bound variable."[12] This thought leads to the implicit, often explicit, and widely pervasive assumption that ontology is subordinate to semantics. On this assumption IR1 is incompatible with MR1. However, I don't think this assumption is tenable. Semantic ascent (i.e., recourse to metalinguistic analysis, rather than the material mode of speech) undercuts realism.[13] Hence it is no surprise that analytic philosophers, who are deeply and antecedently committed to semantic ascent, regularly dispense with realism. Unfortunately, they rarely ask which is more important, realism or semantic ascent? (Here is an instance of the a priori method as Pierce characterized it.) The assumption that ontology is subordinate to semantics should not appear plausible to pragmatists, whether realists or otherwise; a hallmark of pragmatism is that our concepts and symbol systems have genuine use and significance only when engaged in our various attempts to act in and find out about the world.[14]

While it may be true—I believe that it is true—that we cannot think or know about anything without employing concepts, this does not restrict our thought solely to the explicable content of our concepts; our conceptual thought about things is rooted in our activities involving those things. Our engagement with things regularly provides us information that either confirms or corrects our thoughts about them.[15]

Please notice a potential ambiguity in IR1:

IR1 The natural world and whatever exists within it can be meaningfully discussed or thought about only within a conceptual scheme, linguistic framework, or description.

The term "only" in IR1 could be taken to assert either of two claims. One claim would be the denial of knowledge by acquaintance:

NKA In no case can we think about or know anything without using concepts or propositions.

I agree with Putnam (and many others) in upholding this thesis.[16] Notice, however, that the "only" in IR1 could also mean to assert this "restriction" thesis:

R Our thought about, and knowledge of, anything is restricted entirely to the explicable content of the concepts in terms of which we formulate propositions about them.

I submit that Putnam's appeals for internal realism trade on these two theses, and seduce philosophers into accepting R on the basis of rejecting knowledge by acquaintance. This seduction is facilitated, not only by Quine's popular idea of ontological commitment, but also by the long-standing attempt by analytic philosophers to explicate the content of our concepts in terms of implicit, though explicable descriptions of the putative objects of thought. This attempt is manifest, too, in the widespread commitment to descriptions theories of reference, descending from Russell's theory of descriptions, according to which our linguistic utterances refer only to whatever they (implicitly or explicitly) describe. I submit—I cannot argue the point here[17]—that R is false; certainly it is not a thesis any pragmatist ought to accept. A key tenet of pragmatism is that our concepts have genuine use and significance, including "content," only through their use in our various activities, in and through which we engage with things. This is to take the slogan "meaning is use" very seriously; by taking it seriously we recognize that descriptive conceptual content is a necessary but by no means sufficient condition for our thinking about and identifying things.[18] Because descriptive content is only one aspect of our thinking about—and our cognitive engagement with—things, if we think about things scrupulously and persistently, we are engaged with

them in ways that can generate information that enables us to assess and revise the descriptive content of our conceptions of things, even regarding basic a priori concepts and categories.[19]

One of Putnam's complaints against realism *sans phrase* is that we allegedly can't make sense of "the world" independently of our conceptual scheme. This is false. The world itself plays a crucial role both in enabling and in correcting our empirical thought, and it can play this role because our thought is inextricably dependent on the world. That is a key Hegelian-pragmatic insight that has been lost to mainstream analytic semantics.[20] Once explicated, Putnam may well reject R. However, without R, Putnam's Carnapian Worlds argument to the effect that we can make no sense of the world as such, independent of our descriptions or conceptual schemes, utterly collapses. Let's examine that argument.

PUTNAM'S "CARNAPIAN WORLDS" ARGUMENT

I turn now to the core issue. MR1 is defended by realists (e.g., Michael Devitt[21]) as a basic assumption, a basic empirical fact (including the fact that the world long antedates any human beings and hence any of our theories or beliefs about the world), or as the best and only plausible reason why natural science has made such astonishing discoveries and progress. These are considerable reasons in favor of MR1. However, internal realists brush such points aside with semantically based arguments epitomized by Putnam's Carnapian Worlds argument.[22] Putnam contends that the very cardinality of the 'objects' in the world depends on the language we choose to describe it, e.g., whether we choose a "normal" commonsense view of objects or instead choose the language of mereology, and that there is no fact of the matter to settle which language is the 'correct' one. Even if these languages are interdefinable, any one of them may be better suited than another to certain purposes. Moreover, there is no clear-cut distinction between questions of fact and of meaning required to evaluate these alternative languages, nor indeed is there a clear-cut distinc-

tion between factual and evaluative issues required by such evaluations either. Hence "[n]ot even God could tell us if [a] chair is 'identical' with its matter . . . or with the space-time region [it occupies]," says Putnam.[23] Choices among fundamental languages, e.g., substance or process ontologies, can only be made on pragmatic grounds of convenience for various purposes. Hence there are no theory-independent facts of the world. Thus, "[i]f one cannot say *how* THE WORLD is theory-independently, then talk of all these theories as descriptions of THE WORLD is empty."[24] This is tantamount to thesis R.

The debate over MR1 between realists and internal realists has reached stalemate. Other considerations are required to advance the issue. The Kantian roots of pragmatic realism provide such considerations. Kant noted the consequences of a certain incapacity of ours, an incapacity even more basic than those canvassed by Peirce.[25]

An Abbreviated Transcendental Argument for Realism

A crucial feature of Kant's "formal" idealism is that the matter of experience is given to us *ab extra*. This is itself a transcendental material condition of self-conscious experience.[26] Kant recognized only one other transcendental material condition of self-conscious experience: the "transcendental affinity of the manifold of intuition." In brief, this condition notes that any world in which human beings are capable of self-conscious experience is one that must provide us a certain minimally recognizable degree of regularity and variety among the contents of our sensations. In any world lacking this minimum degree of regularity and variety, we could make no judgments, and so could not identify objects or events, and so could not distinguish ourselves from them, and so could not be self-conscious.

This condition is peculiar because it is both transcendental and formal, and yet neither conceptual nor intuitive, but rather mate-

rial. The transcendental affinity of the manifold of intuition is *transcendental* because it is a necessary a priori condition of the possibility of self-conscious experience. It is *formal* because it concerns the orderliness of the matter or content of sensation. However, ultimately it is satisfied neither by Kant's a priori intuitive conditions of experience, space, and time as forms of human intuition; nor by the a priori conceptual conditions of experience, Kant's categories. As Kant twice acknowledges, its satisfaction is due to the "content" or the "object" of experience.[27]

In this connection Kant argues[28] that a complete sensibility and understanding, capable of associating perceptions, does not of itself determine whether any appearances or perceptions it has are in fact associable. If they weren't, there may be fleeting episodes of empirical consciousness (i.e., random sensations), but there could be no integrated, and hence no self-conscious, experience. In part this would be because those irregular sensations would afford no basis for developing empirical concepts or for using categorial concepts to judge objects. (There could be no schematism, and hence no use, of Kant's categories in a world of utterly chaotic sensations.) In this regard, the necessity of the associability of the manifold of intuition is a *conditional* necessity, holding between that manifold and any self-conscious human subject. Necessarily, if a human subject is self-consciously aware of an object (or event) via a manifold of sensory intuition, then the content of that manifold is associable. The associability of this content *is* its "affinity." Because it is necessary for the possibility of self-conscious experience, such affinity is transcendental.

Kant makes the transcendental status of this issue plainest in the following passage, though here he speaks of a "logical law of genera" instead of the "transcendental affinity of the manifold of intuition."

> If among the appearances offering themselves to us there were such a great a variety—I will not say of form (for they might be similar to one another in that) but of content, i.e., regarding the manifoldness of existing beings—that even the most acute human understanding, through comparison of one with another, could not detect the least similarity (a case which can at least be

> thought), then the logical law of genera would not obtain at all, no concept of a genus, nor any other universal concept, *indeed no understanding at all would obtain*, since it is the understanding that has to do with such concepts. The logical principle of genera therefore presupposes a transcendental [principle of genera] if it is to be applied to nature (by which I here understand only objects that are given to us). According to that [latter] principle, sameness of kind is necessarily presupposed in the manifold of a possible experience (even though we cannot determine its degree *a priori*), because *without it no empirical concepts and hence no experience would be possible.*[29]

Despite Kant's shift in terminology, it is plain that the condition that satisfies the "logical law of genera" at this fundamental level is the very same as that which satisfies the "transcendental affinity of the manifold of intuition." In the extreme case suggested by Kant, where there is no humanly detectable regularities or variety within the contents of our sensory experience—call it "transcendental chaos"—there could be no human thought, and so no human self-consciousness, at all. Kant establishes this necessary transcendental condition for self-conscious human experience by identifying a key cognitive incapacity of ours: our inability to be self-conscious, even to think, even to generate or employ concepts, in a world of transcendental chaos. We can recognize Kant's insight only by carefully considering the radically counterfactual case he confronts us with: by recognizing how utterly incapacitating transcendental chaos would be for our own thought, experience, and self-consciousness. This transcendental proof establishes a conditionally necessary constraint on the sensory contents provided to us by the objects we experience.[30] Below a certain (a priori indeterminable) degree of regularity and variety among the content of empirical intuitions, our understanding cannot make judgments; consequently we cannot under that condition be self-conscious. Above this minimal level of regularity and variety, there is then a reflective issue about the extent to which our experience of the world can be systematized. This level pertains to Peirce's abductive arguments for generals.

Kant explains the "necessity" of transcendental conditions of possible experience exclusively in terms of the nature and functioning of our cognitive apparatus ineluctably structuring our experience in accord with those conditions.[31] This thesis defines Kant's transcendental idealism. Though Kant argues that this kind of explanation also holds true of the transcendental affinity of the manifold of intuition, his arguments for this conclusion are all invalid. The reason is the same in each case. If the matter of sensation is given us a posteriori, then *ex hypothesi* we cannot generate its content. Consequently, we also can neither generate nor otherwise insure the regularities, the recognizable similarities and differences, within that content or among that set of given intuitions. The satisfaction of the principle of transcendental of affinity by any manifold of intuitions or appearances cannot be generated, injected, or imposed by that subject; in Kant's terms, it cannot be a "transcendentally ideal" condition of possible experience.

Though it takes further analysis to carry the argument through,[32] the upshot of this finding is that Kant's transcendental idealism is subject to internal critique. A sound version of the standard objection to Kant's arguments for transcendental idealism—the so-called "neglected alternative"—can be deduced from Kant's own principles and analysis in the first *Critique*. Hegel recognized this, and he recognized that this finding provides a genuinely transcendental argument for commonsense realism and (nonreductive) naturalism regarding the objects of human experience: any world in which we human beings can be self-conscious is one that has a natural structure unto itself that provides us with at least a minimum necessary degree of regularity and variety among the contents of our sensations.[33]

TRANSCENDENTAL ARGUMENT VERSUS "CARNAPIAN WORLDS"

How does this finding help resolve the debate about MR1? In several ways. First, Putnam's Carnapian Worlds argument is essen-

tially semantic. It presupposes that we can use and develop a variety of languages or descriptions, and that we are self-conscious enough to assess them and choose among them for various (no doubt at least partially self-conscious) purposes. Consequently, any world in which we can engage in the activities and face the problems central to Putnam's internal realism, is a world in which we can be self-conscious. Hence any world in which we can engage in the conceptual activities central to Putnam's internal realism must (according to the argument of the previous section) have a natural structure unto itself that provides us with at least a minimum necessary degree of regularity and variety among the contents of our sensations. This is MR1, at its most basic and general level. Hence Putnam's Carnapian Worlds argument cannot refute MR1.[34]

Second, Putnam's Carnapian Worlds argument doesn't bear on MR1; it actually bears on MR2.[35] However, I don't believe that MR2 is a thesis that any sober realist or naturalist (pragmatist or not) must or ought to uphold. By their very nature, descriptions are abstract and incomplete. Given human finitude, they must be. An important point is occluded by Putnam's discussion of categorically different but interdefinable languages (e.g., process *versus* substance ontologies), namely: any descriptions of phenomena of any use to us involves various rates at which processes occur or frequencies at which events occur. Those rates and frequencies are intrinsic to the phenomena described, and are neither constituted nor altered by our descriptions—no more than pieces of rock maple can be nailed together without breaking either the wood or the nails.[36] Even the most radical of epistemological perspectivisms—Friedrich Nietzsche's—is consistent with realism, and must be consistent with realism to suit his own aims and needs.[37]

When Putnam observes that "[n]ot even God could tell us if [a] chair is 'identical' with its matter . . . or with the space-time region" it occupies,[38] he fails to note that there is no reason to expect even God to answer the question. Both descriptions, in terms of the chair's matter or its space-time region, are abstractions from the concrete history of some particular chair. Indeed, the chair cannot be "identical" with either its matter or its space-

time region. To be a chair, the matter must be formed in certain ways; to identify the space time region "it" occupies, we must be able to identify the occupant in order to identify the relevant space-time region. Either of Putnam's descriptions is useful for some purposes and not for others, and neither gives us a complete description (or account) of the chair, much less its very "identity." *A forteriori*, neither its matter nor its space-time region can be "identical" with the chair. This is because space-time continuants can only be specified by *conjointly* specifying their regions and their characteristics, both intrinsic and relational.[39]

Third, I must take special exception to the prevalent notion that "properties shadow our predicates." (In effect, this notion follows Quine's notion of ontological commitment.) Of course our *ascription* of properties shadows the predicates we use to characterize things or events. However, Kant's transcendental argument for the transcendental affinity of the manifold of intuition shows that if some of our basic predicates did not track some elementary properties of things and events in our world (via our use of those predicates in cognitive judgments), we would fail to be self-conscious. The notion that properties shadow predicates is linguistic idealism, pure and simple; it is a decidedly pre-Kantian, deeply defective, and misleading notion.

A final important point can only be mentioned here. These considerations provide sufficient grounds to advance beyond a minimalist, disquotational conception of truth and to defend a nonepistemic, correspondence conception of truth (i.e., MR3), at least as concerns molar objects and events.[40]

FALLIBILISM

One of Putnam's main reasons for adopting internal realism is that he cannot tolerate the thought that a cognitive claim might satisfy our ideal criteria of justification and yet be false. This could be the case if truth is "non-epistemic" because truth "transcends" the justification condition on knowledge. To cut off this prospect, Putnam

insists that truth must be an epistemic notion, more or less equivalent to "fully satisfying our very best criteria of justification."[41] Note that I said this is one of Putnam's main reasons for adopting, not for justifying, internal realism (in particular, IR3), and that he insists that truth must be an epistemic notion. Frankly, I find no arguments in his writings to support either contention; his appeal is essentially rhetorical.[42]

The rhetorical appeal of Putnam's claims comes, I believe, from two implicit convictions.[43] One is that, if a cognitive claim fulfills our ideal criteria of justification, surely it must have some grip on the truth. I think this conviction has merit. The question is why. Putnam links truth and fulfillment of ideal criteria of justification by definition. (Or at least by partial definition; it is the only positive characterization he gives of truth in these contexts.) That, I believe, is egregious excess. Though I doubt this *ideal* case has much role in (or sheds much light on) actual human cognition, I submit instead that truth and fulfillment of ideal criteria of justification are linked de facto because we're good enough at investigating the world that if we do make cognitive claims that fulfill our best (or even ideal) criteria of justification, we do so only because we have indeed learned quite a bit about the world, including what exactly is made manifest by our observational or experimental equipment and what is evidenced by our data.[44] Note that this can be the case even if it turns out that the central claim in question is only approximately true, and may ultimately require refinement. When Putnam says that, if truth is nonepistemic, then it transcends justification, the remark has apparent persuasive force only if "transcends" is understood, at least implicitly, as "completely transcends." No realist, no defender of MR3, believes, should believe, or needs to believe this. Fallibilism holds only that our best criteria of justification do not guarantee the truth of an "ideally" justified claim; it certainly does not hold that our best criteria of justification fail altogether to be truth-indicative.

Certainly there is a logical distinction between truth and justification, as full empirical justification does not logically entail the truth of the claim justified. Putnam's epistemic redefinition of

truth in terms of ideal rational acceptability is a desperate attempt to reforge an alleged logical link between (ideal) justification and truth. Such is the power and pervasiveness of the essentially deductivist view of justification deriving from the Cartesian epistemological predicament. Such deductivist predilections are long overdue for radical overhaul.[45]

The second implicit conviction that leads people to accept Putnam's appeals on behalf of IR3 can be put in terms of the lottery paradox, taken as an objection to fallibilism, which, like other targets of the lottery paradox, requires that adequate justification involves less than 100 percent guarantee of truth. The apparent persuasive force of the lottery paradox originates in the facts that one ticket will win, and out of 100,000 tickets yours might be the winner, however marginal this possibility may be; hence prior to the draw one can't *know*, though one can reasonably believe, that one's ticket won't win. The point of this counterexample is that the truth condition for knowledge *might* not be fulfilled if one's justification is even marginally less than 100 percent.[46]

This is not a genuine counterexample to fallibilist accounts of justification, nor a reason to treat truth epistemically. On fallibilist accounts, our justification for a belief need not provide 100 percent guarantee. However, on a fallibilist account of knowledge, at least for any fallibilist realism, truth is still a requirement for knowledge. Hence sober fallibilists maintain that a belief counts as knowledge if the belief *is* true, and if we have adequate justification for it—however "adequate" is understood, which will *not* be in Cartesian infallibilist, 100 percent-or-nothing, terms.

This means that fallibilists cannot guarantee, that is, certify with 100 percent confidence, when in fact we know something, because our justification for that claim will be no stronger than our justification, and yes, it's possible to have adequate (fallibilist) justification in some cases where the truth condition isn't met, or is met only approximately.[47] For this reason, fallibilists look, not only to prior and present evidence, but also to sustained future use and concomitant assessment of beliefs and their justification. Because the truth of any even slightly interesting empirical claim has impli-

cations that exceed any available sets of evidence, claims to truth must be justified as well as possible on the basis of available evidence, *and* subjected to ongoing assessment as their further implications are discovered. According to fallibilist accounts of empirical knowledge, simply knowing that *p* and knowing that one knows that *p* are usually quite distinct achievements. In contrast to this, Putnam's epistemic notion of truth, identified with ideal justification (i.e., IR3) appears to be motivated by the Cartesian assumption that knowing something requires, or at the very least insures, knowing that you know it.

Putnam removes the chance that we might be in error when making a cognitive claim that fulfills our ideal criteria of justification by (at least partially) defining truth in epistemic terms (IR3). His doing so implicitly relies on our all but automatic reaction, "if ideal justification doesn't guarantee truth, then the truth condition on knowledge may not be fulfilled." No pragmatic realist—indeed no epistemologist or any other philosopher—should succumb to this sleight of hand. (This is the sleight of hand that lends credence to the lottery paradox.) Pragmatic realists can and should retain the traditional truth condition for knowledge, and modestly recognize that fallibilist accounts of justification do not guarantee truth; they at most provide extremely strong indicators of truth. Nevertheless, for an ideally justified cognitive claim to count as knowledge, it must *be* true, or at least (perhaps) very nearly approximately true, even though our pragmatic and fallibilist criteria of justification cannot guarantee that the truth condition is fulfilled.

Putnam does, of course, distinguish between ideal justification and whatever degree of justification we may in fact achieve. However, this does not distinguish truth from justification; it only restricts truth to ideal justification. This is Putnam's key to making truth internal to a theory or conceptual framework. However, if Putnam's Carnapian Worlds argument fails, which it clearly does, there is no reason to accept this restriction.

Alternatively, to be very charitable, Putnam's insistence on the tight link between (if not equation of) ideal justification and truth might be a way to highlight his view that we cannot even under-

stand, or even make, cognitive claims without understanding their actual use *in concreto*, including their use in inquiring into their subject matter and in their justification. If this were Putnam's point, it would mean that IR3 is intended as the rejection of whatever views Putnam denigrates as "magical theories of reference," according to which representations intrinsically refer, regardless of how they are caused, and regardless of a person's dispositions.[48] I heartily concur with rejecting such "magical" theories, but this does not require rejecting a nonepistemic, correspondence analysis (*not* criterion!) of truth.

I can now add only a brief word about fallibilism and the strong modal claims involved in transcendental arguments. I submit that if even our knowledge of mathematics and logic is fallible, there cannot be much more difficulty involved in fallibilist accounts of our knowledge of modal claims about necessity, even those involved in transcendental arguments.

More significantly, Kant's own account of our knowledge of the transcendental conditions of integrated self-conscious experience was already protopragmatist. In the final section of the first *Critique*, the "Transcendental Doctrine of Method," Kant recognized that his transcendental arguments rest squarely on an account of our human cognitive capacities, and their attendant incapacities. Knowledge via transcendental arguments is as fallible—and as corrigible—as our inventory of our cognitive capacities.[49] Kant expressly avows that determining our proper cognitive self-inventory is a collective undertaking by philosophers committed to constructive mutual criticism over time.[50] Once this inventory is established, it is much more direct to determine what are its implications for human knowledge, provided that philosophers understand the aims, strategies, and main conclusions of Kant's investigations. I submit that it behooves pragmatic realists to understand them, deeply and in detail.[51]

CONCLUSION

The reader may ask why I have subjected Putnam's Carnapian Worlds argument from the late 1970s and 1980s to such criticism, when Putnam himself has recently rejected his own earlier internal realism, especially when his return to the realist fold has been accompanied by a confession of his prior closet Cartesianism.[52] Surely all of this is significant testimony that his earlier arguments for internal realism aren't sound!

I answer first, that Putnam's arguments for internal realism still persuade many philosophers. Second, Putnam still maintains an epistemic conception of truth, which appears to be one main plank that allegedly supports internal realism. Third, Putnam's implicit Cartesianism runs so deep he doesn't know what to confess. In this regard, Putnam is only one example of how effective was Russell's 1922 exhortation, "I should take 'back to the 18th century' as a battle-cry, if I could entertain any hope that others would rally to it."[53] Analytic philosophy followed Russell's lead, and by-passed Kant's Critical philosophy, along with its successors. Despite his own best efforts, Peter Strawson still believes what he wrote in the mid-sixties, that "nearly two hundred years after they were made [Kant's key insights] have still not been fully absorbed into the philosophical consciousness."[54]

In Putnam's case, this appears in his continued acceptance of Hans Reichenbach's criticism of Kant's defense of synthetic a priori judgments[55] and his formulation of what he regards as Kant's key insight, namely: "Kant saw that whenever human beings describe anything in the world, our description is shaped by our own conceptual choices."[56] According to Putnam, however, Kant erred in thinking that "our conceptual choices are fixed once and for all. . . ."[57] The fact that Putnam formulates Kant's alleged insight in terms of "conceptual choices" shows Putnam's continued allegiance to the notion that semantics is first philosophy, and his utter unawareness of the key point of Kant's transcendental examination of our cognitive capacities, which is to answer the question, What a priori cognitive conditions must be fulfilled such that we can be self-conscious, and conscious of objects, at all?

We cannot make choices, conceptual or otherwise, unless these conditions are fulfilled. Here I have only been able to argue very briefly that Kant is right that there are such conditions. I hope my sketch has been suggestive enough to encourage you to investigate this Critical issue in the detail is deserves—and requires.

Fourth, Putnam's arguments for internal realism are a case in point regarding semantically based arguments against realism, all of which share the same transcendental defect (if I may so call it) highlighted here in Putnam's internal realism.[58]

I conclude that upholding the American tradition of pragmatic realism requires rejecting semantic arguments against realism and for internal realism. Decisive transcendental arguments for rejecting these semantic arguments are available in the Kantian roots of the pragmatic realist tradition. Full-blooded pragmatists would be well advised return to their roots, for these arguments can be incorporated—and were already refurbished by Hegel and incorporated—into genuinely pragmatic realism.[59]

NOTES

1. Charles S. Peirce, "The Fixation of Belief" (1877), in *Writings of Charles S. Peirce*, vol. 1, ed. Max H. Fisch (Bloomington, Ind.: Indiana University Press, 1982), pp. 252–53.

2. On Dewey, see Ralph Sleeper, *The Necessity of Pragmatism: John Dewey's Conception of Philosophy* (New Haven, Conn.: Yale University Press, 1986). The significance of Sleeper's title shifts subtly and profoundly throughout his book, which culminates in Dewey's pragmatic conception of necessity. Quite in line with Sleeper's analysis of Dewey is Frederick L. Will's pragmatic account of necessity, which is based on and augments Dewey's. See Will, *Pragmatism and Realism*, ed. Kenneth R. Westphal (Lanham, Md.: Rowman and Littlefield, 1997), especially chaps. 6–9.

3. Robert G. Meyers, *The Likelihood of Knowledge* (Dordrecht, The Netherlands: Kluwer, 1988), chap. 2.

4. Kenneth Westphal, "Hegel's Solution to the Dilemma of the Criterion," in *The Phenomenology of Spirit Reader: A Collection of Critical and Interpretive Essays*, ed. J. Stewart (Albany, N.Y.: State University of New York Press, 1998), pp. 76–91.

5. See Sami Pihlström, "Peircean Scholastic Realism and Transcendental Arguments," *Transactions of the Charles S. Peirce Society* 34 (1998): 382–413.

6. See Westphal, *Hegel's Epistemological Realism: A Study of the Aim and Method of Hegel's Phenomenology of Spirit* (Dordrecht, The Netherlands: Kluwer, 1989), and *Hegel's Epistemology: A Philosophical Introduction to the Phenomenology of Spirit* (Cambridge, Mass.: Hackett, 2003).

7. Westphal, "Kant, Hegel, and the Transcendental Material Conditions of Possible Experience," *Bulletin of the Hegel Society of Great Britain* 33 (1996): 23–41.

8. *The Later Works of John Dewey*, vol. 1: *Experience and Nature*, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1981), p. 184. Also see Peirce, *The Collected Papers of Charles Peirce*, eds. Charles Hartshorne, Paul Weiss, and Arthur W. Burks (Cambridge: Harvard University Press, 1931–1958), vol. 5, paragraphs 64–76. Robert Almeder discusses this in *Blind Realism: An Essay on Human Knowledge and Natural Science* (Lanham, Md.: Rowman and Littlefield, 1992), pp. 147–50.

9. Putnam claims that the three theses of metaphysical realism are mutually integrated by "a variety of further assumptions and notions." *Realism with a Human Face*, ed. James Conant (Cambridge, Mass.: Harvard University Press, 1990), p. 31. Unfortunately, he does not identify, much less examine, these assumptions. This is a serious philosophical lapse, because inadequate philosophical views are too often retained on the basis of unexamined, but ultimately untenable assumptions.

10. See Will, *Pragmatism and Realism*, chap. 2; Westphal, "Hegel's Internal Critique of Naïve Realism," *Journal of Philosophical Research* 25 (2000): 173–229; and Robert Meyers, "Immediacy, Knowledge, and Naturalism," this volume.

11. On the extremity of attributing to anyone a single coherent overarching "conceptual scheme," see Will, *Pragmatism and Realism*, chap. 5, and Jerry Fodor and Ernest Lepore, *Holism: A Shopper's Guide* (Oxford: Blackwell, 1992).

12. See W. V. O. Quine, "On What There Is," in *From a Logical Point of View* (Cambridge, Mass.: Harvard University Press, 1953), pp. 12–14.

13. Westphal, *Hegel's Epistemological Realism*, pp. 56–57.

14. See Will, *Pragmatism and Realism*, chap. 5; Westphal, *Hegel's Epistemological Realism*, chap. 5; and Westphal, "Hegel's Solution to the Dilemma of the Criterion."

15. See Will, *Pragmatism and Realism*, chaps. 1, 7, 8; Westphal, *Hegel's Epistemological Realism*, chaps. 6–8, 11.

16. I argue for this claim in Westphal, "Hegel's Internal Critique of Naïve Realism."

17. See Will, *Pragmatism and Realism*, chaps. 1, 5, 7, 8; Westphal, *Hegel's Epistemological Realism*, chaps. 7, 8.

18. One key error in Putnam's original "model theoretic" argument for internal realism is that he equated meaning with use, and then equated use solely with formalized syntax! See Will, *Pragmatism and Realism*, pp. xxiv–xxvi.

19. Westphal, "Hegel's Solution to the Dilemma of the Criterion."

20. Will, *Pragmatism and Realism*, chap. 1; Westphal "Hegel's Solution to the Dilemma of the Criterion"; see also Howard Wettstein, *Has Semantics Rested on a Mistake?* (Stanford, Calif.: Stanford University Press, 1991).

21. Michael Devitt, *Realism and Truth*, 2nd ed. (Oxford: Blackwell, 1991).

22. Hilary Putnam, *Meaning and the Moral Sciences* (London: Routledge and Kegan Paul, 1977), p. 133.

23. Putnam, *Realism with a Human Face*, p. 27.

24. Putnam, *Meaning and the Moral Sciences*, p. 133. As originally presented, Putnam's argument treated truth as "satisfaction" in terms of providing a model of any ideal theory, where the mapping relations could be quite arbitrary. I criticize the nub of this part of Putnam's argument in Will, *Pragmatism and Realism*, pp. xxix–xxvi.

25. Peirce, "Some Consequences of Four Incapacities," (1868) in *Writings of Charles S. Peirce*, vol. 2, ed. Edward C. Moore (Bloomington, Ind.: Indiana University Press, 1984), pp. 211–42.

26. Henry Allison, *Kant's Transcendental Idealism* (New Haven, Conn.: Yale University Press), p. 250.

27. Immanuel Kant, *Critique of Pure Reason*, eds. and trans. Paul Guyer and Allen W. Wood (Cambridge, England: Cambridge University Press, 1997), A112–13, A653–54/B681–82.

28. Kant, *Critique of Pure Reason*, A121–123.

29. Kant, *Critique of Pure Reason*, A653–54/B681–82; emphases added.

30. Thus transcendental proofs can justify conclusions much stronger than Richard Rorty recognizes. See Rorty, "Strawson's Objectivity Argument," *Review of Metaphysics* 24 (1970): 236, and Rorty, "Verificationism and Transcendental Arguments." *Nous* 5 (1971): 3–14. He claims that the most transcendental proofs can show are interrelations among thoughts; but see Westphal, "Hegel's Internal Critique of Naïve Realism."

31. Kant states this most directly in the *Prolegomena*: "Even the main principle expounded throughout this section, that the universal laws of nature can be known a priori, leads of itself to the proposition that the highest prescription of laws of nature must lie in ourselves, that is, in our understanding; and that we must not seek the universal laws of nature in nature by means of experience, but conversely must seek nature, regarding its universal conformity to law, merely in the conditions of the possibility of experience which lie in our sensibility and understanding. For how were it otherwise possible to know these laws a priori, since they are not rules of analytic knowledge but are true synthetic extensions of it? Such a necessary correspondence of the principles of possible experience with the laws of the possibility of nature can only proceed from two causes: either these laws are drawn from nature by means of experience, or conversely, nature is derived from the laws of the possibility of experience in general and is utterly one with the latter's strict universal lawfulness. The first [cause] contradicts itself, for the universal laws of nature can and must be known a priori (that is, independently of all experience) and can and must be the foundation of all empirical use of the understanding; therefore only the second [cause] remains." Section 36 of *Prolegomena to Any Future Metaphysics*, in *Kant Selections*, ed. and trans. Lewis White Beck (New York: Macmillan 1988), pp. 199–200 (translated emended); see also Kant, *Critique of Pure Reason*, B41, A23/B37–38, A26–28/B42–44, A195–96/B240–41, A101–02, A113–14, A121–123, A125–26.

32. Westphal, "Affinity, Idealism, and Naturalism: The Stability of Cinnabar and the Possibility of Experience," *Kant-Studien* 88 (1997): 139–89.

33. See Westphal, "Transcendental Reflections on Pragmatic Realism," in *Pragmatism, Reason, and Norms*, ed. Kenneth R. Westphal (New York: Fordham University Press, 1996), pp. 17–59.

34. It is worth noting that Putnam's "Carnapian Worlds" argument is essentially the same as Rudolf Carnap's argument against realism in "Empiricism, Semantics, and Ontology." See Carnap, "Empiricism, Semantics, and Ontology," in *Meaning and Necessity* (Chicago: University of Chicago Press, 1956), pp. 205–21. Putnam's claim that "there is no fact of the matter" on which to decide among competing forms of language is tantamount to Carnap's claim that there is no genuine "external" question about the "reality" of the entities named within any linguistic framework. Carnap's argument against realism is deeply flawed (Westphal,

Hegel's Epistemological Realism, chap. 5). Indeed, Putnam's argument shares those flaws, despite his rejecting some of Carnap's distinctions. One might suggest that Putnam formulates MR1 slightly differently, in a way that escapes my criticism, namely, as the thesis that "the world consists of some fixed totality of mind-independent objects." This raises at least three prospects: (1) The differences between our formulations are merely nominal; both concern "mind-independent" objects, though I have put this clause differently in order to avoid confusions often caused by the term "mind-independent." (2) The differences are irrelevant; emphasizing the clause "fixed totality" generates either nonsense or a view no one holds: who could reasonably suppose that the world consists in a fixed *totality* of objects, when things constantly suffer generation and corruption? To stress instead the "fixity" of objects could either mean to deny this obvious fact, or it could mean to stress the determinateness of objects' characteristics, regardless of what we say, think, or believe about them (setting aside for now culturally reconstructed objects, i.e., artifacts). This interpretation reverts to the formulation I have provided of MR1. (3) Most plausibly, MR1 may be intended to claim that somehow the world itself determines which regularities are most important, and so are genuinely real. If this is the point of MR1, then Putnam's argument has a genuine target, namely philosophers who contend that only some of the world's traits or regularities are the "real" ones, because they are ontologically more basic; e.g., eliminative materialism or some kinds of scientific realism. If this is what MR1 amounts to, it is an excessively strong thesis that sober realists need not endorse, and may reject without adopting any view that would count as "internal realism." On this interpretation, Putnam's argument is far more specific and narrower in scope than he claims, and Putnam's dichotomy between "metaphysical" and "internal" realism even more obviously fails to be exhaustive.

35. See Hartry Field, "Realism and Relativism," *Journal of Philosophy* 79 (1982): 553; Susan Haack, *Manifesto of a Passionate Moderate* (Chicago: University of Chicago Press, 1998), pp. 149–66.

36. This, too, was a flaw in Carnap's "Empiricism, Semantics, and Ontology."

37. Westphal, "Was Nietzsche a Cognitivist?" *Journal of the History of Philosophy* 26 (1984): 343–63; and "Nietzsche's Sting and the Possibility of Good Philology," *International Studies in Philosophy* 16 (1984): 71–90.

38. Putnam, *Realism with a Human Face*, p. 27.

39. This insight is shared by Hegel (see Westphal, "Hegel's Internal

Critique of Naïve Realism") and Gareth Evans, "Identity and Predication," *Journal of Philosophy* 72 (1975): 343–63. See Dewey's discussion of the legitimacy of multiple descriptions of a horse in "The Postulate of Immediate Empiricism," in *The Middle Works of John Dewey*, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1977), pp. 158–59. On Dewey's view see Peter Manicas, "Naturalism and Subjectivism: Philosophy for the Future?" in this volume.

40. Westphal, "Transcendental Reflections on Pragmatic Realism."

41. Putnam, *Reason, Truth, and History* (Cambridge, Mass.: Harvard University Press, 1981), p. 55.

42. Putnam frequently introduces IR3 on the authority of Peirce. I do not believe Putnam has grasped the subtlety of Peirce's theory of truth; see Mark Migotti, "Peirce's Double-Aspect Theory of Truth," in *Pragmatism, Canadian Journal of Philosophy* supplement vol. 24 (1999): 75–108.

43. These are two more implicit assumptions that appear to link the theses of internal realism into a package, assumptions which Putnam neither identifies nor assesses.

44. See Alvin Plantinga, "How to be an Anti-Realist," *Proceedings and Addresses of the American Philosophical Association* 56 (1982): 51.

45. See Will, *Beyond Deduction: Ampliative Aspects of Philosophical Reflection* (London and New York: Routledge, 1988).

46. See for example Fred Dretske, *Knowledge and the Flow of Information* (Cambridge, Mass.: MIT Press, 1981), pp. 99–105.

47. Notice that the notion of "approximate truth" inevitably appears problematic, if not mysterious, if one assumes thesis R. Once thesis R is rejected by adopting a pragmatic account of conceptual significance, "approximate truth" becomes a much more tractable notion.

48. Putnam, *Reason, Truth, and History*, pp. 5, 18.

49. Westphal, "Epistemic Reflection and Cognitive Reference in Kant's Transcendental Response to Skepticism," *Kant-Studien* 94 (2003).

50. See Onora O'Neill, "Vindicating Reason," in *The Cambridge Companion to Kant*, ed. Paul Guyer (Cambridge, England: Cambridge University Press, 1992), pp. 280–308.

51. I regret to report that much of the Anglophone discussion of "transcendental arguments" has failed to understand Kant's aims, strategies, and methods; see Westphal, "Epistemic Reflection and Cognitive Reference in Kant's Transcendental Response to Skepticism."

52. Putnam, "Sense, Nonsense, and the Senses," *Journal of Philosophy* 91 (1994): 445–517.

53. Bertrand Russell, *The Collected Papers of Bertrand Russell*, ed. John Passmore (London and New York: Routledge, 1994), vol. 9, p. 39.

54. Peter F. Strawson, *The Bounds of Sense* (London: Methuen, 1966), p. 29. He reaffirmed this judgment in personal correspondence, May 1999.

55. Putnam, *Pragmatism: An Open Question* (Oxford: Blackwell, 1995), p. 28. For a concise presentation of Kant's argument that our very *concept* of "cause" is a priori, see Lewis White Beck, *Essays on Kant and Hume* (New Haven, Conn.: Yale University Press, 1978), pp. 111–29, especially pp. 121–25. Kant offers a brief but altogether sound argument (based squarely on Hume's own principles) to show that the very concept of cause cannot be acquired from or defined on the basis of generalizations from experience, because we cannot even expect or make the relevant generalizations without presupposing the very concept of "cause." Hence the concept of cause is a priori. Further arguments are required to show that the legitimate use of this concept is also a necessary transcendental condition for self-conscious experience. However, anyone who fails to understand the first step cannot understand anything of importance about Kant's transcendental examination of the necessary conditions of self-conscious experience. Regrettably, this is true of the widely influential criticisms of Kant by Reichenbach and Schlick. Complaints that Kant's basic conceptual categories are "fixed" err badly by disregarding the fact that, on Kant's view, our categories must be schematized in order to use them to judge spatio-temporal objects and events. In principle, the schematism of the categories is extremely flexible (it is effected by the "transcendental synthesis of imagination," constrained by our basic forms of judgment *and* by the world we sense), and can cover the kinds of variability Kant's critics allege against his view.

56. Putnam, *Pragmatism*, p. 28.

57. Ibid., p. 30.

58. Including, for example, Robert Brandom, *Making it Explicit* (Cambridge, Mass.: Harvard University Press, 1994).

59. I am very grateful to Sami Pihlström's paper "Pragmatic Realism and Transcendental Conditions," *Journal of Speculative Philosophy* 12 (1998): 301–11, and private correspondence, for probing questions which formed the basis for this essay's effort to epitomize some core aims and arguments of my work in epistemology. His book *Structuring the World: The Issue of Realism and the Nature of Ontological Problems in Classical and Contemporary Pragmatism* (Helsinki: Philosophical Society of Finland,

1996) is essential reading for anyone concerned with pragmatism and realism. (Don't take my word for it; Peter Hare first referred me to it with even higher praise, and I quickly learned that he's right!) It can be obtained from The Academic Bookstore, P.O. Box 128 (Keskuskatu 1), FIN–00101 Helsinki, Finland. I am equally grateful to the conference organizers for their kind invitation, which provided such a splendid opportunity to try to bring these thoughts together. I also wish to thank the audience, and especially my commentator, Henry Jackman, for many helpful comments.

8

Pragmatic Realism and Skepticism

Chi-Chun Chiu

In his first *Critique*, Kant observes that there is "a scandal of philosophy and universal human reason that the existence of things outside us . . . should have to be assumed merely *on faith*, and that if it occurs to anyone to doubt it, we should be unable to answer him with a satisfactory proof."[1] The purpose of this paper is not to terminate the scandal. Nor does it attempt to answer the skeptic with a satisfactory proof. What I try to do is much more moderate, that is, to show the relevance between Hilary Putnam's pragmatic realism and skepticism. His well-known argument against the skeptical hypothesis that I am brain in a vat (BIV) draws a lot of responses. A natural way of interpreting this argument is to regard it as rejecting the skeptic's premise that I do not know that I am not a brain in a vat.[2] Whether this line of interpretation is accurate partially depends on how the skeptic's argument is formulated. However, I want to show that, in addition to his argument against the BIV, Putnam has another line of argument, which is set in the context of his realist position. His criticisms on the skeptic are not only based on that famous argument against the skeptical hypothesis but also on, at least implicitly, some basic ideas or main theses of his pragmatic realism. And what they point to is not the premise of the skeptical argument but its presuppositions. With his pragmatic realism, Putnam severely challenges

those presuppositions and thus shakes the grounds of skepticism. However, the relevance of pragmatic realism to skepticism is more intricate than what we thought, because the skeptic's presuppositions are deeply rooted in a line of modern philosophical tradition, which Putnam calls "metaphysical realism." His challenge of those presuppositions in a sense is a challenge of (a significant part of) the philosophical tradition. It is far beyond the scope of the present paper to give a comprehensive examination of the contrast of the two kinds of realism. My main task is simply to demonstrate the significance of Putnam's pragmatic realism in our reflecting on the skeptical problem.[3]

There are different types of skepticism in the history of philosophy. The ancient skeptic emphasizes on opposition and antithesis. Pyrrho took it as a way of life, leading us to equanimity and contentment. From Descartes on, however, skepticism has been understood as a threat to the possibility of human knowledge. Indeed, a commonly accepted way of seeing the whole enterprise of modern epistemology is to take it as a response to the haunting skeptical challenge. Within the modern tradition, skepticism also has various forms in terms of its scope. It claims that we do not have this or that kind of knowledge. The skepticism with which I am concerned here is about our knowledge of the external world. According to this widely discussed version of skepticism, we may have knowledge about mathematics, logic, or even our own mental contents, but we do not have knowledge about the external world. One of the arguments for this sort of skepticism is based on the notorious skeptical hypothesis that I am a brain in a vat, being misinformed about everything concerning the external world. At first sight, one may think that it is very difficult, if not impossible, to know the falsity of the hypothesis. However, if I do not know that such a threatening hypothesis does not hold, how can I know anything thing about the external world?

Let "Kx" be "I know that x," "p" be any proposition about the external world, and "h" be the skeptical hypothesis that I am a brain in a vat. The skeptical argument can be formulated a bit more precisely as follows:

(1) Kp (assumed premise)
(2) $K(p \rightarrow \sim h)$
(3) K~h (by using epistemic closure principle on 1 and 2)
(4) ~K~h
/ ∴ (5) ~Kp (reductio ad absurdum)

There are many ways of responding to this argument. For instance, like Robert Nozick or Fred Dretske,[4] one may reject the involved epistemic closure principle so that the derivation of (3) from (1) and (2) is blocked and the validity of the argument is thus undermined. Yet Putnam takes a different way to answer the skeptic. He argues that the possibility of h is not a real one, in the sense that it is self-refuting, that is, if I am a brain in a vat, then "I am a brain in a vat" is false and hence the skeptical hypothesis is false. If I do know the negation of h, then (4) is not true and the skeptical argument turns out to be unsound.

Before examining Putnam's argument against BIV, four points should be clarified. First, someone might protest that we have misplaced Putnam's argument in a context irrelevant to his concern. As Keith DeRose observes, Putnam's own interest seems confined to the "mind/world relationship and he does not seem to pay too much attention to the problem of skepticism."[5] Of course, whether or not he is interested in the problem, we can use his argument for our antiskeptical purpose. However, although it is true that Putnam rarely mentions skepticism in the text, this does not mean that he is not interested in the problem at all. On the contrary, in his reply to Crispin Wright, he explicitly says that his brain-in-a-vat argument was directed against what he calls "internal skepticism," a doctrine whose aim is "to convince us, on the basis of assumptions we ourselves hold, that all or large part of our claims about the empirical world cannot amount to knowledge."[6] Hence, what DeRose's observation truly indicates is not that Putnam has no interest in skepticism, but only that, for him, the mind/world relationship has something to do with the solution or resolution of the skeptical problem.

Second, although it is not clear how Putnam himself would

formulate the target he attacks, from his brief characterizations of the internal skepticism, we can see that (1) unlike us, he is concerned with a sort of external world skepticism, and (2) it argues against our knowledge claims about the external world from our own assumptions. While he does not tell us what these assumptions are and thus it is not easy for us to give an exact formulation of his version of skeptical argument, Putnam seems to take it as something like a *reductio ad absurdum*. If it is the case, as I think it is very likely, then the following objection to the skepticism will be blocked: the use of the skeptical hypothesis, such as the BIV or the Cartesian evil demon, assumes our commonsensical understanding of the external world. We notice that a belief based upon a piece of perceptual experience is fallible, even though it is qualitatively indistinguishable from a "veridical" one. Illusion is illusory because we know how things are in normal conditions. Therefore, when the skeptic sets up the BIV hypothesis, one may argue, she has already assumed the possibility of knowledge about the external world. In other words, she is begging the question. Nevertheless, such a charge against the skeptic is ill founded if her argument is understood as a *reductio*. As Quine admits, it is quite within the skeptic's right in assuming science in order to refute science.[7] Thus, no fallacy of *petitio principii* is committed.

Third, as mentioned, the gist of Putnam's argument is to show that the BIV hypothesis is self-refuting. But what does "self-refuting" mean? There are two cases in which a sentence can be said to be self-refuting: (1) A sentence is self-refuting if and only if its truth implies its own falsity. For example, the sentence "All general statements are false" is self-refuting in this sense. (2) A sentence is self-refuting if and only if its being entertained or enunciated implies its falsity. When I enunciate that I do not exist, the sentence thus enunciated is self-refuting in this second sense.[8] It is not clear whether these two sentences are self-refuting in the same sense or not. Perhaps it depends on how one understands the notion of truth bearer. I think, as will be seen, when Putnam claims that the BIV hypothesis is self-refuting, he has something closer to the second case in his mind.

Fourth, in Putnam's imagined story, there is a radical version of skeptical hypothesis, according to which "the universe just happens to consist of automatic machinery tending to a vat full of brains and nervous systems," and "the automatic machinery is programmed to give us all a *collective* hallucination."[9] Unlike the popular version, here Putnam does not assume the existence of malicious scientist, for not some but all human, or even sentient, beings are supposed to be brains in a vat. It is this version of BIV with which this paper is mainly concerned.

Now, let us turn to Putnam's argument against BIV. With regard to the its premises, he explicitly writes:

> One of the premisses of the argument is obvious: that magical theories of reference are wrong, wrong for mental representations and not only for physical ones. The other premiss is that one cannot refer to certain kinds of things, e.g. *trees*, if one has no causal interaction at all with them, or with things in terms of which they can be described.[10]

Here "magical theory of reference" means a theory holding that a system of representations has "an intrinsic built-in, magical connection with what it represents—a connection independent of how it was caused and what the dispositions of the speaker or thinker are."[11] To see how the above premises are taken to support the conclusion that the BIV hypothesis is self-refuting, we need to grasp the nature of Putnam's argument. What he does, or at least part of what he does, is a Kantian investigation of the preconditions of reference and thought—"preconditions built in to the nature of our mind themselves, though not (as Kant hoped) wholly independent of empirical assumptions."[12] Given these preconditions and the BIV hypothesis as well, Putnam argues, if one is a brain in a vat, then, unlike us, she cannot think about and refer to the external objects. Therefore, she cannot argue that she herself is a BIV.

Let us go into the details. Suppose that Oscar is a brain in a vat and his mental representations are qualitatively indistinguishable from those of mine. If a sentence, "There is a tree outside the window" is passing through my mind, then the same mental repre-

sentation is passing through his. In short, as far as the mental representations are concerned, he can be regarded as my counterpart in the above imagined predicament of collective hallucination. A difference between us is that, unlike me, by hypothesis, he can never entertain a true sentence about the external world. Now suppose that, unfortunately, I were that brain in the vat, or more specifically, I were Oscar. One may argue that under the hypothesis that the I-in-a-vat is completely misinformed, it would be impossible for me as a BIV to think of the true sentence that I am a brain in a vat.[13] However, this is not exactly the way in which Putnam argues against BIV. His argument is more complicated, based upon his peculiar view of the mind/world relationship. First of all, he admits that Oscar (the I-in-a-vat) and I can entertain mental representations that are qualitative similar, if not identical. For instance, when I claim that there is a tree outside the window, I am conscious of what I claim and have a tree image in my mind. So does Oscar when he makes the same statement. However, although the sentence, "There is a tree outside the window" in English and that in vat-English are qualitative indistinguishable, they actually belong to two different languages. More important, the references of the terms in these two languages are not the same. "Tree" in English refers to external objects in the world and yet "tree" in vat-English does not. To elaborate this, Putnam brings his two premises to the stage.

According to the so-called "magical theory of reference," the connection between a mental representation and its referent is regarded as intrinsic and necessary. It has nothing to do with either their causal relationship, or the dispositions of the person who has the mental representation. The mental states of a person totally determine what her mental representations refer to. In brief, reference is determined by what is going on in her head. If such a theory of reference is correct, then Oscar and I, having the same mental states and entertaining the same representations, are using the same terms with the same references. However, the English term "tree" refers to objects in the world. Thus, according to the magical theory, Oscar's term "tree" in vat-English must also refer to the same external objects. This consequence will surely under-

mine Putnam's argument. Thus, to pave the way to his conclusion, the initial step is to sweep off the magical theory.

There are two kinds of counterexamples against the magic. The first is about images, physical or mental. Suppose that a crawling ant traces a line on the sand and it ends up an image that looks like Winston Churchill. Of course, *for the ant*, the curve on the sand is not a picture at all. No matter how it looks like Churchill, it does not represent him. On the other hand, if someone asks me how Churchill looks like and I draw the same curve on the sand with a stick, then *for us*, it does represent Churchill. Thus the physical image on the sand has no built-in, necessary connection with Churchill. Putnam gives us a further example about mental image to show that "mental representations no more have a necessary connection with what they represent than physical representations do."[14] I think that the two parallel examples of images are pretty convincing. Oscar and I may have qualitative indistinguishable mental images, but this *alone* does not guarantee that they represent the same thing. So let us skip the discussion of mental images and turn to the second kind of counterexamples, which is about concept. After all, as Putnam said, "if there are mental representations that necessarily refer (to external things)[,] they must be of the nature of *concepts* and not of the nature of images."[15]

According to Putnam, concepts are not introspectible events or objects. What is puzzling, however, is his further claim that "they are not mental representations at all."[16] The textual context seems to suggest that, by saying that they are not mental representations, Putnam might mean that they are not words, images, sensations, or the like. We can imagine two subjects thinking the same word "tree," entertaining the same image of tree and having the same feeling about it, but indeed they do not understand the concept of tree in the same way, that is, they do not have the same concept. So, more important for us is Putnam's characterization of the nature of concept. The difference between image and concept is that "possessing a concept is not a matter of possessing images . . . since one could possess any system of images you please and not possess the *ability* to use the sentences in situationally appropriate

ways."[17] "Concept are signs used in a certain way," he writes, "the sign itself apart from its use is not a concept. And signs do not themselves intrinsically refer."[18] However, it is still not at all clear why Oscar and I cannot have the same concepts (about the external world). Notice that we may further suppose that Oscar can pass the Turing Test. If the ability to use certain sentences is the criterion for possessing a full-blown concept, as Putnam thinks, then it seems that Oscar and I can use the sentences in exactly the same way and thus have the same concept. Yet, Putnam firmly insists that Oscar and I do not have the same concept. To see this, we should turn to his second premise.

The decisive reason for which Oscar and I do not have the same concepts (about the external world) is that he does not have that kind of concepts at all. Take the concept of tree as an example. Even though Oscar can "chat" with a machine smoothly and respond to sentences with sentences containing the term "tree," his sentences are by no means connected to the external world. The term "tree" he uses in vat-English has no causal relation to the tree in the world either. By hypothesis, the world around Oscar has no tree at all. "Tree" in vat-English may refer to his image of tree, or to the electronic impulse that causes his tree experience, but it does not refer to the tree in the world. With such a difference of reference, "tree" in English and "tree" in vat-English does not mean the same thing. They are different concepts. Obviously, this argument is based on Putnam's semantic externalism, which holds, roughly, that the meaning of one's expression or the content of one's thought is not totally determined by one's internal state or what is going on in one's head, but partly determined by the objects in the environment which one has been contacted with. According to his famous Twin Earth thought experiment, "water" on the Earth refers to H_2O and yet "water" on the Twin Earth refers to XYZ. Their meanings are not the same. Similarly, since Oscar and I are in totally different environments, we do not have the same concept of tree, even though the relevant aspects of our inner phenomena are qualitatively indistinguishable.

It is undeniable that Putnam's argument for the discrepancy

between Oscar's concepts and mine is somehow related to his semantic externalism. However, in addition to the above external, causal, or environmental factor, there is a pragmatic factor involved in his argument. This somewhat neglected aspect has something to do with the actions or abilities of the language user. Putnam's second premise asserts that if one has no causal *interaction* with objects, or with things in terms of which they can be described, one cannot refer to those objects at all. At first sight, saying that successful reference requires one's causal interaction with the related object seems to be just another way of putting Putnam's semantic externalism. However, the term "interaction" indicates that Putnam's point may be a bit beyond that, namely, to refer to an object, we are required not only be passively caused by the object, but also be able to actively handle the object. This way of reading can be supported by some textual evidence. In his discussion of a machine that passes the Turing Test and can discourse beautifully about the scenery in New England, Putnam insists that "we cannot and should not attribute reference to such a device." He explains that it is because "it could not recognize an apple tree or an apple . . . if it were in front of one."[19] "There is no more reason to regard the machine's talk of apple as referring to real world apples than there is to regard the ant's 'drawing' as referring to Winston Churchill."[20] Putnam continues:

> We are able to perceive, handle, deal with apples and fields. Our talk of apples and fields is intimately connected with our *nonverbal* transactions with apples and fields. There are "language entry rules" which take us from experience of apples to such utterances as "I see an apple," and "language exit rules" which take us from decisions expressed in linguistic form ("I am going to buy some apples") to actions other than speaking. Lacking either language entry rules or language exit rules, there is no reason to regard the conversation of the machine . . . as more than syntactic play.[21]

This paragraph clearly shows that, for Putnam, *abilities* to handle the external objects or to perform verbal and nonverbal

actions related to them are crucial for a term to refer to those objects. On his view, Oscar and I may have the same internal representations, but we cannot use them in the same way. For instance, I can have an apple image and have the idea that I am going to buy some apples like that, and then go the supermarket and buy some. Oscar can have the same image and idea, but he cannot take the same action as I do, because there is no apple and supermarket around him. Even if there were some, being a brain in a vat, he could never take the actions of going and buying. Since Oscar's way of using the mental representation of apple cannot be the same as mine, then we do not have the same concept of apple, even though the same sign is used by both of us.[22]

With regard to the above argument, one may think that this pragmatic requirement is too strong. Obviously, I can handle the apple and yet Oscar cannot. But, how about an object, X, which is so complicated or far away from us that nobody can "handle" them? According to the view mentioned above, Oscar and I should have the same concept of X, since the way in which we handle X are the same, that is, all we can do is nothing. To this question, I think Putnam can answer as follows: as a matter of fact, Oscar and I cannot handle X. Nevertheless, if I *were* under such and such conditions, then I *could* do such and such things related to X. In order to refer to X, what is required need not be an actual action but an *ability* to perform such action. Suppose that Oscar and I were located at a place where no apple and supermarket exists. As before, we can have the same image and idea about apple and yet, unlike the previous case, I cannot go to supermarket and buy some. However, on Putnam's view, I still differ from Oscar because if there were supermarket and apples around, then I could, and yet he could not, go and buy some. Note that, as have been seen, one of the reasons for which the machine cannot refer to apple is that "it could not recognize an apple tree or an apple . . . if it were in front of one."[23] Here we can see that our emphasis on the significance of subjunctive condition is not textually ill founded.

To sum up, there are two preconditions for a representation to refer to an object: First, the representation has causal connection

with the object. Second, one who has the representation possesses an ability to handle the object. Given these preconditions, we can see that even though their syntactic structures are exactly the same, English is different from vat-English with respect to reference. More precisely, unlike us, vat-English users cannot refer to an object in the external world.

From these points, we can draw the conclusion that the BIV hypothesis is self-refuting by the following reasoning. As mentioned, the English term "a brain in a vat" refers to a brain in a vat in the world. In vat-English, the term "a brain in a vat" may refer to a BIV image or the like, but it does not refer to a brain in a vat in the world. Now, suppose that I am a brain in a vat (in the world). Then I use vat-English, not authentic English. When I say or think of the sentence "I am a brain in a vat," it is false because I am indeed a brain in a vat, and yet what the sentence expressed is that I am a BIV image or whatever, not that I am a brain in a vat (in the world). Thus, if I am a brain in a vat, then I cannot say about, think of, or argue for that I am a brain in a vat. It follows that the skeptical hypothesis is self-refuting.

So far we have shown how Putnam weakens, if not undermines, a popular version of skeptical argument. However, the relevance of his BIV argument to the skepticism goes beyond that. Putnam claims that the question of BIV would not be of interest if it were not for the sharp way in which it brings out the difference between the internal and external philosophical perspectives.[24] To me, this indicates that the two philosophical perspectives have something to do with the skepticism. What I will now try to do is show the extent to which the two perspectives are relevant to the skepticism.

According to Putnam, metaphysical realism (MR) holds an external perspective and his pragmatic realism holds an internal perspective. The contrast between the MR and Putnam's own version of realism can be regarded as a typical example of that between the two philosophical perspectives. For the present purpose, there is no need to make a sharp distinction between the perspective and the philosophy holding that perspective. Putnam characterizes MR in various ways. Typically, it is said to hold a

God's-eye point of view. Or more specifically, it holds, among others, the following main theses:

1. The world consists of a fixed totality of mind-independent objects.
2. There is exactly one true and complete description of the way the world is.
3. Truth involves some sort of correspondence relation between words or thought-signs and external things and sets of things.[25]

Strictly speaking, the theses are mutually independent. One may accept one of them without holding the others. For instance, as Field correctly points out, the second thesis is not the consequence of the first.[26] However, Putnam remarks that the three theses "do not have content standing on their own, one by one; each leans on the others and on a variety of further assumptions and notions."[27] Unfortunately, he does not tell us what these further assumptions and notions are. My way of understanding the above remark is this: we had better not to regard MR as a theory. Rather it is a perspective, a picture or a set of assumptions, according to which a variety of philosophical doctrines can be formed. With different further assumptions or notions, a metaphysical realist can develop her philosophy in different forms. One way to delineate the picture, or the relation among the theses, is as follows: the term "fixed totality of objects" means that the number of the individuals and that of properties and relations are all fixed. The complete description of the world is expressed by an ideal theory, which contains, among others, a name for each individual as well as a name for each property and relation. The truth of the theory consists in the correspondence between the language it uses and the way the world is. To be sure, such delineation is too abstract to provide us a concrete picture. Putnam himself observes that the three theses "have been held by philosophers of every historical period, and one can think of a rich filigree of ideas, doctrines, and detailed arguments which flesh out these abstract

theses in different ways."[28] Although there are different ways to "flash out" the theses, for the present purpose, my discussion will be confined within the context of skepticism. I will show to what extent the theses are presupposed by the skepticism.

What is distinctive about skepticism? Michael Williams provides us with an illuminating characterization of the aim of skepticism: "a *detached* examination of the *totality* of our knowledge of an *objective* world."[29] If one can examine the totality of knowledge of the world, then, it seems to indicate that there is a totality of the objects of the world, the knowledge of which is being examined. Interestingly, Williams himself casts doubt on the notion of "the totality of our knowledge of the world," if it is taken as a theoretically substantial notion. His argument is based on an analogy: we can bring together various things called "hot" but there is not reason, in advance of theory, for supposing that there is a single thing—heat. On the same token, we have this or that sort of knowledge about the external world, but we should not assume that there is a totality of our knowledge of the world. He also gives us a further analogy between the inflationist notion of truth and the skeptic's notion of the totality of knowledge.[30] However, I do not see why the skeptic has to take the notion of the totality of our knowledge as a theoretically substantial notion, not to mention the question of the appropriateness of the analogy. To say that the skeptic aims at examining the totality of knowledge is simply to say that the skeptical doubt can never be alleviated by appealing to any sensory evidence, for the same doubt can be applied to the latter. The doubt is holistic in the sense that it covers every tiny part of our knowledge about the external world. Nevertheless, whether the world itself consists of a fixed totality of objects is another matter. Such an assumption is not required for someone to be a skeptic, though it need not to be excluded either. As far as I am concerned, no skeptical argument is based on the notion of the *fixed totality* of objects of the world. However, a point involved in the first thesis of MR is accepted by the skeptic, that is, the world is objective, and so are the objects therein. For the skeptic, an objective world is the one in which the facts are what they are indepen-

dently of their being known or believed or said to be that way by anyone.[31] In short, an objective world is a mind-independent world, whether or not the totality of its objects is fixed. Here a distinction should be reminded: that a skeptic *does* accept the first thesis of MR to the extent that there is a mind-independent world is one thing, and yet whether the skeptic *need to* make such an assumption is another. My point is that the BIV argument has to make the assumption of the mind-independent world. This assumption is an essential part of the BIV scenario. No matter how the brain in a vat manipulates her ideas, mental representations or the like, the external world remains as what it is. Thus, if the first thesis of MR is taken to say that (1) the world consists of mind-independent objects and (2) the totality of these objects is fixed, then the skepticism does presuppose the former. Therefore the first thesis is partially relevant to the skepticism.

The second thesis has something to do with the external or detached perspective. At first sight, the existence of one and only one complete description of the world seems very implausible. Different conceptual schemes may describe the world in different ways. Moreover, a scheme may contain some indeterminate or vague concepts so that the description of the world expressed by the scheme cannot be complete. On Putnam's view, however, metaphysical realist's complete description of the world is something like an *ultimate* ideal theory of the world. The world is described from God's eye perspective. The description is the final version and thus there is exactly one true and complete description of the way the world is, as the second thesis of MR holds. I have argued that the skeptic need not assume that the totality of the objects of the world is fixed. Similarly, I do not think that she needs the assumption of the second thesis as a whole, because even if there are many versions of ideal theories, the skeptic still can argue that we know none of them. However, in order to cast doubt on our knowledge of the external world, the skeptic needs to take a Godlike position because her doubt is about the totality of our knowledge (of the external world). Her position is detached from the world, in the sense that when she examines our knowledge,

none of our beliefs about the external world is taken for granted. For the skeptic, the totality and the detachment are two sides of the same coin. It is from this detached perspective that the skeptic describes the BIV scenario.[32]

Another sense of detachment can be seen if we understand truth as some sort of correspondence between language (or thought-signs) and the world. It is commonly recognized that a main problem for this notion of truth is how to explain the correspondence relation. Putting this problem aside, we can at least say that this notion of truth is verification-transcendent in character. It has nothing to do with our epistemic practice, for it is possible that our epistemic norms are all satisfied and yet our beliefs about the external world are false. On this view, truth, unlike justification, is not interest-relative, nor context-sensitive. When a skeptic examines our knowledge, she sets aside all the pragmatic considerations. Such a detached attitude gives the skeptic an easy way to escape from a possible criticism. One possible way to criticize the skeptical argument is to claim that whether or not I am a brain in a vat, it does not make any difference in my practical life, including all sorts of epistemic activities. For instance, I can predict that the sun will rise tomorrow, or prove to others that I own two hands. Moreover, in doing so, I can at the same time offer evidence, reasons, or other sorts of justification. The skeptic will admit that what is said to be predicted or proved can be counted as knowledge, only when they are considered from a pragmatic perspective. From God's eye view, however, they are not knowledge at all because they are not true in the BIV situation. My point is not that the skeptic has to adopt the correspondence theory of truth. This is a hasty conclusion. It is possible that a cautious skeptic would instead accept, say, a minimalist theory of truth in order to avoid the troublesome notion of correspondence. My point is rather this. As mentioned, the correspondence theory of truth is verification-transcendent in character, that is, what is verified does not guarantee its truth. There is a gap between truth and epistemic justification. It is this gap on which the skeptical argument must rely. No matter how adequate the evidence provided by the brain in a vat

is, all the sentences about the external world, which it purports to justify, are false. Thus the BIV does not have knowledge.

So far, I have shown: (1) The skeptic need not presuppose the three theses of MR exactly as defined. (2) There are some ideas embedded in those theses. First, the world and the objects therein are mind-independent, in the sense that they are what they are independently of how we think or believe about them. Second, the world as a whole can be examined or described from a totally detached perspective. Third, truth has nothing to do with our epistemic justification. A sentence can be fully justified and yet still be false. (3) It is the above three ideas that the skeptic must rely on.

Rejecting the metaphysical realism, Putnam denies that the totality of the mind-independent objects, of which the world consists, is fixed. According to the internalist perspective, the question of what objects the world consists of is "a question that is only make sense to ask *within* a theory or description."[33] Hence, strictly speaking, what Putnam rejects is not that the totality is fixed, but that it is fixed *once and for all*.[34] Thus interpreted, his denial of the first thesis need not be regarded as denying the existence of mind-independent objects. "The traditional metaphysician is perfectly right to insist on the independence of reality and our cognitive responsibility to do justice to whatever we describe." What is neglected, Putnam claims, is "the insight that 'description' is never a mere copying and that we constantly add to the ways in which language can be responsible to reality."[35] From this statement it is clear that our descriptions of reality are not neutral. Following James, Putnam holds that "there is no such thing as a description that reflects no particular interest at all."[36] This leads us to the denial of the second thesis that there is exactly one true and complete description of the world. With different interests, we may have different but equally good descriptions. However, a possible objection may arise. One may, on the one hand, accept that there are different ways to describe the world according to different interest but, on the other hand, still insist that in the ideal theory there is one and only one version of description, otherwise the theory would not be called "complete." There is some reason for which Putnam can

reject the notion of the existence of a single true and complete theory.[37] At present, I simply want to point out that even if the first thesis is rejected, the skeptical hypothesis will leave intact, for what is relevant to the skepticism is not the thesis per se but the embedded idea of the mind independence of the objects. Putnam's attitude to the issue of the mind independence of object/reality is somewhat ambivalent. Roughly, his basic position is this. That the objects in the world are mind-independent only makes sense within a theoretical or practical context. It does not make any sense if it is taken from a totally detached perspective. Thus, it is the total detachment that is Putnam's target. His denial of the second thesis per se will leave the skeptic intact in the same way, since even if there does not exist exactly one complete true theory, it is still possible that we know nothing about it, if any. Only when the total detachment is undermined can one reject the skeptical hypothesis. The approach of Putnam's argument against BIV aims at showing that if we, taking a totally detached perspective, make the BIV assumption, then the reference to the objects in the external world will become problematic. Without such reference, the BIV assumption cannot be made, since it cannot even be thought of.

When the skeptic offers her arguments, usually she does not explicitly tell us what kind of theory of truth is being used. Although in most cases she appears to adopt some sort of correspondence theory, I have suggested that she need not to do so. In supporting her argument, what she needs, among others, is a cleavage between epistemic justification and truth. Pointing to this, one of the attempts of Putnam's internalism is to connect truth with justification. He proposes that truth be an idealization of rational acceptability.[38] On this view, truth is "some sort of (idealized) rational acceptability—some sort of ideal coherence of our beliefs with each other and with our experiences *as those experiences are themselves represented in our belief system*—not correspondence with mind-independent or discourse-independent 'states of affairs.'"[39] Note that here "idealized" or "ideal" need not be something like a final convergent point in the future. Nor need it be something stated in the final theory. Rather, being truth is being

verified to a sufficient degree to warrant acceptance under sufficiently good epistemic condition.[40] And "there are *better and worse* epistemic situations *with respect to particular statement.*"[41] A normal epistemic situation with respect to a particular statement can be regarded as an ideal epistemic situation and yet the same situation may not be an ideal one with respect to other statements. Further characterizations of this notion of truth are given in terms of the following "key ideas":

(1) Truth is independent of justification here and now, but not independent of *all* justification. To claim a statement is true is to claim it could be justified.

(2) Truth is expected to be stable or 'convergent'; if both a statement and its negation could be justified, even if conditions were as ideal as one could hope to make them, there is no sense in thinking of the statement as *having* a truth value.[42]

The first idea is opposite to the verification-transcendent notion of truth and thus the correspondence theory of truth is rejected. I have argued that a skeptic need not to hold the latter, but she needs the former. The BIV thought experience tries to describe a scenario in which my beliefs about the external world are all false, even though they are adequately justified. Without the assumption that truth has no essential relation to any possible justification, the skeptic cannot easily draw the consequence that we are all ignorant under the BIV circumstance.[43]

I have said that the idealized rational acceptability does not indicate that truth is a final convergent point in the future. This seems to be contradictory to the second key idea, according to which truth is expected to be convergent. A closer reading of (2) will show that it is not the case. The point of this key idea is twofold. First, it insists the principle of bivalence. Second, it rejects relativism. Suppose that a statement A and its negation (~A) are both verified in the ideal condition. If it did make sense to allow A to have truth value, then given Putnam's view of truth, one would draw the conclusion that A and~A are both true. However, if (2) is right, then when there is a situation in which both A and~A are verified, we must conclude that either it is nonsense to assert that

A has truth value or we are not in an ideal epistemic situation. If A is regarded as having truth value, as all assertive sentences are, then we will expect a further condition under which the truth value of A can be determined. I think that is what Putnam means when he claims that truth is expected to be stable or convergent. At any rate, there is no room for A and~A to be both truth. Thus the second key idea is an important complement of Putnam's notion of truth. On the one hand, (1) can be used to attack the verification-transcendent notion of truth (as well as the skeptical argument) and, on the other hand, (2) can be used to block the relativism—a price Putnam does not want to pay by rejecting MR.

The critique of MR is an important part of pragmatic realism. I have shown that denial of the three theses of MR does not directly threaten the skeptic. However, three ideas embedded in those theses are required for skeptic to formulate the BIV scenario: mind independence of objects; total detachment from the world; and the separation of truth from epistemic justification.[44] If these ideas are abandoned, then the skeptic will have difficulty presenting her argument with the same force as that of the BIV argument. However, if the presuppositions of the skepticism do include the above three ideas, then what I have done is merely a first step toward the solution or resolution of the skeptical problem. To deny those theses is not to merely replace them with their negations. Putnam has warned us that doing so will only fall again into the pattern of "recoil" that causes philosophy to jump from one extreme to another extreme. What we need is a kind of "middle way." With his pragmatic realism, Putnam has tried painstakingly to show such a new direction. Whether or not this will lead us out of the skeptical predicament, it is worth further exploring.[45]

NOTES

1. Immanuel Kant, *Critique of Pure Reason*, eds. and trans. Paul Guyer and Allen Wood (Cambridge, England: Cambridge University Press, 1998), p. 121, Kant's emphasis.

2. See, for instance, Keith DeRose, "Introduction: Responding to

Skepticism," in *Skepticism: A Contemporary Reader*, eds. Keith DeRose and Ted A. Warfield (New York: Oxford University Press, 1999), p. 7.

3. Since Putnam's thought is always in a state of flux, it is difficult to give it a fixed label without incurring misunderstanding. With different emphases, he has called his own realist position "internal realism," "pragmatic realism," or "natural realism." In the present paper, I make no attempt to discern the subtle differences among these versions. I use "pragmatic realism" to cover his basic position against metaphysical realism.

4. See Robert Nozick, *Philosophical Explanations* (Cambridge, Mass.: Harvard University Press, 1981). For Dretske, see his "Epistemic Operators," *Journal of Philosophy* 67 (1970): 1007–23, reprinted in *Skepticism: A Contemporary Reader*, eds. Keith DeRose and Ted A. Warfield (New York: Oxford University Press, 1999), pp. 131–44.

5. See DeRose, "Introduction: Responding to Skepticism," p. 8.

6. *Reading Putnam*, eds. Peter Clark and Bob Hale (Oxford: Basil Blackwell, 1995), p. 284.

7. See W. V. Quine, "Reply to Stroud," *Midwest Studies in Philosophy* 6 (1986): 475.

8. These two senses of "self-refuting" can both be found in Hilary Putnam, *Reason, Truth and History* (Cambridge, England: Cambridge University Press, 1981), pp. 7–8.

9. Ibid., p. 6. (Putnam's italics.)

10. Ibid., pp. 16–17. (Putnam's italics.)

11. Ibid., p. 5.

12. Ibid., p. 16.

13. Being put in this simple way, the argument is clearly invalid. If I am a BIV, I do not *know* that I am a BIV. But it does not follow that I cannot *think of* it.

14. Putnam, *Reason, Truth and History*, p. 3.

15. Ibid., p. 17. (Putnam's italics.)

16. Ibid., p. 18.

17. Ibid., p. 19. (Putnam's italics.)

18. Ibid., p. 18.

19. Ibid., p. 10.

20. Ibid., p. 11.

21. Ibid. (Putnam's italics.)

22. In Putnam's later reflection on his early argument that our understanding of our language must consist in our mastery of its use, he con-

fesses that the notion of use that he employed was a "cognitive scientific" notion. He writes, "My picture of use was a portmanteau affair. There was the computer program in the brain and there was the description of the external causes of the language user's words." *The Threefold Cord: Mind, Body and World* (New York: Columbia University Press, 2000), p. 14. The scientific character of the notion of use can be seen from his talking about language entry rules or language exist rules and the terms he used, such as "handle," "transactions" may allow different interpretations, but it does not mean that there is no pragmatic element involved in his argument. Note that in his well-known essay, "The Meaning of 'Meaning,' " Putnam has already emphasized on the social dimension of meaning, the "structured cooperation" between different sets of speakers, or in short, the division of linguistic labor. However, it is beyond our purpose to trace his pragmatic thought. For division of linguistic labor, see Putnam, "The Meaning of 'Meaning,' " in *Mind, Language and Reality* (New York: Cambridge University Press, 1975), pp. 227–29.

23. Putnam, *Reason, Truth and History*, p. 10. The statement here is not being used to directly support the antiskeptical argument, otherwise the fallacy of begging the question will be committed. What it shows is the subjunctive character of a condition for something to have an ability of reference.

24. See Putnam, *Reason, Truth and History*, p. 49.

25. Ibid.

26. See Hartry Field, "Realism and Relativism," *Journal of Philosophy* 79 (1982): 553.

27. Hilary Putnam, *Realism with a Human Face*, ed. James Conant (Cambridge, Mass.: Harvard University Press, 1990), p. 31.

28. Ibid., p. 30.

29. Michael Williams, "Epistemological Realism and the Basis of Scepticism," *Mind* 97 (1988): 423 (Williams's italics). This characterization is based on Barry Stroud, *The Significance of Philosophical Scepticism* (Oxford: Oxford University Press, 1984).

30. Williams, "Epistemological Realism and the Basis of Scepticism," p. 424.

31. Ibid., p. 422.

32. Since the skepticism in question is merely concerned with the knowledge of the external world, it is globe only with respect to our knowledge of the external world. This kind of skepticism need not exclude other kinds of knowledge. However, Putnam's argument implies

that the force of such a restricted "globe" skepticism is far-reaching, because total detachment from the external world will not only ruin our knowledge of the world but also affect our semantic knowledge of natural language.

33. Putnam, *Reason, Truth and History*, p. 49. (Putnam's italics.)

34. See, for instance, Putnam, *The Threefold Cord*, p. 6.

35. Ibid., pp. 8–9.

36. Ibid., p. 5.

37. In his Kant Lectures, Putnam holds that "our norms and standard of warranted assertibility are historical products; they evolve in time." Moreover, they "always reflect our interests and values" and they are capable of reform." These issues of norm are closely related to the question of how far Putnam distances himself from relativism, a question we will not deal with here. However, the quoted statements strongly indicate he would not be committed to the existence of a single ultimate complete true theory. See Putnam, *Realism with a Human Face*, pp. 21ff.

38. See Putnam, *Reason, Truth and History*, p. 55.

39. Ibid., pp. 49–50. (Putnam's italics.)

40. See Putnam, *The Threefold Cord*, p. 17. This notion of truth will not lead Putnam to idealism because "the notion of *sufficiently good epistemic circumstances* is a "world involving" notion." Ibid., p. 18. (Putnam's italics.)

41. Putnam, *Realism with a Human Face*, p. viii. (Putnam's italics.)

42. See Putnam, *Reason, Truth and History*, p. 56. (Putnam's italics.)

43. In the Preface of his *Words and Life*, Putnam claims that he no longer defends the theory of truth that he put forward in *Reason, Truth and History*. See his *Words and Life* (Cambridge, Mass.: Harvard University Press, 1994), p. v. The change of his attitude to theory of truth is worth noting but he, I think, still holds that truth has to be somehow related to our epistemic practice.

44. Recently the nature of perception has received Putnam's attention. In his Dewey lectures, he criticizes that traditional assumption that there has to be an interface, such as sense data, between our cognitive powers and the external world. See Putnam, *The Threefold Cord*, pp. 10–11. In my opinion, this assumption is also adopted by the skeptic.

45. Many thanks for Professor Kenneth Lucey's helpful comments on this paper. I am also grateful to Professor John Shook for his kind help. Finally, much of the work for this paper was done with support provided by the National Science Council, Taiwan, R.O.C., No. NSC-89-2411-H-007-030.

9

Pragmatic Realism and Ethics: *A Transcendental Meditation on the Possibility of an Ethical Argument for Moral Realism*

Sami Pihlström

Introduction: The Metaethical Problem of Realism and Objectivity

Moral philosophy is often claimed to have taken a practical, or applied, turn in recent years. Philosophers have not (nor should they have) been silent about such urgent human issues as social justice, medical care, war and peace, or the development of new scientific technologies (for example, genetic engineering). The description of modern Anglo-American moral philosophy as mainly consisting of "applied ethics" is, however, inaccurate.[1] Even though the flourishing period of metaethics has come to an end with the disappearance of any school-like unity in the tradition of analytic philosophy by the end of the twentieth century, metaethical disputes over the objectivity or at least intersubjectivity of moral values, norms, and principles—that is, over *moral realism* – have been central in moral philosophy over the past few decades, and continue to do so. These highly abstract disputes are certainly not the usual stuff of applied ethics, which aims at concreteness. They belong to moral philosophy proper and are closely related to perennial philosophical issues about reality, truth, and objectivity. The various antirealist positions in metaethics, such as ethical relativism and skepticism, are also close

relatives of corresponding views in general epistemology and in the philosophy of science.

This essay is an attempt to persuade the reader to accept the following line of thought. The metaethical way of arguing for or against moral realism has led to an *impasse*. The situation is unsatisfactory for all parties to the debate. Therefore, instead of continuing to operate on the metalevel, we might do better if we tried a more direct argument: an ethical one. If one is tempted to embrace pragmatism in some form, it is not implausible to suggest that pragmatic moral realism is itself a transcendentally legitimated ethical commitment, although some groundwork regarding the more general problem of realism within a pragmatist framework is needed to sustain this suggestion. The argument proposed is, of course, circular: the metaethical view favored in this essay, pragmatic realism, which is supposed to give us a "foundation" of morality by showing how moral judgments and moral evaluation are possible, is itself grounded in ethical considerations. But this circularity is not vicious, nor is my approach a foundationalist one. On the contrary, the inevitable circularity illuminates the very structure of my main argument: to argue in favor of moral realism on ethical grounds is to argue transcendentally, by establishing, from within certain "given" actualities, the necessary condition(s) for the possibility of such "givens." It is my objective to show that this kind of argumentation can be (and has been) used in the American tradition of pragmatism. Thus, I hope to be able to "do philosophy historically" in Peter Hare's sense.[2]

If the reader feels that metalevel disputes will not have been left aside in the considerations to be advanced, she or he will be perfectly right. While attempting to show that certain "nonmetalevel," "first-order," ethical reasons support, in a transcendental way, the metaethical view known as realism rather than extreme relativism or skepticism, I indirectly engage in a highly abstract metaphilosophical inquiry on the relation between ethics and metaethics. I hope, however, that such an inquiry will turn out to be relevant to the discussion of the future of the pragmatist tradition, with respect to both the general issue of realism and its application in

metaethics. It is, after all, pragmatism that I employ in seeking to defend moral realism ethically, and it is pragmatism that I hope to be able to reconcile with transcendental argumentation.

WHY METAETHICAL AND METAPHYSICAL ARGUMENTS FOR AND AGAINST REALISM ARE INCONCLUSIVE

Let us begin by distinguishing between some central forms of moral realism and antirealism. This will help us in classifying the arguments supporting these positions.

It is possible to call one a *moral realist* if one believes in objective moral values and, accordingly, in the objective, determinate, mind-independent truth or falsity of statements about moral values. Hence, one is a moral realist if one thinks that it is the (moral) world that somehow makes our statements about moral values true or false.[3] If it is true that murder is wrong, this is so because the world (whatever we mean by that word) is such that murder is wrong, and not because you, I, or anyone else contingently happens to think that murder is wrong. The serial killer may, indeed, believe that murder is not wrong, and according to the realist, be genuinely mistaken in this belief. Morality is not simply a matter of different opinions. This is what the realist means by declaring moral judgments as "mind-independently" true or false. The statement that murder is wrong does not, furthermore, merely refer to the emotions of the individual person making the statement, as ethical emotivists would claim; it refers to the fact (or, rather, the value) that murder *is* wrong. A *moral antirealist*, on this construal, would simply be the one who rejects moral realism, insisting that there are no objective moral values and that statements about such values are not determinately true or false in virtue of any "moral reality" of objective values. An extreme antirealist would straightforwardly reduce moral rightness to individual attitudes of approval or disapproval. According to the programs of emotivism, prescriptivism, and other forms of ethical "expressivism," moral value resides in the subject's expression of attitudes.[4]

This way of characterizing realism and antirealism in moral philosophy is rather weak, however. It would categorize people like J. L. Mackie as moral realists,[5] even though Mackie is famous for his "error theory" which is usually taken to be an antirealist doctrine. This theory says that while people make statements about objective and action-guiding moral values in order to refer to such values and to express truths about them, such statements are in fact false, that is, not meaningless or mere expressions of emotions or other attitudes. This is so because there are no such "queer" things as objective values in the natural, scientifically describable world we inhabit. Yet, moral statements do have a truth value (they are false), and it is the world (which does not contain objective values) that makes them false; indeed, the natural world never makes such statements true.[6]

We should, in the light of views like Mackie's, make more careful distinctions between moral realisms and antirealisms. Geoffrey Sayre-McCord's introduction to an anthology of essays on moral realism and antirealism provides some help.[7] According to Sayre-McCord, it is important to distinguish between cognitivist and noncognitivist forms of moral antirealism. A. J. Ayer, Bernard Williams, and Simon Blackburn would classify as *noncognitivist antirealists*, whereas Mackie and Gilbert Harman, among other error theorists, are *cognitivist antirealists*. Noncognitivists think that ethics is not a cognitive enterprise at all. Its statements are weaker than those made in science, or in some other framework seeking to describe the world. Our ethical opinions do not constitute "knowledge" in the sense in which scientific theories do.[8] Cognitivists are often also realists, but antirealist cognitivists like Mackie and Harman argue that ethical statements purport to refer to objective moral values and that ethics is supposed to be a cognitive enterprise by those who engage in ethical practice and make ethical statements, even though there are no such values in reality and the cognitive project in ethics hence fails. In addition to the "queerness" of objective values, Mackie appeals to the diversity of ethical opinions among cultures. Harman has also defended a version of moral relativism.[9] On Sayre-McCord's construal, moral realism

requires not only cognitivism, because there are cognitivist antirealists, but also a "success theory," which says (*contra* error theories) that moral statements are sometimes true.[10] Further distinctions could be made by trying to spell out what "sometimes" in this characterization means, but these refinements need not concern us here.

Among recent metaethicists, Hilary Putnam[11] has vigorously defended a pragmatically realist or objectivist position, attacking Mackie, Williams, and other moral antirealists whose views are based on the (in Putnam's view) dubious metaphysical assumption of hard-boiled scientific realism, objectivism, and naturalism, or even physicalism. Putnam's arguments center around his thesis of *the entanglement of fact and value*, which he regards as one of the central ideas of the great American pragmatists, especially William James and John Dewey. Putnam thinks that ethical value judgments can be as objectively true (or false) as descriptive factual judgments.

The Putnamean argument in favor of moral realism proceeds as follows. In order to have any "empirical world" as an object of our knowledge, we need to have normative standards for the rational acceptability of factual beliefs. However, we cannot expect our beliefs to match the world as it is in itself, independently of the way we structure it on the basis of our concepts and language use.[12] The notions of factuality and rationality are interdependent, since "the notion of a fact (or a true statement) is an idealization of the notion of a statement that it is rational to believe."[13] The criteria of rational acceptability must be supplemented by criteria of relevance, since true statements that represent facts ought to answer the relevant questions we ask about the factual world. Putnam concludes that our talk about facts involves "all our values," "our total system of value commitments," and that, therefore, "[a] being with no values would have no facts either."[14] Hence, value judgments are an essential element of the scientific project of describing the world, or the facts, and they are not only for describing our "subjective" ways of looking at things (which, "in themselves" as it were, would lack value properties).[15]

Putnam labels this the "companions in the guilt" argument: if ethical notions like the good and the right are ontologically queer,

as Mackie claims, or do not belong to the absolute conception of the world, as Williams claims, or are just culturally relative and hence rationally incomparable or hardly even transculturally understandable, as ethical relativists claim, then many of the notions indispensable in science—for example, the notions of a valid inference, justified belief, well-supported theory, successful reference, truth, and the like—are equally suspect.[16] The idea is that if one rejects objective values, one cannot make sense of there being facts (for us) either, for all the normative criteria by means of which the acceptability of factual judgments is assessed are lost along with values. Hence, what we have in Putnam is a pragmatic *indispensability argument.* He judges the "first-person normative point of view" to be equally important as the "third-person descriptive point of view,"[17] defining the objectivity ("humanly speaking") of morality as "the objectivity of what is objective from the point of view of our best and most reflective practice,"[18] a practice by no means inferior to the more rigorously defined scientific practices, though undoubtedly very different from them. Ethical objectivity should not, Putnam reminds us, be confused with the belief that there is a universal way of life.[19] The relevant kind of objectivity lies in our being committed—despite the fact that we inevitably view the world in ways that reflect our interests and values, as shaped by our culture or tradition—to regarding certain worldviews or value judgments as better than some others.[20]

There is no end to normative disputes over the rational acceptability of value-laden worldviews, nor should there be. Our intellectual lives largely consist in normative and reflective reevaluations of our own and other people's evaluations. Mackie's and other error theorists' and moral antirealists' attacks against the existence of objective moral values are, thus, condemned as humanly irresponsible and pragmatically unsatisfactory by Putnam and his fellow pragmatists. Worse, those attacks are performatively inconsistent by appealing to normative criteria (e.g., standards of the logical evaluation of arguments) while claiming, ad hoc, that an important set of such criteria (viz., the ethical ones) cannot be objective.[21] This line of argument is, clearly, a pragmatist

one. It is from the point of view of our human practices of evaluation—practices that form an indispensable part of almost any other human practice—that we should make the moderately realistic commitment to objective moral values. There is no metaphysically absolute or foundationalist basis for such a commitment.

> The fundamental reason that I myself stick to the idea that there are right and wrong moral judgments and better and worse moral outlooks, and also right and wrong evaluative judgments and better and worse normative outlooks in areas other than morality, is not a metaphysical one. The reason is simply that that is the way that we—and I include myself in this "we"—talk and think, and also the way that we are going to go on talking and thinking.[22]

Admittedly, Putnam's argument does not demonstratively establish the reality or objectivity of moral values. There is no denying of the fact that human practices have normative dimensions other than the (explicitly) ethical one. However, given our need to commit ourselves to valuational activities within, say, scientific practices, there is no sufficient *motivation* for taking a skeptical stand regarding moral values.[23] Moreover, *any* conceivable human practice may also have an ethical dimension, regardless of the variety of other dimensions it might have. The objectivity-for-us of the ethical and nonethical values manifested in our practices is, in any event, something that should not be conceptualized on the model of the objectivity of physical entities and regularities. Putnam and other pragmatic moral realists may safely point out that Mackie et al. are simply looking for objective moral values (which they cannot find) in a wrong place. That is, they mistakenly believe that normative entities should or could be discovered as a result of a scientific investigation or that they could be accommodated in a physicalistic worldview. What is required is, of course, "inquiry" in a much broader sense, a reflective attention on what we take to be essential in our practices of coping with the world. Moral and nonmoral values are cultural constructions rather than physical or material facts, even though they undoubtedly have their basis in entirely natural human life in a natural world.

We should observe that, in addition to being a pragmatic argument, Putnam's defense of moral realism, or of the objectivity of moral values and their entanglement with facts, is a *transcendental* one.[24] The genuine normativity inherent in our practice of making value judgments is argued to be a necessary condition for the possibility of certain human practices, whose actuality is assumed by all parties to the debate—not only the practices of morality, but also such practices as rational theory evaluation in science, which are prima facie taken to be concerned with merely factual judgments. The strong scientific realists' and physicalists' arguments against objective values are self-destructing, performatively incoherent, for they must eventually appeal to the very same normative standards that they attempt to eliminate from their picture of the world. Hence, what Putnam calls the "companions in the guilt" argument can also be regarded as a transcendental reductio ad absurdum of scientifically (or, rather, scientistically) grounded moral antirealism, such as Mackie's or Williams's, as a transcendentally valid ad hominem argument against those who try to abandon a conceptual network they inescapably assume in their own arguments.

Putnam is certainly not the only recent philosopher to whom we can appeal for help when confronted by a moral skeptic like Mackie. A pragmatic and transcendental argument in favor of moral realism not unlike Putnam's can perhaps be extracted from Frederick L. Will's writings.[25] We may read Will as arguing that it is only from within our normative framework itself—from what Putnam calls the first-person point of view—that we can recognize the significance and bindingness of values or norms. We could not even be aware of the questions regarding the status and validity of (moral and other) norms, and we could not try to criticize or revise our norms, were we not already agents governed by them and committed to a life with them. The moral antirealist assumes an external perspective which abstracts from the crux of the matter the normativity of norms and values; accordingly, she or he asks the wrong questions about the ontological status of normativity. The pragmatic moral realist instead adopts an internal perspective in order to transcendentally examine how the normativity that

belongs to our lives is possible, as a cultural institution within which we live.[26]

A position remarkably similar to Putnam's (and Will's) has also been formulated by John McDowell, who urges that "[i]t is no less correct about scientific enquiry than about any other [e.g., ethical] kind of enquiry" to say that "we have only our own lights to go on in trying to ensure that the considerations that we are responsive to are really reasons for thinking one thing rather than another."[27] Another recent writer, John Tasioulas, arrives at a closely related view through an insightful critique of Williams. He explains, with reference to McDowell, that "scientific inquiry, no less than ethical thought, takes place within 'the space of reasons' that is the domain of normative connections." Tasioulas proposes a "traditionalist account of rationality," which (1) "insists that 'thick' ethical concepts do presuppose reflection, and so provide leverage for internal critique," (2) "holds out the possibility of objectively adjudicating between the practices and values of distinct ethical traditions," (3) "rejects the invidious science/ethics contrast as either a scientistic prejudice or a metaphysical illusion," and insists, *contra* Williams, that (4) "while reflection can sometimes be destructive of existing [ethical] beliefs and practices, it may also be vindicatory of them or, at least, it can point the way to their improvement."[28]

As much as I sympathize with this way of thinking, I cannot help believing that these disputes over moral objectivity remain desperately inconclusive. None of the parties to the debate can provide any ultimate argument, transcendental or nontranscendental, against the other. Mackie's and Williams's arguments against the objectivity of moral values are based on their scientistic and metaphysical assumptions, which ought to be rejected, but Putnam's view has its own problems, too. For example, Putnam has a far too imprecise manner of speaking about relativism, naturalism, physicalism, and other views he abhors, and apparently relies on some form of ethical intuitionism.[29] Moreover, a pragmatist (or "traditionalist") account of ethical or nonethical normativity, rationality, and objectivity is vulnerable to the charge of relativism. If it is just *we* — which "we," by the way? — whose practices

are a transcendental grounding of the objectivity of the distinctions between right and wrong moral and other normative outlooks, aren't we in the end committed to an uncritical and self-refuting relativism whose own standards of acceptability vanish in the air? We should, on the one hand, agree with Putnam and other pragmatists on the need to avoid scientistic and reductionist accounts of morality and normativity, but we cannot, on the other hand, safely rely on "our" practices and the ways "we" talk and think, if we wish to avoid relativism. The problem is whether a soft and moderate pragmatic conception of moral objectivity is a stable middle position between an extreme Platonic, Christian, or in some other way metaphysically grounded moral realism and the equally unacceptable forms (both cognitivist and noncognitivist) of moral antirealism.

This is not a problem for moral philosophers only. It is a deep issue worth pursuing by any thinker with pragmatist persuasions. The connection between the problem of moral realism and the general problem of realism seems to be intimate. In particular, the threat of relativism must be faced, although it may never be resolved, by any pragmatic transcendental argument referring to what is necessarily presupposed in the practices of a group of "us."

At this point, with the emerging perspective of relativism, we may try to gain some help from the account of transcendental argumentation presented by Jonathan Lear.[30] Even though Lear does not explicitly deal with ethics in his treatment of transcendental inquiry, we may apply metaethically his formulation of the idea of "transcendental anthropology." We might explicate the Putnamean transcendental argument formulated above in Lear's terms as an argument seeking to show that a commitment to the objectivity of at least some ethical values is a constitutive element of our being "minded" in the way we are.[31] We cannot coherently imagine an exotic tribe (of, say, extreme physicalists) for whom those values would not exist at all. That is to say, we can hardly make sense of people who would not find ethical evaluation important and, hence, not merely a matter of subjective fancies, and still go on living a life we would describe as human. If we

follow Putnam, we are *not*, through this kind of an argument, saying that our ethically engaged form of life is just one among many possible ones. From *our* point of view, there is no coherent alternative to it; there is no nonethical or morally skeptical place to stand and to continue to be included in "us." Lear thinks it is ultimately only an illusion we arrive at when trying to imagine "other-minded" people since we cannot even form the concept of being "other-minded."[32]

With Putnam's account of moral realism as grounded in our practices of talking and thinking we have, to continue using Lear's terminology, obtained a transcendental, nonempirical truth about our anthropological situation, about "the logic of the soul" that guides our lives. In metaethics, just like in the Wittgensteinian rule following considerations which Lear comments upon at some length, transcendental inquiry and an anthropologically oriented pragmatism fruitfully coincide.[33] In metaethics, too, "[a] transcendental consideration of what we are like is considering the very same people [namely, us] as an empirical inquiry into human nature, but it purports to yield some form of nonempirical insight." The transcendental and the anthropological perspectives only apparently conflict with each other. The anthropological stance is "of a piece with" the transcendental one, since it is adopted in the course of a philosophical (transcendental) reflection on what it is to be "minded" in the way we are, or, more precisely, "minded" in any way at all.[34]

But, again, who are "we"? A transcendental investigation of our mindedness is an investigation of something that is a particular form of life, if viewed from an external, "sideways-on" perspective. It remains unclear to me what it means to say the following:

> There are certain truths about us which, though they must be expressed anthropologically, are not confined to any particular form of life. Nor are they merely universal in the sense of occurring in all forms of life. Rather they try to express the conditions of being minded in any way at all.[35]

Is the "we" we are looking for simply "the subject for whom these truths are true," an unobservable metaphysical subject beyond space and time? No, according to Lear, it is just "we in our ordinary lives who can accompany our activities with consciousness." The consciousness we seem to have in being minded in the way we are also seems to be impossible to describe. We can only "live" it from an internal perspective.[36] This is extremely puzzling. I am entirely happy with Lear's program of reconciling the transcendental and the anthropological stances, and I am willing to employ this program in making sense of the role of certain metaethical "truths," such as pragmatic moral realism, but I cannot see how the problem of (moral) relativism is avoided by an appeal to a group of "us"—despite the undeniable fact that Lear's discussion of this issue is one of the most profound ever written.

Nevertheless, even though Lear cannot offer us any easy escape from the problem framework we are considering, my own proposal of how to live with the situation is, as we shall see, crucially indebted to his idea of an entanglement of the transcendental and the anthropological.

PRAGMATISM, ETHICS, AND TRANSCENDENTAL ARGUMENTATION

Putnam's moral realism is, as we saw, based on his pragmatism. In the pragmatist tradition realism has been one of the constantly debated topics, and by no means has it been restricted to moral philosophy. Among the various neopragmatisms critically discussed today, there are more and less realist varieties to be found. Putnam's pragmatic realism, for instance, differs both from Rorty's relativist and postmodernist pragmatism[37] and from Susan Haack's more Peircean way of thinking, which is sharply opposed to any kind of relativism.[38] Exactly like the disputes over moral realism, the more general realism debate within neopragmatism has, on my estimate, ended in a blind alley. The same basic positions and arguments are repeated again and again. Realists insist on

the independence of the natural world in relation to human concepts, language use, beliefs, and theories, often arriving at views about morality like those of Mackie and Williams. Pragmatists and other less realistically inclined philosophers, in turn, emphasize the idea that the way(s) the world is cannot be torn apart from the way(s) in which it is conceptualized and practically engaged by us. Most realists reject the Putnamean thesis of the fact/value entanglement, as well as the notion of moral objectivity grounded thereupon. Pragmatists oppose physicalist or scientific-realist attempts to get rid of irreducible normativity, finding such attempts self-stultifying. A satisfactory view which could save both (moral and non-moral) objectivity and the dependence of such objectivity on a prior, practice-laden subjectivity (on "us") is still lacking, despite a century's work within the tradition of pragmatism.

What we desperately need in this situation, in my view, is a return to the Kantian background of pragmatism, something that is too often overlooked, at least by explicitly non-Kantian pragmatists such as Rorty. The idea, very roughly, is that a quasi-Kantian *transcendental pragmatism*, designed on the model of Kant's transcendental idealism, can safely accommodate *empirical realism* regarding the world we live in—a world including both scientific and ethical elements, among others.[39] This appeal to Kant requires, however, that we "naturalize" and thereby pragmatically transform Kant's original transcendental framework. Pragmatism cannot adopt any full-blown Kantian transcendental perspective. Rather, it must treat the transcendental conditions that make our cognitive and ethical experience of the world possible as socio-culturally and historically changing, as constantly reinterpreted and reconceptualized. Kant's famous categories of understanding, for example, must be understood as constructions emerging out of our social and linguistic practices. They can be critically investigated and revised, if necessary. As Wittgenstein (a kind of Kantian, both in his early and late thought) clearly saw, our language games and the forms of life on which they are based gradually change; no transcendental truth constitutive of a form of life is eternal and universal.[40] Pragmatism, on my opinion, succeeds in doing what

Lear thinks is desirable in our post-Kantian philosophical situation: in maintaining both the transcendental and the empirical perspectives, without collapsing philosophy into a purely empirical discipline indistinguishable from, say, psychology and sociology, or into a vacuous a priori inquiry into allegedly immutable and necessary structures of reason.[41] Such a pragmatism can perhaps be said to *anthropologize* transcendental philosophy. Indeed, the naturalization sought in the pragmatist's critical transformation of Kantianism is an anthropologization rather than a reductive, natural-scientific replacement of transcendental concerns.

One of our argumentative circles can now be closed. I want to argue that the naturalization or anthropologization of Kant—or, what amounts to the same, the retranscendentalization of pragmatism—cannot be carried out unless ethics and the issue of moral realism is taken into account. The socially and historically contextualized form of pragmatist transcendental philosophy I advocate is, at bottom, an ethical enterprise. Human practices, or forms of life (that is, the Putnamean "way we talk and think," or the Learean way in which we are "minded") are inherently ethical. These practices ultimately provide the pragmatic transcendental conditions or a nonfoundationalist quasifoundation for the possibility of both cognitive and ethical experience. The pragmatist and anthropologized transcendental philosophy defended here must, then, be grounded in our (or the ethical subject's, whoever that is) relations to *other people* in the ultimate ethical concept of *responsibility*, which structures the very basic fact that it is only in intersubjective practices that any grounding of objectivity, in ethics and elsewhere, can be found.

To make these extremely abstract considerations somewhat more concrete, an example should be given. Fortunately, there is a natural case to be taken up at this point. Among philosophers seeking to transform transcendental philosophy into a more pragmatic method, Karl-Otto Apel has perhaps been the one most intimately engaged in ethical reflection. In his work, the pragmatic reinterpretation of transcendental philosophy takes a discourse-ethical shape.

While several aspects of Apel's work are, to my mind, worth following,[42] his position as a whole is far from unproblematic. His program of providing an ultimate grounding or ultimate foundation (*Letztbegründung*) of transcendental philosophy is, it seems to me, but another variant of the all too familiar theme of "first philosophy." Although he tells us that he is transforming transcendental philosophy, he seems to be seeking ultimate, "first," philosophical principles to ground all other discourses. Those principles, which in Apel's view cannot be overcome or criticized without performative self-contradiction, are the basic norms of argumentative communication.[43] Hence the ethical point of view: Apel, like Jürgen Habermas (with minor differences), seeks to ground philosophy in an ethical appreciation of certain intersubjectively basic norms. Their common research program, transcendental pragmatics, hermeneutics, or semiotics of argumentative discourse or communication, finds its ultimate foundation is discourse ethics.[44]

Apel eventually is, I think, a rather orthodox, foundationalist, infallibilist, and aprioristic Kantian in disguise; his ultimate foundations are not as post- or nonmetaphysical as he supposes. This is demonstrated, for instance, by his manner of speaking about "the 'transcendental language game' of philosophical discourse," with respect to which we can ask the crucial quasi-Kantian question about the conditions of the possibility of the validity of meaning. The right starting point in philosophy, for Apel, is not the traditional transcendental thinker's "*ego cogito,*" but the irreducibly intersubjective "*I argue,*" which is possible only in a social, discursive context.[45] In arguing that fallibilism cannot be extended to the norms governing the transcendental language game of argumentative discourse itself, Apel overlooks the fact that all human language use may be revisable in the course of the development of our practices or forms of life. The rules of argumentation, Apel's final *transcendentalia,* however deeply ethical, are no more sacrosanct than the allegedly transparent structure of the individual transcendental consciousness presupposed in the earlier phases of transcendental thought. Any "certainties" lying at the basis of our language games, including the philosophical language game in

which fallibilism, among other issues, is theorized about,[46] must themselves be revisable from the point of view of some other language game. Fallibilism is simply something other than universal skeptical doubt, which, I agree with Apel, is a nonstarter. One can appeal to a nonrevisable, infallible certainty of the philosophical language game only as a metaphysical postulate. Instead of following Apel here, the true pragmatist should simply bite the bullet and self-reflectively regard any philosophical theory, including the one about the fallibility of any philosophical or any other theory, as fallible and revisable in the course of the development of our practices.[47] If Apel's criterion of performative self-contradiction precludes this, then that criterion itself should perhaps be revised. *Contra* Apel, nothing in philosophy is "undebatable"; human fallibility extends everywhere.[48] This is something that the pragmatist, beginning with *human* practices and truly human, hence finite, forms of life, cannot brush under the carpet. The postulation of an idealized communication community is just that, an idealization too far removed from human actualities.[49]

What I am saying is that it is possible for the pragmatist to dispute Apel's basic premise, that is, his contention that any philosophy adopting a "practical standpoint" (i.e., any ethically relevant philosophy) must distinguish between "the universally valid presuppositions of its critically reflective language game" and "the purely contingent, historically conditioned presuppositions which make up the background of the lifeworld."[50] From the practical standpoint itself, this is a distinction without difference.

From a somewhat different point of view, Apel's approach has recently been criticized in a very interesting essay by Steven Galt Crowell, who regards it as an example of the "intersubjective turn" that transcendental philosophy has taken in our century.[51] Like Apel and many other commentators,[52] Crowell discusses the self-referentiality and the resulting circularity of transcendental argumentation, laying special emphasis on the requirement that transcendental philosophy ought to be "self-grounding," that is, that it ought to explicate its own conditions of possibility. He credits the phenomenological tradition for having distinguished between "an

epistemological demand that the knowledge claims philosophy makes should be shown to be consistent with its own account of what knowledge is and how it is possible; and an *ethical* demand that the 'genesis' of the grounding project should be shown to have some *necessary* motivation within experience itself."[53] It is the latter demand that is, according to Crowell, insufficiently acknowledged in recent intersubjective interpretations of transcendental philosophy, such as Apel's.

Transcendental philosophy cannot maintain a "first-person perspective" in the epistemological sense—in the "methodologically solipsist" sense assumed in the tradition of the philosophy of consciousness from Descartes through Kant to Husserl, correctly attacked by Apel and others—but it must, Crowell argues, do so in an ethical sense, regarding the first-person perspective as "an indispensable referent for the ultimately ethical ground of philosophy."[54] Thus, transcendental philosophizing highlights the need to make ethical commitments at the beginning of one's philosophical work. Philosophy according to the transcendental tradition ought to be critically reflexive and thus self-grounding is not just a methodological requirement but an ethical one as well. In attempting to understand this requirement, we may, Crowell urges, find some help in Emmanuel Levinas's conception of ethics as a "first philosophy." The self-grounding of transcendental philosophy must be sought in ethical experience rather than in purely rational argumentation. Therefore the first-person perspective will have to be philosophically privileged, *pace* the intersubjective turn. The task of transcendental philosophy is ethical, since such philosophy arises, according to Crowell, from "an obligation to constitute a world that can be shared with others."[55] However, Apel's appeal to the intersubjectively shared norms of an idealized community of argumentation does not help, since, from a Levinasian perspective, "the ethical claim of the Other must reach me *prior to* the constitution of an interchangeable intersubjectivity; hence there is a first-person condition that eludes the transcendental subject (as community of sign interpreters) while making it possible."[56] With a Levinasian tone of voice, Crowell further reflects:

> The problem of grounding "leads to the Other" in the sense that the *origin* of intersubjective personhood lies in the ethical experience of a demand that "calls my freedom into question." I demand justification of myself as a person only because it has already been *demanded of* me, as ego or "freedom," by the Other.[57]

This is the way we arrive at the "ultimate philosophical self-responsibility"[58] that can only be ethically explicated. No self-responsibility in the form of a requirement of grounding is possible unless I, as a transcendental subject, have entered into a primary ethical relationship with the Other. The Other's demand for *justice* is "the origin of *my* project of justification," and also the condition of the possibility of any commonality or intersubjectivity. This is the "original connection between justification and justice,"[59] the very point at which even the most abstract philosophical, e.g., ontological or epistemological, reflection on the conditions of the possibility of experience or meaningfulness refers back to the still more primary ethical condition of my being able to take philosophical or argumentative responsibility over my reasoning within an intersubjective setting, facing the Other's *visage*. Only here, only in the concreteness of responding to the Other's ethical demand, can Apel's requirement of "an ethic of responsibility," potentially yielding an ideal consensus, be answered. Responsibility is more explicitly an ethical notion than responsiveness, but it surely grows out of the latter. To be a responsible thinker is to be responsive to others through argument and reason, that is, to take seriously the others' need to be heard and their need to be given reasons for what they are supposed to believe.

But Crowell's argumentation is not unproblematic, either. Even though his return to the primacy of the first-person point of view is ethical rather than epistemological, he must face the charge that he eventually revives, albeit in a reinterpreted form, the methodological or transcendental *solipsism* characterizing much of modern Western philosophy. Paradoxically, the Levinasian emphasis of the ethical encounter with the Other does not remove the priority of the subject, *me*, since it is always me who must stand in the ethical relation with the Other and take ultimate, nonshare-

able, uncompromised responsibility for this relation.[60] Nevertheless, Crowell's way of leading us to the ultimate ethical problematique of the self-responsibility of philosophical (transcendental) inquiry brings to the fore the main theme of this essay: the issue of moral realism is not simply a problem for moral philosophers, but lies at the very center of virtually all philosophical reflection. This issue can be approached by means of transcendental argumentation, as in Putnam, though not explicitly, and it can be connected with larger philosophical problem frameworks, such as the general question of realism. But we always seem to come back to the basic ethical problem itself. We are thus led to consider, self-reflectively and (hopefully) self-responsibly, the ethical status of our philosophical views and arguments regarding moral realism. This is a pleasant task for a pragmatist, since it turns our attention to what our metaethical position of realism really means "in practice." The "pragmatic method" itself—at least in James's if not in Peirce's sense—seeks to determine the practical (including the ethical) outcome of our philosophical and nonphilosophical conceptions and to evaluate those conceptions on that basis.

The Ethical Basis of Metaethics: Realism as an Ethical Commitment

My question at this point is, simply, the following: Why shouldn't we, in the inconclusive argumentative situation described above, and convinced (by Crowell) of Apel's and other intersubjectivists' incapacity to provide a plausibly transformed transcendental philosophy with an ethical grounding, consider genuinely ethical arguments regarding moral realism and, hence, regarding the possibility of an ethically grounded transcendental philosophy itself?[61] Why, that is, should we stay on the abstract metaethical level, arguing back and forth between realism and antirealism with no generally acceptable conclusions within our sight?

This suggestion might be understood as a variation of Putnam's indispensability argument. It can also be seen as an application of

the pragmatic method. I now propose to argue, transcendentally, that it is only from the perspective of our ethically loaded human practices that moral realism turns out to be a legitimate commitment. The scientific, naturalistic, "third-person" point of view attempting to transcend such practices is simply the wrong place to begin in metaethical argumentation. Hence, Mackie, Williams, et al., are transcendentally shown to be wrong even before their arguments against moral objectivity can get off the ground.

If we view realism as an ethical commitment transcendentally based on our natural human life (or lifeworld, to employ a Husserlian term), we can see how normative ethics grounds metaethics, rather than the other way round. We may also see the distinction between ethics and metaethics, usually taken for granted in twentieth century moral philosophy, become vague and context-dependent. The connection to pragmatism is intimate, since this "naturalized" way of employing ethical argumentation in support of moral realism is in fact close to James's famous notion of the "will to believe," a suggestion first made with regard to the justification of religious belief. We are, the pragmatist might claim, justified in making a "will to believe" kind of leap to moral realism and hence in believing in the objectivity and rational negotiability of ethical values, even though (or precisely because) the metaphysical and metaethical disputes over this issue seem to lead to a dead end.[62] We should then be able to defend, transcendentally and ethically, a pragmatist form of moral realism—something that James himself did not do, not explicitly at any rate.[63] Such a realism is a transcendental condition—albeit being simultaneously a natural fact of our human practices—of our being able to lead a fully human life, engaged in continuous normative evaluation, i.e., the kind of life we lead anyway. However, it is not a transcendental condition in a purely epistemological sense. It is a genuinely ethical condition, something that makes our life possible in an essentially ethical sense as a fully human life. It might be called a "transcendental-anthropological" condition in Lear's sense.[64]

If transcendental philosophy is grounded in pragmatism, as I think it should be, then the demand for an ethical grounding of

philosophical argumentation in general is ipso facto satisfied. From the point of view of a pragmatist reinterpretation of our search for transcendental conditions for the possibility of experience, meaning, intelligibility, and practical (ethical) requirements always come first—or, better, they are inseparable from "theoretical" ones. Ethics is for pragmatists inevitably entangled with ontology and epistemology, since pragmatism starts from the idea that we humans act in a world which is cognized and ontologically structured only through our action and the conceptual resources employed in the course of such action.[65] Our actions are inevitably conducted in an ethically loaded setting. There is no absolutely neutral or nonethical place for us to stand in viewing the world as actors in it. There can be no prior ontological or epistemological critique of moral realism in abstraction from the ethical status of the doctrine being criticized. Pragmatic transcendental philosophers, despite their legitimate insistence (with Apel) on the intersubjective shareability of experience and meaningfulness, need not dream of any ultimate grounding of philosophy in the absence of ethics. They can avoid what Crowell perceives to be the main problem of the intersubjective turn of transcendental philosophy.

In other words, there can be from the pragmatist point of view *no* ultimate, noncriticizable grounding of philosophy or of anything else. Or, the pragmatic grounding of transcendental reflection in ethical responsibility is "ultimate" only in the sense that it also reflects on its own possibility, makes itself possible. There is no point in asking deeper questions about why one should adopt the ethical point of view to one's actions, philosophical or otherwise. The requirement that argumentative action ought to be ethically evaluated with regard to its responsibility is "ultimate" in the sense that nothing grounds it. To assume such responsibility is simply to be human. It is precisely because of this self-grounding reflexivity and, accordingly (*pace* Apel), of the thoroughgoing fallibility of philosophical (even transcendental) reflection, that pragmatism is a genuinely self-responsible form of transcendental philosophy. The transcendental inquirer always begins with a group of given presuppositions, for example, presuppositions regarding

the normativity ineliminably present in our discursive practices. She then circularly returns to them, but none of those presuppositions is assumed to be incorrigible or beyond rational discussion and negotiation. Such discussion and negotiation should never be detached from ethical concerns.

The problem, if we follow the (meta)ethical ideas of James's doctrine of the will to believe and Levinas's appeal to the Other, is whether there is any room for ethical or metaethical *theories* and *arguments* in our approach anymore. From the Jamesian point of view, a moral commitment is eventually each individual's "will to believe" and personal responsibility. From the Levinasian point of view, the essence of morality lies in the subject's primary relation to the Other. Analogously, Wittgenstein thought that ethical value lies beyond what is expressible in language. Are there, then, anything even remotely like Apelian universally or even contextually valid normative presuppositions of argumentative discourse to be found in the ethical realm, if we, affirming the primacy of the first-person point of view, just have to start from these thinkers' ways of understanding ethics? This issue must be left unsettled here. If one's case for moral realism is genuinely pragmatist and transcendental, one must accept the constitutional role played by transcendental subjectivity (however social) in relation to objectivity or intersubjectivity. This is what unifies such diverse thinkers as, say, James, Levinas, and Wittgenstein. But the more precise sense in which this subjectivity is thought to be primary in relation to the objectivity whose possibility it grounds must be discussed on some other occasion. To accord *some* role to such ultimate subjectivity is, however, to follow the main line of thought of the present inquiry, that is, to place the basis of pragmatically responsible and self-reflective metaethical commitments to moral objectivity in the more primary, and inevitably subjective, ethical motivation itself.[66]

The Possibility of a Nonfoundationalist Ethical "Foundation" of Metaethics

Ethical life itself, instead of abstract metaethical analysis of ethical concepts and intuitions, will necessarily be our starting point if we endorse the pragmatist suggestion sketched in the previous sections. This is a proposal concerning how one should begin one's moral considerations. It is also a proposal resembling certain developments in recent discussions of modernity and postmodernity.

What I particularly have in mind is Charles Taylor's conception of "strong evaluation" as a definitive characteristic of human life. One might say, from a Taylorian perspective, that one or another ethical framework of strong evaluation is inevitably transcendentally presupposed as the basis of all theorizing and argumentation that human beings engage in, metaethical theorizing and argumentation included. This results simply from the fact that metaethical inquiries are part of a morally loaded human life itself. This is a view Taylor shares with the major figures of the pragmatist tradition, although he does not seem to have much to say about them.[67]

Just as the philosopher (such as Taylor) attempting to understand transcendentally our modern predicament and its formation from within that predicament itself, I have been arguing from the demand of individual ethical responsibility, assumed in philosophical argumentation in general, to metaethics (moral realism), and back to (first-order) ethics again. Such an argument is legitimate, insofar as we take realism, itself ethically legitimated, to be relevant in the legitimation of our ethical commitments. The argument is of course circular, but not viciously so. The circle it contains is a pragmatically self-strengthening one. It is only from the point of view of my ethical responsibility in relation to the Other which enables me to argue in the first place that I am able to ethically reflect on the possibility of defending moral realism—which explicates the nature of the ethical responsibility whose possibility was already assumed.

I hope it has become clear that my argument for moral realism is, in addition to being an ethical argument, also a transcendental

argument. Realism is argued to be a necessary condition of the possibility of the kind of moral life that we naturally live, and even of nonmoral life, insofar as that is ever possible for us. This is also an example of naturalized transcendental argumentation: morality is an entirely natural part of our lives, also to be approached empirically—for instance, anthropologically, sociologically, and historically, or even neuroscientifically.[68] There is nothing wrong in such investigations, although they do not provide answers to exactly the same questions as the more abstract philosophical type of inquiry. When appealing to moral life itself as a nonfoundational "foundation" of ethical realism, we appeal to something natural, something that belongs to "human nature." I do not think that foundational studies of morality should direct themselves to anything non- or supernatural. We can only ground our metaethical standpoint in something that is natural to us as human beings, namely, ethics.[69]

This natural form of ethical life is ipso facto transcendental. It is transcendental precisely because it is natural, unavoidably given to us. It is also contingent in the sense that we could be, or could have been, entirely different natural creatures from what we in fact are. Hence, the naturalistic and pragmatic transcendental philosopher should try to overcome the dichotomy that more strongly transcendentally oriented thinkers like Apel still assume between the transcendental and the contingent. Only someone engaging in foundationalist first philosophy can claim that, "[w]hile recognizing the dependence of our thought and understanding on contingent, 'background' presuppositions of the lifeworld, on its language games and life forms, . . . we must also recognize the conditions of valid knowledge about contingent phenomena, namely, conditions beyond or below or behind which we cannot go, hence noncontingent conditions."[70] True, we may have to admit that one cannot *at the same time* view certain conditions as both natural or anthropological (hence contingent) and transcendental (hence necessary). But rather than postulating any metaphysical hierarchy of increasingly transcendental and decreasingly naturalized conditions, we may regard the two poles of the transcendental-natural

continuum as *complementary*, roughly in the sense in which the microphysical descriptions postulating "particles" on the one hand and "waves" on the other are thought to be complementary in interpretations of the quantum theory, that is, mutually incompatible yet both necessary and together sufficient in our most informed scientific representations of the world.[71] Applying this analogy in metaethics or in what might be called, following Kant, a *Metaphysik der Sitten*, we may say that the pictures of human life as involving strong ethical evaluation, commitment to genuine transindividual and even transcultural moral values, on the one hand, and of human life as being fully explainable in purely factual, natural-scientific terms, on the other, are complementary pictures. A *Gestaltswitch* is required for us to move from one to the other, but both are needed, since both are constitutive of our normal natural practices of coping with the world we live in.[72]

Perhaps we are naturalizing Kant beyond recognition by rejecting Apel's too easy compromise with transcendental philosophy and pragmatism. Indeed, Kant himself would hardly endorse anything like the naturalization I have proposed. Yet we are traveling back to Kant's main ideas by arguing that the ultimate aim of transcendental philosophy, however naturalized, is ethical. Ethics is the crown of the project of transcendental argumentation. It is also the crown of the project of naturalizing Kant. Furthermore, the relevance of the ethical point of view and of moral realism in relation to the naturalization of transcendental philosophy or the transcendentalization of pragmatic naturalism suggests that a true naturalism or pragmatism does not simply view human beings from a third-person perspective as participants in practices or forms of life to be understood externally, but also, and more importantly, as genuine subjects engaging, from a first-person perspective, in *their own* ethically problematic practices or forms of life. One does not cease to be a genuine subject when one realizes that one's subjective actions are situated within an intersubjectively shared practice. It is still possible to adopt an "internal" point of view to that practice, living as a part of it.

One of the key problems to be faced in the project I have

sketched undoubtedly is relativism, as was already pointed out in connection with Putnam and Lear above—a problem which Apel discusses with respect to Heidegger and Wittgenstein, in particular[73]—and even solipsism, as my remarks on Crowell's ethical critique of Apel's intersubjective turn demonstrate. In our naturalized picture of the transcendental grounding of moral realism, morality can be argued to be transcendentally dependent on our biological, psychological, social, cultural, historical, and other fully natural backgrounds: on the frameworks and traditions people have inherited, the frameworks within which they naturally live and act and which can be critically renewed, though not easily, by means of critical encounters with other such frameworks.[74] These backgrounds can also be ultimately individual or personal. We cannot deny the relevance of individual "philosophical temperaments" in our attempt to understand morality.[75] Yet, rather than succumbing to the temptations of relativism, we should constantly remind ourselves of its dangers, prepared to argue rationally even amidst our occasional lapses to relativism. As was perceived with the help of Lear, there is a way of formulating the project of transcendental investigation in a way which does not make the problem of relativism immediately threatening, since the focus of interest is *our* mindedness, not the imagined situation of our form of life being one among many. Even so, the relativism issue will hardly ever leave us for good.

I want to conclude by reminding the reader once again that my pragmatic conception of the ethical grounding of metaethical principles, such as realism, is, like all results of naturalized and anthropologized transcendental philosophy, entirely fallible. Fallibilism and antifoundationalism should be extended not only to ethical and metaethical doctrines themselves, but also to the metalevel conceptions of how those doctrines are related to each other. This is what it means to naturalize philosophy, transcendental moral philosophy in particular, all the way down—or, better, all the way up to one's most abstract philosophical arguments and theories.[76]

The ethical argument for moral realism I have been meditating on is, indeed, where I think the pragmatist's apology for naturalized

transcendental philosophy should reach its culmination. What I have proposed is a pragmatic, fallible, and experimentalist (that is, Putnamean and perhaps in a sense Deweyan) conception of ethical "inquiry" and of the justification of ethical values and norms, a conception firmly rooted in the American tradition of pragmatic naturalism.[77] This conception requires a pragmatic realism, a realism that ought to be defended as an ethical commitment. I have argued that this defense, in turn, can be considered transcendental, though at the same time anthropological. It is a reflexive defense of certain conditions for the possibility of what is given in human life.

Finally, this transcendental project itself, the strategy that seeks to establish conditions for the possibility of what is given in human life, can again be defended (perhaps only) *ethically*: it is an ethical way to philosophize, since it turns attention to our life, to what it is to lead a human life natural to human beings. The reflexive circle of transcendental inquiry is nowhere disconnected from ethical problems and assumptions, even though the transcendental thinker may always revise those problems and assumptions in the course of inquiry.[78]

Notes

1. On problems related to the notion of "applied philosophy" more generally, see Sami Pihlström, "Applied Philosophy: Problems and Applications," *International Journal of Applied Philosophy* 13 (1999): 121–33.

2. See *Doing Philosophy Historically*, ed. Peter H. Hare (Buffalo, N.Y.: Prometheus Books, 1988).

3. We might classify moral realists as "thick" (rather than "thin") realists in Colapietro's sense, as explained in "Realism Thick and Thin," this volume. It should not be surprising that such a position is appealing to pragmatists who want to take seriously the thickness and richness of our practices.

4. I shall not refer directly to the standard literature on expressivist moral theories. See the relevant discussion in *Essays on Moral Realism*, ed. Geoffrey Sayre-McCord (Ithaca, N.Y.: Cornell University Press, 1988).

5. J. L. Mackie, *Ethics: Inventing Right and Wrong* (Harmondsworth, England: Penguin Books, 1977), chap. 1.

6. On the importance of the notion of truthmaking in metaphysics more generally, see D. M. Armstrong, *A World of States of Affairs* (Cambridge, England: Cambridge University Press, 1977).

7. Sayre-McCord, "Introduction," in *Essays on Moral Realism*.

8. Bernard Williams expresses this idea by drawing a sharp distinction between nonabsolute ethical knowledge and "absolute" scientific knowledge in *Ethics and the Limits of Philosophy* (Cambridge, Mass.: Harvard University Press, 1985). Simon Blackburn sympathizes with a Humean projectivist view of morality and defends "quasi-realism," which seeks to show "how much of the apparently 'realist' appearance of ordinary moral thought is explicable and justifiable on an anti-realist picture." *Essays in Quasi-Realism* (Oxford: Oxford University Press, 1993), p. 151. Blackburn claims that "starting from an anti-realist position," the quasirealist "finds himself progressively able to mimic the thoughts and practices supposedly definitive of realism" (p. 4). Classical examples of noncognitivist antirealism include, of course, emotivism, prescriptivism, and other expressivist theories. R. M. Hare, well known for his prescriptivist work in metaethics, attacks what he calls "descriptivism" and wants to avoid ontological talk about values, objectivity, subjectivity, realism, and other ethical notions. The right metaethical method, in Hare's rather traditional view, is logical and conceptual analysis. See *Essays in Ethical Theory* (Oxford: Oxford University Press, 1993), chap. 6.

9. See Gilbert Harman, *The Nature of Morality* (Oxford: Oxford University Press, 1977) and Gilbert Harman and Judith Jarvis Thomson, *Moral Relativism and Moral Objectivity* (Oxford: Blackwell, 1996). Harman also stresses that the moral relativist need not be an error theorist. On the problem of the cultural diversity and plurality of moralities, yielding the threat of relativism, see also, among numerous sources, the essays collected in *Cultural Pluralism and Moral Knowledge*, eds. Ellen Frankel, Fred D. Miller, Jr., and Jeffrey Paul (Cambridge, England: Cambridge University Press, 1994).

10. The situation is further complicated by the fact that both error theories and success theories may be connected with subjectivist, intersubjectivist, or objectivist conceptions of the truth-conditions of moral statements. See Sayre-McCord, *Essays on Moral Realism*, pp. 10, 14–22.

11. Of special importance are Hilary Putnam, *Reason, Truth and History* (Cambridge, England: Cambridge University Press, 1981); *Realism with a Human Face*, ed. James Conant (Cambridge, Mass.: Harvard University Press, 1990); and *Words and Life*, ed. James Conant (Cambridge, Mass.: Harvard University Press, 1994).

12. Here Putnam presupposes his famous critique of "metaphysical realism," the view that there is in principle a single true description of the way the world is in itself, mind- and discourse-independently. See my discussion of the distinction between metaphysical and internal realism in Pihlström, *Structuring the World: The Issue of Realism and the Nature of Ontological Problems in Classical and Contemporary Pragmatism* (Helsinki: Philosophical Society of Finland, 1996) and *Pragmatism and Philosophical Anthropology: Understanding Our Human Life in a Human World* (New York: Peter Lang, 1998). David Weissman argues, quite correctly, that truths about the world (and hence facts) are, in a sense, dependent on values, according to Kantian and pragmatist thinkers like Putnam. He is also right in observing that pragmatists in general and James in particular can be regarded as paradigmatic Kantians. See his *Truth's Debt to Value* (New Haven, Conn.: Yale University Press, 1993), p. 11. His critique of pragmatism and Kantianism is, however, superficial, for he supposes that thinkers in these traditions are necessarily committed to a naively constructivist theory of "worldmaking," according to which our arbitrary desires and valuations build up various idiosyncratic "worlds." The way in which the world is "constructed" according to pragmatists is much more sophisticated, however (see Pihlström, *Pragmatism and Philosophical Anthropology*, chap. 1). Weissman hardly succeeds in providing much more than a rather standard account of metaphysical realism in his denial of the constitutive dependence of truth on value.

13. Putnam, *Reason, Truth and History*, p. 201.

14. Ibid.; see also Putnam, *Realism with a Human Face*, pp. 115–17.

15. In his more recent book, Putnam speaks about facts and values as "interpenetrating." See *Pragmatism: An Open Question* (Oxford: Blackwell, 1995).

16. See Putnam, *Realism with a Human Face*, pp. 37, 140–41.

17. Putnam, *Words and Life*, p. 168.

18. Ibid., p. 177.

19. Ibid., pp. 184ff., 214–15.

20. Ibid., chaps. 8 and 9; see also Putnam, *Realism with a Human Face*, chap. 11, and Putnam, *Renewing Philosophy* (Cambridge, Mass.: Harvard University Press, 1992), chap. 5.

21. It seems to me that the genuine normativity of objective values is lost not only if one endorses an error theory or some other form of anti-realism, but also if one follows those reductively naturalist "moral realists" who claim to be able to accommodate values in a purely naturalist

or physicalist picture of the world. Examples of these moral realists are Richard Boyd, "How to Be a Moral Realist," in Sayre-McCord, *Essays on Moral Realism*, pp. 181–228, and Mario Bunge, *Ethics: The Good and the Right* (Dordrecht, The Netherlands: D. Reidel, 1989). An extreme version of the latter way of thinking has been formulated by Paul Churchland who seeks to offer a neuroscientific account of such phenomena as moral knowledge, moral perception, moral virtue, and moral character (among others). See his "Toward a Cognitive Neurobiology of the Moral Virtues," *Topoi* 17 (1998): 83–96. Such a scientistic reduction—which Churchland calls "reconstruction" but which might as well, or more properly, be called "elimination"—simply appears to give up the *moral* features of these phenomena (while, admittedly, being on the right track in abandoning any crude science versus ethics dichotomy in a pragmatic way). I cannot, however, dwell on this issue in any detail here.

22. Putnam, *Renewing Philosophy*, p. 135.

23. One may also argue—following Peirce and other pragmatists—that there is an indispensable ethical core in the scientific method itself. For example, see Joseph Ransdell's discussion of the Peircean commitment to truth as a moral value, and his reminder that Peirce held that logic presupposes ethics, in "Peirce and the Socratic Tradition," *Transactions of the Charles S. Peirce Society* 36 (2000): 341–56.

24. Kenneth Westphal's contribution to this volume, "Can Pragmatic Realists Argue Transcendentally?" convincingly shows that pragmatists can argue transcendentally. This is not the right place to discuss the differences (sometimes significant) between his views and mine, however.

25. See Frederick L. Will, *Pragmatism and Realism*, ed. Kenneth Westphal (Lanham, Md.: Rowman and Littlefield, 1997), and *Pragmatism, Reason, and Norms: A Realistic Assessment*, ed. Kenneth Westphal (New York: Fordham University Press, 1998).

26. More than anyone else, Kenneth Westphal has drawn the attention of the philosophical community to Will's work. I am most grateful to him for his help in the formulation of the argument I am presenting here.

27. John McDowell, "Eudaimonism and Realism in Aristotle's Ethics," in *Aristotle and Moral Realism*, ed. Robert Heinaman (Boulder, Col.: Westview Press, 1995), p. 217. Some of McDowell's essays on moral realism and other metaethical matters are collected in his *Mind, Value, and Reality* (Cambridge, Mass.: Harvard University Press, 1998). Chapter nine of this book is particularly relevant to the concerns of my essay.

28. John Tasioulas, "Relativism, Realism, and Reflection," *Inquiry* 41

(1998): 402, 406. I am very much in agreement with Tasioulas's arguments. His work, just as Will's, strongly enriches Putnam's critique of Williams, and it also bears some resemblance to McDowell's position. See Georgios Anagnostopoulos, "Ethics and the Indispensability of Theory," *Topoi* 17 (1998): 149–66. Another neopragmatist arriving at a relatively strong objectivism about morality is Nicholas Rescher, in *The Validity of Values* (Princeton, N.J.: Princeton University Press, 1993). See also the critical discussions in *Pragmatic Idealism: Critical Essays on Nicholas Rescher's System of Pragmatic Idealism*, eds. Axel Wüstehube and Michael Quante (Amsterdam: Editions Rodopi, 1998). Among major living philosophers Thomas Nagel also defends moderate moral objectivity, though not in a pragmatist way, in *The View from Nowhere* (Oxford: Oxford University Press, 1986). Recent pragmatist advocates of moral realism also include Cheryl Misak and David Bakhurst, who rely on a Peircean notion of truth as an ideal limit of inquiry as something that would be best for us to believe if inquiry could be carried on indefinitely for their characterizations of the truth-aptness of moral discourse. See Misak, "Pragmatism, Empiricism and Morality," in *Essays for David Wiggins: Identity, Truth and Value*, eds. S. Lovibond and S. G. Williams (Oxford: Blackwell, 1996), pp. 201–18; Misak, *Truth, Politics, Morality: Pragmatism and Deliberation* (London and New York: Routledge, 2000); and Bakhurst, "Pragmatism and Moral Knowledge," in *Pragmatism, Canadian Journal of Philosophy* supplementary vol. 24 (1999): 227–52.

29. I discuss these and some other problems in Pihlström, *Structuring the World*, chap. 5. I am not implying that the writers I associate with Putnam (e.g., Will and McDowell) inevitably share the same problems.

30. Chaps. 11 and 12 of Jonathan Lear, *Open Minded: Working Out the Logic of the Soul* (Cambridge, Mass.: Harvard University Press, 1998) are particularly relevant here.

31. Jonathan Lear, *Open Minded*, pp. 250, 294. On p. 249 Lear stipulates that "a person is *minded* in a certain way if he has the perceptions of salience, routes of interest, feelings of naturalness in following a rule, and so on which constitute being part of a certain form of life." See also p. 290.

32. Lear's attempt to show that relativism is not really an option for us is reminiscent of Davidson's well-known argument against the possibility of rival conceptual schemes in *Inquiries into Truth and Interpretation* (Oxford: Oxford University Press, 1984). I have expressed some doubts about Davidson's project in Pihlström, *Structuring the World*, but I shall not return to them here.

33. Lear, *Open Minded*, pp. 266, 272. "The most interesting question about Wittgenstein's later philosophy is, I think, how one can adopt the anthropological stance and the transcendental stance simultaneously" (p. 253). See also pp. 297–98.

34. Ibid., pp. 278, 281, 300. The worry arises, however, whether Lear can successfully synthesize the transcendental and the anthropological by claiming that the latter is not a genuinely empirical stance at all but "an artifact of philosophical inquiry" (pp. 271, 273). Here, in my view, pragmatism might offer a more promising synthesis, since it draws attention to *actual* human practices, not merely to imagined ones, as Wittgenstein does.

35. Ibid., p. 276.

36. It is "only from the inside," we are told, that we can be aware of the fact that "our form of life is not some fixed, frozen entity existing totally independently of us," but rather "(our) active mind" (p. 300). This view is not far from Will's position, briefly mentioned above.

37. A critique of Rorty and a critical defense of Putnam is provided in Pihlström, *Structuring the World*, and *Pragmatism and Philosophical Anthropology*.

38. Susan Haack has recently collected some of her essays on realism, relativism, and other matters in *Manifesto of a Passionate Moderate: Unfashionable Essays* (Chicago: University of Chicago Press, 1998).

39. Kant himself also thought that transcendental idealism and empirical realism are compatible. The relation between Kantianism and pragmatism is discussed to some extent in Pihlström, *Pragmatism and Philosophical Anthropology*, and a detailed study of William James's Kantian background is made in chap. 5.

40. The mutability of language games and the resulting "modesty" and "mortality" of truths expressible within a language game has been analyzed in a Wittgensteinian setting in Pamela L. Dick, "First-Person Truth," in *The Role of Pragmatics in Contemporary Philosophy: Proceedings of the 20th International Wittgenstein Symposium*, eds. P. Weingartner, G. Schurz, and G. Dorn (Vienna: Hölder-Pichler-Tempsky, 1998), pp. 400–11. With detailed references to Wittgenstein's *On Certainty*, she formulates an internal versus external distinction close to Putnam's "internal realism" and not unrelated to Lear's view commented upon above. This distinction is interestingly different from Nagel's disjunction between the subjective and the objective (the engaged and the disengaged, or detached) perspective on the world. For Nagel, the subjective perspective is

restricted to how the world appears to a subject, to what it is like to be a certain kind of experiencing being, whereas the objective perspective amounts to a metaphysically realist hope of viewing the world from no particular point of view, from a "view from nowhere." For Dick (and Putnam), on the contrary, it is the internal perspective that is characterized by an instinctive realism, a realism which should not, however, be interpreted externally, as a form of metaphysical realism, but rather—transcendentally, I would like to add—by emphasizing the necessary connection between truth and human practices. The "relativity of truth" is only "shown," not "said," from within the practice we engage in (Dick, "First-Person Truth," p. 408). It is their embeddedness in changing human practices or forms of life that makes our statements about the world capable of being true or false; conversely, those practices themselves are constituted by certain quasiempirical, transcendentally certain yet vulnerable, truths, as Wittgenstein argues in *On Certainty*. Dick comes quite close to the view I am presenting here, but she cannot, I believe, easily avoid the charge of relativism, either. She argues, after all, that the constituting certainties of a practice are certainly true "only *within my practice*—our practice, assuming I'm not demented," and that they may not hold in some other practice, nor in mine, if it alters. On the other hand, her emphasis on the fact that practices are "intrinsically vulnerable to change and disruption" is an important Wittgensteinian insight to be retained in any attempt to naturalize and pragmatize transcendental argumentation. Her wish to avoid both metaphysical realism with its absolute truth-claims and the skepticism that results from the disappointment that such truth-claims cannot be had is, moreover, a healthy part of transcendental pragmatism. I see no reason for excluding certain ethical commitments defining basic human values from the class of transcendentally fixed, though always reinterpretable and changeable, Wittgensteinian "hinge propositions" constitutive of our practices.

41. Lear, *Open Minded*, p. 254; see also p. 276.

42. In particular Karl-Otto Apel has done an important job in criticizing the paradigm of methodological solipsism beginning with Descartes and the relativistic outcomes of certain postlinguistic-turn (e.g., late-Wittgensteinian) critiques of solipsism, as well as the excessive "detranscendentalization" of philosophy that has emerged through Rorty's postmodernist neopragmatism. I also approve of Apel's way of combining Peircean pragmatism with the project of transcendental philosophy, even though I would argue that he unnecessarily regards

James's and Dewey's pragmatisms to be inferior in this respect. See Apel, *From a Transcendental-Semiotic Point of View*, ed. Marianna Papastephanou (Manchester, England: Manchester University Press, 1998). For a defense of a Jamesian (and to some extent Deweyan) approach with an eye for "transcendental pragmatism," see Pihlström, *Pragmatism and Philosophical Anthropology*, chaps. 4 and 5.

43. Apel lists such normative presuppositions in many places, such as *From a Transcendental-Semiotic Point of View*, pp. 206–207, where he tells us that philosophers have to try to achieve, by means of argument, a consensus on the validity of their validity claims with all partners in the discourse, and that when arguing they have to follow the claims to intersubjectively shareable meaning, to truth, to truthfulness, and to (ethical) rightness in argumentation. Apel thus includes an ethically relevant condition, the "claim to ethical rightness," as one of his presuppositions of argumentative discourse; hence, his approach is highly interesting from the point of view of my aims in this essay. This ethical claim is defined by Apel as the "solidarity of an ideal community of communication," in which basic norms of equality and equal responsibility are obeyed (pp. 207–208; see also p. 238).

44. Ibid., pp. 20, 60, 93, 208.

45. Ibid., p. 52.

46. Ibid., pp. 86–87.

47. On the relation between fallibilism and pragmatism, see Westphal, "Can Pragmatic Realists Argue Transcendentally?" in this volume.

48. For example see Apel, *From a Transcendental-Semiotic Point of View*, p. 177.

49. I believe similar arguments might be applicable against Jürgen Habermas, but I am not going to discuss his views here. Misak strongly objects to both Apel's and Habermas's transcendental argumentation which seeks to justify fundamental discourse-ethical principles (*Truth, Politics, Morality*, pp. 38ff.). While I share her critical opinion of these two discourse ethicists, I do not think her arguments are effective against the pragmatist reinterpretation of transcendental reflection, in which the necessity of transcendental principles is always contextualized in and conditional on the practices we take ourselves to be engaging in. As a matter of fact, it seems to me that Misak's own pragmatist defense of moral realism, beginning with her Peircean conception of belief and truth seeking, can be construed as a fallible transcendental argument—although Misak herself would certainly deny this! In other words, Misak over-

hastily supposes that all transcendental arguments ought to be knock-down arguments against the skeptic (in this case, the moral skeptic), even though the transcendental method can be seen as a more flexible pragmatic method of trying to understand from within our very practices how it is possible for us to live our moral lives in the way we actually do.

50. Apel, *From a Transcendental-Semiotic Point of View*, p. 154. On p. 176, Apel strongly insists that the universally valid principles of philosophy can, and must, be distinguished from general empirical hypotheses. This is exactly what opponents of "first philosophy," such as Quine, deny.

51. Steven Crowell, "The Project of Ultimate Grounding and the Appeal to Intersubjectivity in Recent Transcendental Philosophy," *International Journal of Philosophical Studies* 7 (1999): 31–54. The other examples Crowell considers are Bernhard Waldenfels's phenomenology of the life-world and a kind of "practical" interpretation of Husserl to be found in Elisabeth Ströker's and Gerhard Funke's work. I shall not pay attention to these twists in the recent history of phenomenological transcendental philosophy. While Crowell cites Apel's earlier essays, I have confined myself to Apel's *From a Transcendental-Semiotic Point of View*, which expresses the same basic position.

52. For example, Jeff Malpas, "The Transcendental Circle," *Australasian Journal of Philosophy* 75 (1997): 1–20.

53. Crowell, "The Project of Ultimate Grounding and the Appeal to Intersubjectivity in Recent Transcendental Philosophy," p. 34.

54. Ibid., p. 35.

55. Ibid., pp. 36, 50.

56. Ibid., p. 41. At this point, the pragmatic moral realist can of course ask why Crowell needs to distinguish (on p. 36) between the ethical and the cognitive (or the argumentative). Is he, after all, a noncognitivist in ethics?

57. Ibid., p. 49.

58. Ibid., p. 46.

59. Ibid., pp. 49, 50.

60. For Levinas's notion of the Other, to whom I must be in a primary ethical relation of responsibility, see Emmanuel Levinas, *The Levinas Reader*, ed. Sean Hand (Oxford: Blackwell, 1989).

61. I hope to be able to discuss this issue further in a work on the role played by solipsistic assumptions in recent philosophy (transcendental philosophy in particular). On some preliminary remarks on the relevance of the issue of solipsism, with reference to Wittgenstein, see Pihlström, *Pragmatism and Philosophical Anthropology*, chap. 2.

62. This approach might be compared to McDowell's thesis that there are no nonethical, external criteria for assessing a person's good life in Aristotle's moral philosophy, i.e., that there is no notion of good, happy or virtuous life to be explained prior to, or independently of, the ethical conception of good life and virtue that Aristotle holds. Several of McDowell's essays in *Mind, Value, and Reality* deal with Aristotle's moral thought. On Aristotle's relation to the modern debates on moral realism, see also the other essays collected in Robert Heinaman, *Aristotle and Moral Realism*. Putnam's moral realism, referred to above, also seems to be of an Aristotelian variety in an important sense: Putnam occasionally speaks about "human flourishing" and even about "eudaemonia."

63. I have suggested in chap. 6 of *Pragmatism and Philosophical Anthropology* that William James's "will to believe" argumentation and transcendental argumentation can be seen as analogous projects: both begin with our "human nature," with what we are like, naturally, as the kind of beings we are. Both are, thus, based on philosophical-anthropological assumptions, such as "our passional nature" and the transcendental constitution of our cognitive capacities, respectively. We do not, then, need to have any "evidence" for the reality of ethics or for the relevance of the ethical point of view. Instead, we can just actively will to believe, on the basis of our human nature, that the ethical point of view must be taken seriously in our actions. Similarly, we do not, and cannot, have any evidence for the fact that we have structured cognitive experiences of the world. We can only accept this factuality of our life as the starting point of transcendental arguments. Furthermore, it should be noted that James, in his "will to believe" doctrine, did not subordinate reason, or epistemic rationality, to practical or prudential concerns; instead, he presented a novel account of epistemic rationality itself. One of the few recent discussions of James's doctrine that recognize this is Henry Jackman, "Prudential Arguments, Naturalized Epistemology, and the Will to Believe," *Transactions of the Charles S. Peirce Society* 35 (1999): 1–37.

64. Despite the fact that James's philosophy was inextricably entangled with ethical concerns, moral realism was not among the explicit topics of the discussions of pragmatism during the flourishing period of this school. Later, drawing on Dewey, Horace S. Fries tried to show that "moral judgments are objectively either true or false in the sense in which scientific judgments are true or false" in "The Method of Proving Ethical Realism," *Philosophical Review* 46 (1937): 485. Dewey's nonreductively naturalist and pragmatically realist ethical system is formulated, among

many other places, in his *Human Nature and Conduct: An Introduction to Social Psychology* (New York: Henry Holt, 1922).

65. Bakhurst's pragmatic moral realism is here close to mine, although he does not use the transcendental vocabulary. It is important to emphasize, as he does, the possibility of ethical experience, ethical "inquiry," and a related notion of truth (construed in a broadly Peircean manner), as well as the compatibility of the anthropocentricity and the objectivity of morality (see "Pragmatism and Moral Knowledge," p. 237). It is equally important to remind metaethicists about the "inescapability" of the ethical point of view and of personal moral commitments (see also p. 237, notes 32 and 33). As many Wittgensteinian moral philosophers have also insisted, moral requirements are not optional in the sense in which other legitimate interests operative in human life may be; yet, there is no foundational reason for this inescapability and nonoptionality to be found anywhere outside morality itself (pp. 241–43). A pragmatist conception of the place of ethical meaningfulness in our lives can, I believe, account for this irreducibility of ethical reasons to anything nonethical. Moreover, Bakhurst rightly reminds us that a pragmatist account of moral knowledge should not "feign neutrality with respect to first-order moral positions (as so much metaethical writing does), but . . . inherit the activist spirit characteristic of the pragmatist tradition" (p. 231). It is roughly in this sense that I have formulated my own pragmatic argument in favor of moral realism as an ethical one.

66. This also enables us to formulate more straightforward ethical arguments in favor of pragmatism. For example, it is ethically significant that pragmatists can avoid both reductionist scientism, which makes the objectivity of morality problematic, and irrationalist relativism, which dispenses of all normative criteria governing beliefs, methods, and worldviews. Here, as elsewhere, pragmatism's role as a mediator, as a middle ground between dubious alternatives, is not only theoretically but also practically or ethically justifiable.

67. In addition to Taylor's, one should mention Alasdair MacIntyre's *After Virtue: A Study in Moral Theory*, 2nd ed. (Notre Dame, Ind.: University of Notre Dame Press, 1984), although his historicism is so strong that I do not want to commit myself to it—at least not without further critical discussion, which is impossible here. I make an attempt to understand Taylor's views in relation to transcendental philosophy and pragmatism in Pihlström, *Naturalizing the Transcendental: A Pragmatic View* (Amherst, N.Y.: Humanity Books, forthcoming). Furthermore, Taylor, just like MacIntyre, is a Christian

believer. This might lead us to reflect on the possibility of a pragmatic grounding not only of moral but also of *theological* realism—another theme important in the pragmatist tradition, especially in James's philosophy (see again Pihlström, *Pragmatism and Philosophical Anthropology*, chaps. 5 and 6).

68. See Churchland, "Toward a Cognitive Neurobiology of the Moral Virtues."

69. Some rethinking of the concept of nature and, accordingly, of naturalism is certainly needed here, for example in the way suggested by McDowell (*Mind, Value, and Reality*, especially chap. 9), who tries to liberate us from the problem, typical of modern philosophy, of viewing nature as something revealed to us by the natural sciences and of seeking to find a place for ethics in a natural world thus construed. McDowell defends a conception of reason (including ethical, or practical, reason) that is naturalistic in the Aristotelian sense that "a formed state of practical reason is one's second nature, not something that dictates to one's nature from outside," but not naturalistic in the modern, metaphysically shallow sense "of purporting to found the intellectual credentials of practical reason on facts of the sort that the natural sciences discover" (p. 192). The "natural world," to which our moral capabilities also belong, should not, in his view, be regarded as "constitutively independent of the structure of subjectivity" (p. 180). Here I completely agree with McDowell and acknowledge his crucial influence on the present inquiry. I try to identify some problems in his approach in Pihlström, "How Minds Understand Their World: Remarks on John McDowell's Kantianism, Naturalism, and Pragmatism," *Facta Philosophica* 1 (1999): 227–43.

70. Apel, *From a Transcendental-Semiotic Point of View*, p. 97.

71. It is compatible with this idea to contend that there are more and less general (more and less broad, universal, etc.) transcendental-cum-natural conditions of experience.

72. This suggestion can be regarded as a pragmatic reinterpretation of the Kantian doctrine of the "two standpoints." On this doctrine see Christine Korsgaard, *Creating the Kingdom of Ends* (Cambridge, England: Cambridge University Press, 1996). We are simultaneously, equally necessarily, natural, causally explainable creatures and agents guided by ethical and more generally normative values we ourselves confer upon our (life)world. While both standpoints present a true picture of our life, a true "human face," it is the pragmatic and transcendental perspective on us as value-guided agents that is needed in the very act of distinguishing and comparing the two standpoints.

73. Apel speaks about the "radically relativistic and historically bound consequences" of Wittgenstein's and Heidegger's thought, such as "the denial of all universal (and if possible also transcendentally founded) criteria of philosophical discourse and also the ethically relevant thesis with regard to the necessity of falling back upon the only available basis for a consensus, namely, that of a contingent life form" (*From a Transcendental-Semiotic Point of View*, p. 152). Post-Heideggerian hermeneutics, in particular, is in danger of falling prey to historicism and relativism (p. 174).

74. This is, again, a theme highly relevant in Taylor's and MacIntyre's work. See, for example, MacIntyre, *After Virtue*, p. 277: "Traditions do on occasion founder, that is, by their own standards of flourishing and foundering, and an encounter with a rival tradition may in this way provide good reasons either for attempting to reconstitute one's tradition in some radical way or for deserting it. Yet it is also the case . . . that if in such successive encounters a particular moral tradition has succeeded in reconstituting itself when rational considerations urged upon its adherents either from within the tradition or from without so required, and has provided generally more cogent accounts of its rivals' defects and weaknesses and of its own than those rivals have been able to supply, either concerning themselves or concerning others, all this of course in the light of the standards internal to that tradition, standards which will in the course of those vicissitudes have themselves been revised and extended in a variety of ways, then the adherents of that tradition are rationally entitled to a large measure of confidence that the tradition which they inhabit and to which they owe the substance of their moral lives will find the resources to meet future challenges successfully. For the theory of moral reality embodied in their modes of thinking and acting has shown itself to be . . . *the best theory so far*." MacIntyre's proposal for a moral tradition capable of such an historicist legitimation is, of course, Aristotelianism.

75. For a discussion of James's notion of a philosophical temperament and its metaphilosophical relevance, see Pihlström, *Pragmatism and Philosophical Anthropology*, chap. 10.

76. The view formulated here also enables us to say *both* that our ethical principles are fragile, never to be universally established but always open to critical revision through particular problematic cases (see Avrum Stroll, "The Fragility of Moral Principles," *Topoi* 17 (1998): 137–47), *and* that no sharp fact-value dichotomy should be drawn between scientific

and ethical theorizing (see Anagnostopoulos, "Ethics and the Indispensability of Theory"); i.e., that ethical views are not mere subjective opinions in comparison to the strongly objective statements scientists make about the structure of the natural world.

77. See Bakhurst, "Pragmatism and Moral Knowledge."

78. I owe a great debt to Beth Singer, who commented on this paper's presentation at the conference *The Future of Realism in the American Tradition of Pragmatic Naturalism* at SUNY Buffalo. I hope her important questions have to some extent been answered in this essay's final version. I am also most grateful to Kenneth Westphal for his comments, as well as to Cheryl Misak and John Shook for their remarks. In addition, my Finnish colleagues Hanne Ahonen, Heikki Kannisto, Irma Levomäki, and Arto Tukiainen have over the years crucially affected my understanding of the problem of moral realism. I wish to thank them, too. Finally, I am pleased to be able to honor, with this modest contribution, Peter H. Hare, whose achievements the Buffalo meeting celebrated.

10

Problems and Prospects in the Ethics of Belief

Peter H. Hare

Prospects have never been brighter for an ethics of belief in the tradition of William James. But the development of such an ethics of belief will require collaboration between diverse philosophical traditions and between philosophy and science, collaboration that we have not seen hitherto. Accordingly, I want to use this occasion to make a plea for cooperative effort. I urge cooperation, between those working in the tradition of pragmatist metaphysics, those working in analytic epistemology, and those working in cognitive science. Let me briefly describe the relevant aspects of the current philosophical scene in a way that makes clear the need for such cooperation.[1]

Many philosophers trained in the analytic tradition have come to recognize that the epistemic cannot be understood in abstraction from the nonepistemic. They have further come to believe that knowledge cannot be understood in abstraction from the processes that produce it and the consequences that flow from it. They have also come to recognize that knowledge from the internal perspective of the knower cannot be understood in abstraction from knowledge by standards external to the knower—and conversely. Finally, they have recognized that personal knowledge can be understood only in the context of social knowledge. In short, they have come to reject dualisms pragmatist metaphysicians long ago rejected.

We can best begin to appreciate these current developments by contrasting so-called "reliabilist" and "responsibilist" epistemologies. The reliabilist judges the epistemic merit of a belief on the basis of the reliability of the mechanisms which produced it. If those mechanisms can be shown to be of a sort that produce true beliefs reliably, then the belief in question is epistemically justified. This can be determined, the reliabilist supposes, without consideration of what the believer does or does not have access to; it can be done on a basis *external* to the consciousness of the agent who has the belief. The responsibilist, on the other hand, thinks that reliably produced belief is an ideal only and cannot be a requirement of epistemic justification; epistemic justification, the responsibilist says, is instead a question of whether the agent acted responsibly in the context of what was accessible to her.

This audience does not need to be told that responsibilist epistemology is part of a long history in this country of the evaluation of belief in ethical terms. James proposed an ethics of belief, and C. I. Lewis also developed such a theory. Dickinson Miller and Curt J. Ducasse carried on this work, and Roderick Chisholm, a student of both Ducasse and Lewis, is the most influential current proponent of such a view. Today an increasing number of philosophers are contributing to the systematic elaboration of an epistemology that relies on analogies with moral reasoning and rejects the dualisms I have mentioned. Lorraine Code, for example, urges that we reject a preoccupation with the "end-states of cognition" and concentrate instead on the processes used to achieve those end-states.[2] With that focus we come to recognize, she says, that "epistemic and moral considerations are so interwoven they cannot be "absolutely separated."[3] She argues that we should judge the epistemic justification of a belief not on the basis of traits of the end-states of cognition but rather on the basis of whether the person came to the belief by way of a *responsible process.* A similar view is conceived in terns of "epistemic virtues" which the agent must manifest in prior actions if the resultant belief is to qualify as epistemically justified. James Montmarquet, who goes a good way toward making clear the notion of epistemic virtue, considers inad-

equate the view that an agent is epistemically virtuous if she is trying her best to arrive at the truth. "For just as a moral fanatic may qualify as conscientious without being, on balance, very virtuous at all (except to . . . cofanatics), we can easily imagine an "epistemic fanatic" who is not epistemically very virtuous at all—for example, an extreme dogmatist, absolutely convinced of his possession of the truth, absolutely convinced that his methods of study of some sacred text are everyday bringing in powerful new truths."[4]

Montmarquet suggests that a "balanced intellectual personality" will include virtues of two classes: impartiality and intellectual courage. The virtues of impartiality include "openness to the ideas of others, the willingness to exchange ideas with and learn from them, the lack of jealousy and personal bias directed at their ideas and the lively sense of one's own fallibility."[5] The virtues of intellectual courage include "the willingness to conceive and examine alternatives to popularly held beliefs, perseverance in the face of opposition from others (until one is convinced one is mistaken) , and the Popperian willingness to examine, and even actively seek out, evidence that would refute one's own hypotheses."[6] The two classes of virtue are complementary sides of a balanced intellectual personality: the first, "the 'other-directed' virtues which are necessary to sustain an intellectual *community*," and the second, the "inner-directed" virtues of a person of high intellectual integrity."[7] These epistemic virtues, he holds, "are forms by which [epistemic conscientiousness] may be *regulated*. Unregulated by these, bare conscientiousness . . . may degenerate into some form of intellectual dogmatism, cowardice, or related evil."[8] Interestingly, Montmarquet notes that these are virtues only in our present epistemic situation with the world appearing to us as it does. *Other* worlds can be conceived in which they would not be virtues.

The social nature of knowledge has not been overlooked by contemporary analytic epistemologists, who have recently developed what is called "social epistemology." The attribution of knowledge to a person is considered partly dependent on intersubjective standards of evidentness, and intersubjective evident-

ness is partly a function of what evidence a normal inquirer has in a given epistemic community. Any standard of evidentness is thus sensitive to social context.[9]

Members of a society are often disposed to adopt the beliefs of others unselfconsciously. Although in traditional epistemology such suggestibility is considered an epistemic vice, recent social epistemologists have argued to the contrary. "If nine people report seeing a situation one way and I seem to see it another, this is surely very strong prima facie evidence of my error. It is possible, of course, that there is collusion among the nine, but by and large a tendency to take on the opinion of a unanimous majority in this kind of situation would serve me quite well."[10]

Belief perseverance is another epistemic tendency that is viewed differently today from what it was in traditional epistemology. We have a tendency to go on believing what we already believe. "This tendency will not outweigh the tendency to take on the opinions [of others] when the others constitute a large group. . . . Nevertheless, when the disagreement is with a single individual . . . [agents] will tend to persevere in their beliefs."[11] Although in the past this tendency has been assumed to be an epistemic vice, its usefulness has recently been pointed out. "Without a mechanism like belief perseverance, an agent would be faced with a choice between keeping track of the number of people who agree with each of his beliefs and those who disagree, or, alternatively, simply giving up beliefs for which evidence cannot be remembered whenever disagreement is discovered. Neither of these prospects is cognitively acceptable. The first requires extraordinary investment of cognitive time and effort; the latter results in large-scale dumping of beliefs in light of the frequency of disagreement."[12]

Other aspects of social epistemology are worth mentioning. For example, although epistemologists have traditionally assumed that for an inference to be reliable at all it must be reliable in all possible environments, recent social epistemologists have stressed that the same inference can serve well in one sort of environment and poorly in another sort of environment.[13]

Other social epistemologists have shown that a division of cognitive labor among subjects plays a major role in satisfying epistemic goals. One person's epistemic justification depends on the epistemic justification of others. Individuals in isolation would have a paucity of beliefs. Furthermore, the satisfaction of epistemic goals is well served by not having the same epistemic standard for everyone in a society. Different people usefully play different cognitive roles and epistemic virtue is relative to context. The demands of epistemic justification and virtue are relativized to roles and contexts. Epistemic rationality consists partly in forms of social interchange.[14]

Despite its important implications, this research in analytic epistemology with the help of cognitive science has received little attention from philosophers working in the pragmatic tradition. Although Peirce, James, Dewey, and Mead all took careful account of the empirical science of their day, today's pragmatists seem to believe that they can safely ignore recent work in cognitive science.

Perhaps the single most important development in recent epistemology concerns the relation between the epistemic and the nonepistemic. The epistemic is no longer considered to be a self-contained realm. As Morton White points out, this viewpoint is a natural development of James's views.

White makes explicit and elaborates what he calls James's "epistemological corporatism" in an account of how we arrive at new opinions. "[T]he individual has a 'stock of opinions already, but he meets a new experience that puts them to a strain'. The result is 'inward trouble' for the inquirer. He tries to escape from this trouble by modifying his previous stock of opinions but . . . the inquirer saves as much of the stock as he can, thereby revealing the extreme conservatism affecting all inquirers."[15] In other words, James "thought that we test organically unified stocks of opinions rather than isolated opinions."[16] But, White argues, James includes not only opinions and experiences of a sensory sort. "One of the straining experiences can be a newly arisen desire that the opinions cease to satisfy . . . the affective or emotional part of our lives may have a bearing on what descriptive beliefs we are entitled to

hold . . . ; a believer may change a descriptive belief, not because he is faced with a recalcitrant fact or sensory experience, but because he is faced with a recalcitrant emotion."[17] Let me give you White's example of this process.

> A mother has taken the life of a fetus that she has been carrying and she is confronted by a moral critic who presents the following argument.
>
> 1. Whoever takes the life of a human being does something that ought not to be done.
> 2. The mother took the life of a fetus in her womb.
> 3. Every living fetus in the womb of a human being is a human being. Therefore,
> 4. The mother took the life of a human being.
>
> Therefore,
>
> 5. The mother did something that ought not to be done.
>
> . . . [T]he premises of this argument form a stock of opinions which may be strained by an emotion or feeling that prompts the denial of that conclusion. The denial of that conclusion might be justified by arguing that a normal human being would *not* feel obligated *not* to take the life of the fetus. In that case, the whole mixed stock of opinions or premises may be denied and then altered.[18]

The mother has a choice among ways of altering the stock of descriptive and normative beliefs. She may reject the descriptive statement that a live fetus is a human being or she may reject a moral principle in her effort to organize her mixed flux of sensory experience and feeling.

Among the numerous other philosophers who recently have had interesting things to say about the relations between the epis-

temic and the nonepistemic, Richard Foley is one of the most noteworthy. Having worked out a theory of what he calls "epistemic rationality," Foley questions the tenability of "evidentialism," that is, the view that "epistemic reasons for believing something by their very nature are . . . superior to nonepistemic reasons for believing.[19] He thinks that it is clear that in the extreme case, for example, where the survival of the earth depends on a person believing proposition P that he has good epistemic reason to believe is false, it is rational for that person to believe P. He goes on to discuss the devices by which a person might acquire such a nonepistemically justified belief. He cautions that "[g]iven the holistic nature of beliefs, such a project frequently will involve [a person] not just in changing his attitudes toward P but also in changing his attitudes toward an enormous number of other propositions. For ordinarily, beliefs cannot be altered in a piecemeal fashion . . . For example, if in order to win a million dollars, [a person] must come to believe that the earth is flat, he also is going to have to come to believe a whole range of other propositions that are now epistemically irrational for him. Indeed, he presumably will have to come to believe that there is an enormous worldwide conspiracy to make it appear as if the earth is round when in fact it is flat."[20] Although Foley stresses that the effects of adopting epistemically irrational beliefs are not *always* far-reaching, the project of getting oneself to believe what is epistemically irrational is not "to be undertaken lightly."[21] He also makes the valuable point that there are normally good *non*epistemic, "practical" reasons against allowing practical considerations to motivate one to try to worsen one's epistemic situation. For although by deliberately worsening one's epistemic situation one may get oneself to believe what one has a practical reason to believe, worsening one's epistemic situation ordinarily will affect adversely one's chances of achieving one's other practical goals. This is an excellent illustration of how the epistemic and the nonepistemic are interconnected. Such interconnection is also apparent in the fact that it is a question of *epistemic* rationality whether a particular project of worsening one's epistemic situation

for nonepistemic reasons will produce massive error and consequently disastrous practical consequences. Often the epistemic rationality of *second-order* beliefs about the nonepistemic rationality of first-order beliefs is crucial to reaching a conclusion about rationality all-things-considered. This means that there is no incoherence in believing for good epistemic reasons that worsening one's epistemic situation is rational.

Foley suggests that one reason for its being unlikely that worsening one's epistemic situation will be nonepistemically justified all things considered is that usually the propositions which there are important nonepistemic reasons to believe are central to how we live (e.g. propositions about our own abilities) and those "propositions are just the ones that are least likely to be relatively isolated from other propositions."[22] He reaches the general conclusion that "insofar as it is now epistemically rational for an individual to believe that a deliberate worsening of his epistemic situation is likely to result in his choosing less effective means to [his other] goals than he would otherwise, he has reasons not to worsen his epistemic situation."[23]

But Foley also observes that nonepistemic reasons usually justify limiting the time and effort one devotes to trying to *improve* one's epistemic situation. Seldom do nonepistemic considerations justify a person in trying as hard as she can to improve her epistemic situation. It may be epistemically rational for a person to believe that additional epistemic effort will not result in greater success in reaching goals. At some point increased epistemic effort means less time and effort available to devote to one's various nonepistemic goals. Foley judiciously concludes that it is "rational, all things considered, for a person to be neither slovenly nor fanatical in his search to believe truths and not to believe falsehoods."[24]

He has not, Foley emphasizes, worked out a full theory of rationality which would require, among other things, a sorting out of the various kinds of nonepistemic rationality and a general theory of goals. As it happens, Paul Moser has made some progress in that direction. Moser distinguishes three types of rationality: epistemic, moral, and prudential. He shows how many of

the traditional puzzles about the ethics of belief are generated by failure to distinguish these types of rationality. Having made those distinctions, he tries to answer the natural question of how we can resolve conflicts between types of rationality so as to arrive at "all-things-considered" rationality. If all-things-considered rationality is to be a distinctive sort of rationality, it must "allow for the possibility of each less general sort of rationality being overridden in an instance of rational conflict [and] . . . must require the consideration of factors other than the particular rational obligations in conflict."[25] All-things-considered rational belief must be most conducive to satisfaction of one's preferences regardless of whether they are epistemic, moral, or prudential preferences. He goes on to outline a theory of "superior preferences" as related to desires, goals and means to goals. Like Foley, Moser stresses the many complex interconnections between the epistemic and the nonepistemic. For example, in his analysis, a person's superior preference cannot "depend for its existence on an epistemically unjustified belief" of person.[26]

A valuable feature of Moser's account is that he makes explicit the context dependence of rationality. Something can, he thinks, be all-things-considered rational for a person in one context but not in another, due perhaps to a change of superior preference or to the relevance of additional conflicting rational obligations. All-things-considered rationality is also a function of the total evidence that a particular person in particular circumstances has and of the person's ability to recognize, after reflecting on her total evidence, that doing whatever is in question is likely or unlikely to satisfy her superior preference.

In light of these developments, let us examine a number of objections which have been made to the view that nonepistemic reasons for belief can sometimes override epistemic reasons, objections to the view that we are sometimes justified in believing beyond the evidence. In what follows I hope to show that James's approach to such overbelief is fundamentally sound.

It is often objected that, if psychological devices are used to produce belief where the evidence is balanced pro and con or there

is little evidence on either side, that overbelief may be considered to have beneficial consequences only if one fails to take account of effects on *other* beliefs. It is predicted that when such devices are employed, there will be spreading of overbelief to other beliefs including beliefs against which there is a preponderance of evidence. This objection, however, fails to note an equally legitimate concern, a concern characteristic of James. If an ethics of belief demands that we refuse to use devices to produce such a belief, that demand is likely to spread to other beliefs where the evidence is overwhelmingly favorable and to lead one to reject then out of a commitment to what might be called epistemic asceticism. Any worry we may have about the spreading of *over*belief must be balanced by a concern about the spreading of *under*belief. Underbelief can be just as disastrous as overbelief. Cases abound in which underbelief paralyzes action—the underbeliever refuses to act on probabilities. For example, many Germans during World War II had ample evidence that genocide was going on but refused to believe it on the basis of what they considered inadequate evidence. A demand for certain knowledge of consequences of action in practical situations can be just as harmful as wishful thinking about those consequences, and there is no reason to suppose that underbelief will be less likely to slip down a slope to the disastrous extreme of epistemic asceticism than overbelief will be to slip down a slope to a disastrous extreme of belief against conclusive evidence. Such armchair speculation about the long-term consequences of epistemic strategies cuts both ways. Moreover, such sinister tendencies in overbelief are not found in numerous empirical studies of overbelief. Emphatic rejection of overbelief on the grounds that the acquisition of one belief will inevitably affect a great many other beliefs that have some logical relation to the original belief reflects lack of familiarity with relevant empirical studies. Studies indicate that beliefs are acquired by processes "operating in a highly local manner" without involving "an agent's entire corpus of belief."[27]

As I have already noted, Foley worries that, "if in order to win a million dollars, [a person] must come to believe that the earth is

flat, he also is going to have to come to believe a whole range of other propositions that are now epistemically irrational for him. Indeed, he presumably will have to come to believe that there is an enormous worldwide conspiracy to make it appear as if the earth is round when in fact it is flat." But again armchair psychology is not good enough. Although doubtless there are situations in which the acquisition of one belief will cause changes in many other beliefs, it has been found by psychologists not to happen in many instances where we might a priori expect it to happen.

Hard as it is for some philosophers to accept, human beings in their intercourse with the world do very nicely despite having a formally inconsistent body of beliefs. There is good reason to suppose that certain fonts of epistemic inconsistency are adaptively advantageous.

Foley, you'll recall, also is concerned that the most important overbeliefs are usually about matters that are "central to how we live," such as beliefs about our own abilities, and those "propositions," he says, are just the ones that are least likely to be relatively isolated from other propositions." Despite the commonsense plausibility of that worry, it is not supported by empirical studies which have shown that people can have overbeliefs about their abilities without harmful ramifications in their other beliefs.

Philosophers inclined to speculation about the effects of overbeliefs would do well to study a recent book by Shelley Taylor.[28] Taylor, herself a psychological researcher, provides a summary of recent research on what she calls "positive illusions." Her picture of human cognitive powers is very different from what philosophers have traditionally presented. Human beings are found to be amazingly adept in using overbelief and inconsistency to their adaptive advantage. Genuinely adaptive rationality turns out to be akin to the concept of rationality James proposed.

Cognitive research has established that "the normal human mind distorts incoming information in a positive direction. In particular, people think of themselves, their future, and their ability to have an impact on what goes on around them in a more positive manner than reality can sustain. . . . At one level [the human mind]

constructs beneficent interpretation of threatening events that raises self-esteem and promotes motivation; yet at another level it recognizes the threat or challenge that is posed by these events."[29]

For example, most people "believe that they drive [a car] better than others. . . . [I]n one survey, 90 percent of automobile drivers considered themselves to be better than average drivers [and] these beliefs sometimes show an unresponsiveness to feedback that reminds one of a very young child. When people whose driving had involved them in accidents serious enough to involve hospitalization were interviewed about their driving skills and compared with drivers who had not had accident histories, the two groups gave almost identical descriptions of their driving abilities . . . and this was true even when the drivers involved in accidents had been responsible for them."[30] Although we philosophers may lament such cognitive behavior, there is considerable evidence that overbeliefs of this sort at least when mild, are often beneficial in their overall consequences. The truth is that the commonsense psychology that philosophers have always relied on is incapable of predicting the long-term on-balance consequences of such positive illusions. This is not to deny that overbelief can sometimes have disastrous consequences. It is to say that empirical research has shown that on-balance beneficial overbeliefs are much more common than has hitherto been supposed. We can no longer consider that overbeliefs in general have a presumption against them. The numerous empirical studies Taylor reports have shown that overbeliefs about certain basic matters have a presumption in their favor. The types of overbelief that have a presumption in their favor are those about: (1) self-worth, (2) ability to control the environment, and (3) favorable events in the future.

A few examples. When people have overbeliefs about their own abilities, they have more benign views of other people and are more likely to help people in need. People can tolerate extreme stress better if they have an overbelief in their ability to control that stress. If a person has an overbelief about the good things the future holds in store, present sacrifices may seem bearable steps on the way to a more promising future.

But the role of different types of overbelief is complex. Even in the course of a single project different overbeliefs can be beneficial at different stages. "At the outset of the project, it may be very valuable to have a certain naïve optimism that the goal will be accomplished. The ability to keep that final state in mind may provide motivation and persistence when otherwise one might be tempted to turn away from the task because the goal is so far off. However, as work toward the goal progresses and the goal comes into sight, [another kind of] optimism may be more functional. In the last stages of a project, as a goal is coming to fruition, what becomes important is the ability to see exactly what tasks remain to be accomplished and to put one's mind to doing them, rather than to keep an overly optimistic assessment of the future in mind."[31] The healthy human mind, it turns out, is adept at increasing or decreasing the degree of overbelief as the needs of the situation change.

Taylor summarizes the benefits of these three types of overbelief: "people who hold positive illusions about themselves, the world and the future may be better able to develop the skills and organization necessary to make their creative ideas and high level of motivation work effectively for them. They seem more able to engage in constructive thinking. They can tie their illusions concretely to the project at hand, developing a task-oriented optimism and sense of control that enable them to accomplish more ambitious goals. They are more likely to take certain risks that may enable them to bring their ventures to fruition. And they seem better able to choose appropriate tasks, gauge the effort involved, and make realistic estimates of their need to persevere. Moreover, by developing the ability to postpone gratification, they are able to commit themselves to a longer term task that may involve sacrifices and delayed rewards along the way."[32]

Taylor notes genuine risks in overbelief, risks that are especially obvious in matters of physical health. She gives this illustration. "A colleague was called in as a psychological consultant on a very difficult medical case involving a twenty-year-old graduate student with an inoperable brain tumor. The physicians knew that

the patient was virtually certain to die within the next few weeks. Understandably, the young man resisted this prognosis and turned to an alternative treatment center for hope, inspiration, and help in curing himself. The counselor asked him to describe his life, in an apparent effort to determine what had brought on the tumor at such a young age. Most of the events of the man's life had progressed rather normally, except that his mother had died when he was sixteen. The counselor latched on to this as an explanation for the tumor, informing him that he had never successfully come to terms with the loss and adjusted to it. Only by doing so now would he be able to free himself of the cancer. The young man was given some mental exercises to perform that involved imagining the tumor gradually shrinking. He was also urged to come to terms with the loss, but not told exactly how to do so. Within days, the young man was seriously distressed, agitated over his apparent inability to manage the loss. He had always believed that he had done so successfully, but the counselor had persuaded him otherwise. He worked himself into near-frenzy."[33]

One important reason that positive illusions are so often on-balance adaptive is that human beings are able "to maintain self-aggrandizing views of themselves while simultaneously making adaptive use of negative information from the environment."[34] We can simultaneously process information in very different ways so that we get the benefits of *both* overbelief and epistemic rationality.

It is also interesting to note that, though the extreme overbelief of denial or repression is usually not adaptive, a healthy human mind can temporarily use denial adaptively. "If a child is hit by a car and killed, the mental response may be that the bodies were mixed up, that the child's friend, not one's own child, has died. Precisely because the dramatic and sudden news alters life so profoundly in so many ways, denial can serve a protective function while these changes are sorting themselves out. Thus, early on in adjustment to a life-threatening or shocking event, denial can be both normal and useful."[35]

Human beings are much more cognitively flexible than they are usually thought to be by philosophers. We can rapidly change cognitive strategies to adapt our cognitive powers to a changing

situation. Our cognitive powers are also capable of simultaneously operating in diverse ways in a mix of strategies that allows us to use the most beneficial strategy for each aspect of our situation.

Much is known about the strategies we use to control negative information in such a way that we can maintain positive illusions and their benefits while simultaneously making adaptive use of that information. As Taylor points out, such cognitive flexibility has been recognized in literature as well as in cognitive psychology. George Orwell noted in the novel *1984*: "The secret of rulership is to combine a belief in one's infallibility with the power to learn from past mistakes."[36]

Although philosophers have roundly condemned all forms of self-deception, there is much empirical evidence to support the view that "through the twin mechanisms of selective attention and selective memory, it is possible to self-deceive not only successfully but adaptively."[37]

There are adaptive limits to positive illusions. These can be seen most clearly in the manic period in the life of a manic-depressive. While manic, a person has greatly exaggerated positive illusions. While there are many historical examples of people being extraordinarily creative while manic, there can be no question of the overall harmful consequences of such a cognitive strategy. Contrary to the notions of rationality found traditionally in philosophy, there is no simple set of principles that will allow us to determine the best cognitive strategies. It is easy enough to point to examples of disastrous use of a strategy and also examples of successful use of a strategy. The trouble is that in much of our lives the cognitive situation does not admit of simple analysis. Consequently, I am not today recommending that we all set about systematically acquiring positive illusions of the sorts Shelley Taylor describes. Instead I am saying that overbeliefs have been so categorically rejected that philosophers have been blind to the adaptive flexibility of human cognitive powers. This failure was perhaps forgivable in the era of James when empirical psychology was in its infancy. But cognitive science has flourished for some decades now and deserves more philosophical attention than it has hitherto received.

To be sure, contemporary epistemologists have often made use of the results of cognitive science. But such epistemologists are working in the analytic tradition and consequently have a seriously inadequate metaphysics, in particular, inadequate conceptions of nature and experience. Philosophers working in the pragmatic tradition can do much to contribute a needed metaphysical framework. Let me give some examples.

(1) As you'll recall, Moser in his account of all-things-considered rationality relies on the notion of a "superior preference." But nothing is said about how those preferences arise. He treats those preferences as antecedently given. However, as every student of Dewey knows, every end-in-view is itself the resolution of a problematic situation. Some of you will recall the discussion of this by Hilary and Ruth Anna Putnam at the SAAP meeting last December in Atlanta. In their illustration a graduate student in philosophy begins to wonder whether philosophy is what she wants to do. She ends up opting for a life of social service, rather than a life in a philosophy department. Philosophers without the resources of pragmatist metaphysics ask what is the higher ranked end for which philosophy was given up. The Putnams point out there was no such end antecedently given in terms of which the student could decide what to do. "She had to discover the origin of her malaise and to institute the problem: namely, 'What end-in-view shall I now pursue?' The formulation of the new end-in-view of social service was itself the resolution of that problematic situation."[38]

(2) Although, as we have seen, analytic epistemologists such as Foley and Moser have come to recognize that the epistemic cannot be understood in abstraction from the nonepistemic, they lack a metaphysical framework within which to make sense of the natural dependence between the epistemic and the nonepistemic. The account of the cognitive in Dewey's *Logic* and *Experience and Nature* is set within an appropriate metaphysics, I believe.

(3) Both reliabilists and responsibilists in analytic epistemology recognize that knowledge cannot be understood in abstraction from the processes that produce it and the consequences that flow from it, but they offer no metaphysical analysis of the epistemic

comparable to Dewey's account of value in his essay "The Construction of the Good."

(4) Contemporary epistemologists recognize that knowledge possessed by an individual can be understood only in the context of social knowledge but they lack a metaphysics which illuminates the complex relationships between the individual and society.

(5) Recent theorists of knowledge have been wrestling with the conflict between so-called "internalist" and "externalist" theories, and most have concluded that a sound epistemology must somehow combine crucial features of both types of epistemology. Surely they could make more sense of this combination if they could bring to bear the pragmatist view of how experience and nature are interrelated.

What is needed then is cooperative effort by cognitive scientists, analytic epistemologists, and pragmatist metaphysicians. The problems of the ethics of belief are formidable. Although it is clear that the role of overbeliefs has been badly misunderstood by epistemologists because they have not appreciated the adaptive flexibility of our cognitive powers, it is not clear what an ethics of belief that took full account of that flexibility would look like.

James appears to suppose that, if both are epistemic and nonepistemic demands are taken fairly into account, our beliefs on crucial issues will typically be optimistic. However, my colleague Newton Garver has taken James to task for this doxastic optimism. Garver uses the example of police reform to illustrate his objection to James's optimism. In Garver's account it is admitted that a belief that police reform is possible or impossible can play the legitimate role of an enabling belief, a belief that enables one to meet one's primary obligation to make our society more just and humane. He also admits that one has a right to either of the two beliefs since the evidence does not allow one to resolve the conflict between the two beliefs epistemically. However, Garver rejects the argument that "we need hope in order to act—and hope can survive only when there is a prospect for improvement and for the elimination of brutal excesses and aberrations of the police role,"[39] an argument he thinks is Jamesian. He argues that there is another

"posture for a humane and compassionate person to adopt."[40] Does this mean that Garver thinks we have a duty to believe that police reform is impossible? Not quite. Despite his statement that "for an honest person, there is no real possibility of sitting on the fence," he describes his view as "the cynicism of [a] hard-headed epistemology, reminiscent of William K. Clifford against James, which refuses to justify basic beliefs by their pragmatic necessity rather than their demonstrable truth."[41] According to Clifford, our duty is to *suspend judgment* anywhere and everywhere there is insufficient evidence. So, despite the fact that Garver's initial characterization of the problem suggests that we must choose between adopting an overbelief in the possibility of police reform and an overbelief in the impossibility of police reform, he ends up saying we are obliged to suspend judgment in the manner of Clifford.

It is important to note that Garver does not advise us to suspend judgment for the reasons Clifford would have us do so. Garver seems not to have categorically rejected obligations to have overbeliefs. He simply argues that in "a matter of public policy" as overbelief in the possibility of reform is likely to do more harm than good. "If [this approach] is," he says, "less adventurous than Jamesian optimism, it is also less pretentious and less dangerous. Perhaps a sense of adventure is appropriate in the matter of personal faith to which James addressed himself . . . but in the matter of public policy where the consequences may be that fellow citizens are bloodied, harassed, and imprisoned, caution would seem preferable to adventure."[42]

Although I agree that James is inclined to adopt *indiscriminately* belief in the possibility of reform, what I find troublesome in Garver's basically Jamesian position is that he concludes that suspension of judgment is morally required in all matters of public policy. I would urge instead a more flexible Jamesian view which, depending on the circumstances surrounding a particular social problem, advocates sometimes a pessimistic view, and sometimes an optimistic view. An indiscriminately pessimistic view such as Garver advocates may be as unfortunate in its consequences as James's indiscriminate optimism.

It is an open question whether Garver is correct in his suggestion that optimistic overbeliefs are generally more appropriate on personal matters than on social concerns. Surely this is another question in which armchair philosophy is not enough. Empirical studies are needed. Social psychologists might examine, for example, the role of pessimism and optimism in fostering or thwarting Soviet *perestroika*. My personal impression is that traditional Russian pessimism on matters of social reform is a formidable obstacle in the way of Gorbachev's economic reforms, but here as elsewhere in the development of an ethics of belief philosophy should collaborate with cognitive science.

Another puzzle concerns the voluntariness of belief as a crucial presupposition of any ethics of belief. James and all subsequent writers have recognized that only if belief is voluntary can persons be considered responsible for belief. There is now an extensive literature on what is called "doxastic voluntarism." Many have concluded that *direct* control of one's belief is impossible, but it is generally conceded that our indirect control is sufficient to justify often holding a person responsible for his or her beliefs. Although it is a complicated question for another occasion, in my view the voluntariness of belief is more comparable to the voluntariness of ordinary action than is usually supposed. Philosophers have tended to hold belief to a more demanding standard of voluntariness than they hold ordinary action to, and consequently have exaggerated the voluntariness of action and the involuntariness of belief.

Be that as it may, there is an interesting aspect of this problem that has been overlooked in the debates about doxastic voluntarism. It has not been noted that overbelief about voluntariness of belief is beneficial epistemically and nonepistemically. A person who has positive illusions about her control of belief is likely to be more strongly motivated to expend time and effort in inquiry intended to modify belief. It is partly because a scientist presumes that he can make choices among beliefs that he develops a program of empirical research. Similarly, a philosopher takes the trouble to examine arguments on the assumption that she can choose beliefs in light of the merits of those arguments. Even if it

were true, as I think it is not, that direct control over one's belief is never possible, *belief* in one's direct control is, I suggest, of great importance to human inquiry. In other words, overbelief in the voluntariness of belief has *extrinsic* or *instrumental* epistemic merit—it makes possible inquiry at the end of which there is knowledge not otherwise available. Epistemic rationality demands belief in the voluntariness of belief.

Interesting questions have also been raised about the consequences of applying *moral* terms to belief as opposed to terms of *prudence* only. H. H. Price, for example, argues that "the consequences of this doctrine that there is sometimes a moral obligation to believe are of course pretty horrifying. The religious wars of the sixteenth and seventeenth centuries were," he says, "based on such a theory."[43] In my view an otherwise laudable commitment to freedom of thought is partly responsible for philosophers such as Price being appalled by the prospect of having duties to believe. Imprisonment, torture, or worse are imagined as the sanctions that would be imposed on persons morally irresponsible in belief. Surely it is possible to distinguish between the sanctions appropriate for misbelief that causes harm or prevents good being done and sanctions appropriate for overt action that has those effects. Don't we distinguish between sanctions to be imposed on people whose *characters* are morally objectionable and sanctions to be imposed on those whose *overt acts* are objectionable? The sanctions imposed for bad character may be only such things as social ostracism or denying them the respect they would otherwise receive. Execution, imprisonment, or fine are hardly called for. Analogously, lesser sanctions can be imposed for misbeliefs; sanctions which, while not jeopardizing freedom of thought, take seriously the moral consequences of belief.

Admittedly, this is a rather casual dismissal of the important problem of determining the moral consequences of widespread adoption of the view that persons are morally responsible for their beliefs. We don't have to look to the sixteenth or seventeenth centuries to appreciate the magnitude of this problem. Consider the late Henry Luce, head of Time/Life, whose possession of enor-

mous power to control the beliefs of citizens is vividly described by David Halberstam in *The Powers That Be*. Luce seems to have been convinced that people were morally irresponsible in believing that Senator Robert Taft would be a good president of the United States. So convinced, Luce deliberately manipulated the "truth" in his publications so as to make people believe in accordance with what he took to be their moral responsibilities.[44] This *is* "pretty horrifying."

Jonathan Harrison has raised another intriguing question about allowing moral reasons to override epistemic reasons for belief. He asks under what conditions it would be right or wrong to believe that whites are on average more intelligent than blacks. "It is an odd thing," he points out, "that the people who think it wrong for whites to believe that whites are more intelligent than blacks, do not usually believe it wrong for whites to believe that blacks are more intelligent than whites . . . [though from] this it would follow . . . that there are some true propositions that some, but not others, ought not to believe."[45]

This is yet another indication that the development of an ethics of belief is fraught with problems. However, as I suggested at the outset, a rapprochement between pragmatism, analytic epistemology, and cognitive science promises significant success in addressing those problems. Let me conclude, then, by repeating the plea for cooperative effort with which I began. In our day of philosophical pluralism tolerance of other traditions too often leads to scattered effort and consequent lack of philosophical progress. In my view, if we are not to succumb to the cynicism of deconstruction, we have no choice but to foster a cooperative spirit.

Notes

1. Presidential Address to the Society for the Advancement of American Philosophy, 3 March 1990, Buffalo, New York. Readers should note that in this paper are to be found the broad brushstrokes and exhortation appropriate to writing in the genre of the presidential address, a genre as close to that of the sermon as to that of the journal article. Also,

this quasisermon is intended for an audience firmly committed to the development of the classical American philosophy of Peirce, James, Royce Dewey, Mead, Whitehead, Lewis, et al. For earlier discussions of related issues in a different genre, see Peter H. Hare and Edward H. Madden, "William James, Dickinson Miller and C. J. Ducasse on the Ethics of Belief," *Transactions of the C. S. Peirce Society* 4 (1968): 115–29; Peter Kauber and Peter H. Hare, "The Right and Duty to Will to Believe," *Canadian Journal of Philosophy* 4 (1974): 327–43; and Peter H. Hare, "Toward an Ethics of Belief," *Philosophie et Culture: Actes du XVIIe congrès mondial de philosophie / Philosophy and Culture: Proceedings of the XVIIth World Congress of Philosophy* (Montreal: Editions Montmorency, 1988), vol. 3, pp. 428–32.

2. Lorraine Code, *Epistemic Responsibility* (Hanover, N.H.: University Press of New England, 1987), p. 8.

3. Ibid., p. 69.

4. James Montmarquet, "Epistemic Virtue," *Mind* 90 (1987): 483.

5. Ibid., p. 484.

6. Ibid.

7. Ibid.

8. Ibid., p. 485.

9. Stewart Cohen, "Knowledge, Context and Social Standards," *Synthese* 73 (1987): 3–26.

10. Hilary Kornblith, "Some Social Features of Cognition," *Synthese* 73 (1987): 31.

11. Ibid., p. 32.

12. Ibid., p. 33.

13. Ibid., p. 35.

14. Frederick F. Schmitt, "Justification, Socialty and Autonomy," *Synthese* 73 (1987): 43–85.

15. Morton White, "Pragmatism and the Revolt Against Formalism: Revising Some Doctrines of William James," *Transactions of the C. S. Peirce Society* 26 (1990): 3–4.

16. Ibid., pp. 5–6.

17. Ibid., pp. 9–10.

18. Ibid., p. 10.

19. Richard Foley, *The Theory of Epistemic Rationality* (Cambridge, Mass.: Harvard University Press, 1987), p. 213.

20. Ibid., p. 218.

21. Ibid., p. 219.

22. Ibid., p. 224.

23. Ibid.

24. Ibid., p. 226.

25. Paul K. Moser, *Empirical Justification* (Dordrecht, The Netherlands: D. Reidel, 1985), pp. 224–25.

26. Ibid., p. 230.

27. Kornblith, "Some Social Features of Cognition," p. 36.

28. Shelley E. Taylor, *Positive Illusions: Creative Self-Deception and Healthy Mind* (New York: Basic Books, 1989).

29. Ibid., p. xi.

30. Ibid., pp. 10–11.

31. Ibid., p. 71.

32. Ibid., p. 74.

33. Ibid., pp. 89–90.

34. Ibid., p. 121.

35. Ibid., p. 124.

36. Quoted by Taylor, *Positive Illusions*, p. 145.

37. Ibid., p. 157.

38. Hilary and Ruth Anna Putnam, "Epistemology as Hypothesis," *Transactions of the Charles S. Peirce Society* 26 (1990): 407–433.

39. Newton Garver, "The Ambiguity of the Police Role," *Social Praxis* 2 (1974): 320.

40. Ibid., p. 321.

41. Ibid., pp. 321–22.

42. Ibid., p. 322.

43. H. H. Price, "Belief and Will," *Proceedings of the Aristotelian Society Supplement* 28 (1954): 1–26, reprinted in *Philosophy of Mind*, ed. Stuart Hampshire (New York: Harper and Row, 1966), p. 101.

44. David Halberstam, *The Powers That Be* (New York: Dell, 1979), p. 133.

45. Jonathan Harrison, "Some Reflections on the Ethics of Knowledge and Belief," *Religious Studies* 23 (1987): 328–29.

11

IMMEDIACY, KNOWLEDGE, AND NATURALISM

Robert G. Meyers

Many philosophers have held that the most perfect manifestation of knowledge is direct confrontation with the object. This has been variously described as understanding (by Aquinas), acquaintance (by James and, later, Russell) and direct perception. In Husserl it merges with an account of insight that "excludes the conceivability that what is evident could subsequently become doubtful," which he calls apodectic evidence.[1] I will argue that these views contain a common thread, namely, an uncritical acceptance of introspection and what seems to be direct awareness of facts. To simplify the discussion, I will concentrate on the role of acquaintance (or direct perception) in our knowledge of physical objects, but my aim is to cast suspicion on direct perception itself. The result, if I am right, is a representationalist theory of knowledge that goes beyond Locke's and Russell's sense-datum theory and covers all knowledge: empirical, mathematical, and introspective.

I

According to Russell, I am acquainted with an object "when I have a direct cognitive relation to that object." The cognitive relation he

has in mind is not "the sort of relation that constitutes judgment, but the sort which constitutes presentation." As a result, he says that "S is acquainted with O" is equivalent to "O is presented to S."[2] He prefers "acquaintance," since "presentation" emphasizes the object side of the relation, and so threatens to make us lose sight of the subject and be led to think there is no subject at all. This, he thinks, is a grave mistake, since the dualism of subject and object is "a fundamental fact concerning cognition."[3]

Since he takes acquaintance to be a primitive relation (which must ultimately be known by acquaintance), Russell does not explicitly list conditions for it, but he does take it to have three conditions.

(1) It is a two-term relation between a subject and an existent (or "subsistent") object. It cannot hold between a subject and a fiction that does not exist in any sense. In other words, it is not an intentional relation in the primary sense in which aRb is an intentional fact only if it can obtain even if b does not exist. "S is acquainted with b" may be said to be intentional in a broader sense, since it is a form of awareness, but it can be true only if b exists in some minimal sense. He also holds that it is noninferential and independent of reasoning or conscious inference; it must be sui generis and cannot rest on other beliefs. In his early period (up to about the time of World War I), this would have been the end of the matter. At that time, he took introspection more or less at face value and held that, if we are not conscious of performing any inference, the state cannot depend on other mental states. But he later recognized that this puts too much weight on reflection. An awareness might rest on other mental states even if introspection does not reveal any inferential process. As a result, we have to distinguish two further conditions of acquaintance.[4]

(2) It must be noninferential, where this is taken to mean that it is not an instance of reasoning or conscious inference. Furthermore, (3) it must be presuppositionless, that is, it must not rest on or presuppose prior beliefs or knowings; or, to put it still another way, it must not be the result of any unconscious inference. As Russell puts it in discussing the a priori, knowledge by acquaintance might be elicited by some experience or memory, but it

cannot be based on it.[5] Since it is an open question whether a state can be dependent in this sense without our being consciously aware of it, we must distinguish between two conditions here.

According to Russell, acquaintance is the basis of all knowledge (and understanding, although I will not dwell on that aspect of his theory). When an object is presented to us, we are directly aware of it and can read off its properties. The result is a basic belief on which other beliefs can be based. I will call this the principle of acquaintance. When we have a sense datum of an apple, for example, we know by inspection that it, the datum, is round and red. The account can also be extended to a priori knowledge. When I think of the concepts of two and being odd, I am acquainted with them and so can tell by inspection that two is not an odd number, and so on through more complicated examples. This knowledge does not rest on acquaintance with sense data and so is a priori.

Russell denies, however, that we are acquainted with physical objects. When we read off the apparent qualities of a sensum, our knowledge is about the datum, and from this we have to infer a further belief about the external object. There are thus three steps in perceiving an apple: first, we are directly aware of a sense datum; second, because of this, we directly perceive that this datum is red and oval; and third, we infer from this belief along with background beliefs that there is an apple before us. The first step is acquaintance, i.e., knowledge of a datum, while the second is knowledge that it has certain qualities, and the third is an inference. This is the doctrine of representative perception.[6] The opposing doctrine of direct perception holds that in the first step we are acquainted with the external object itself and so can read off its properties without making any inference. As a result, there are only two steps in perceptual knowledge: acquaintance with an external object; and, on the basis of this, direct knowledge about its qualities. This is Berkeley's view. He says that, if you ask a gardener why he thinks the cherry tree exists, he will say "because he sees and feels it; in a word, because he perceives it by his senses." Berkeley thinks common sense is right about this. The tree is

immediately perceived, the gardener makes no inferences from the idea to another existence since he just sees it, and, as Berkeley says, the senses "make no inferences."[7]

Reducing the issue to a two-way debate might seem too simple, since several distinct theories have been offered as alternatives to the representative theory. In this enlarged taxonomy, we have:

1. Representative realism, which holds that perception has both a physical object and a mental replica which we directly perceive. We may call this a double-existence theory of perception.

2. Phenomenalism which holds that the object is a bundle of possible sense data or what Russell labeled "sensibilia." This in turn divides into two species:

    a. Realist versions which hold that these sense data exist independently of mind, and

    b. Idealist versions like Berkeley's which take them to be ideas dependent on mind.[8]

3. Direct realism which in its usual form denies the existence of sense data or ideas, but holds that we are directly aware of real physical objects. It thus denies the double-existence theory by denying ideas. The color and shape we directly perceive are qualities of a substance that causes our perception. This is the version found in Reid.[9]

We thus have four theories: representational realism, realist Phenomenalism, idealism, and substantial direct realism.

Two issues can be distinguished in this debate. (1) The first is the relation between the object of acquaintance and the physical object. Do we directly apprehend it or some replica of it? (2) The second is the ontological status of the physical object. Is it a bundle of sense data over time or a substance with properties that cause

perceptions of them? And if it is a bundle, are its elements independent of mind or not? Although both issues have metaphysical elements, the first can be taken to be essentially an epistemological question and the second metaphysical. From this perspective, idealism, realist phenomenalism, and direct realism are all single-existence theories which hold that we are directly aware of the object and its qualities in normal veridical perception. I will refer to all of these theories as species of direct realism. This overlooks the distinction between phenomenalism (which is a nonsubstance theory) and substantial direct realism. "Direct realism" is also a misnomer in the case of Berkeley, but not significantly so, if we remember that it refers to a position on the epistemological question. (I think he would also be pleased to be called a realist in this nonmetaphysical and commonsense sense.) This allows us to focus on the epistemic question of whether knowledge of objects is a one- or a two-step affair.

In the following two sections, I will argue that direct realism is mistaken in thinking that it is superior to representationalism since it avoids taking physical objects to exist beyond objects of acquaintance, and defend this claim from objections. In section four, I will extend the argument and argue that all knowledge transcends present experience so that there is no acquaintance at all. If this is right, all knowledge is representational, even knowledge of necessary truths and immediate experience. We may call this doctrine radical representationalism. In section five, I will defend this from the charge (as made by Husserl) that it commits us to skepticism and argue that the claim to knowledge by acquaintance rests on psychologism.

II

As we saw, according to Russell, acquaintance holds only if its object exists, that is, S is acquainted with O implies that O exists. This follows from the claim that acquaintance provides us with knowledge of its object, for the object must exist in order to know by acquain-

tance that it has a certain property. This has an important bearing on direct realism. Given that we are acquainted with physical objects, it follows that we know them at the time that they exist. It follows that we only have to look in order to discover that they exist.

This, I think, is the basis of the direct realist's claim that her account avoids the skeptical implications of representationalism. The representationalist may know the character of the idea of which she is aware, but since this is distinct from the physical object and nothing about the idea entails the existence of the object, she cannot claim to have any ground for thinking there is one beyond his idea. Since the direct realist, e.g., Berkeley, claims that we are directly aware of physical objects themselves, she thinks this problem is resolved: the skeptic is answered and the common man's view that we know physical objects is vindicated.

Unfortunately common sense is not so easily defended. The problem is that even if we are acquainted with physical objects, they still transcend the present experience. As Berkeley recognizes, illusions often present us with ideas that are not parts of real things; or, to put the point in a way that is independent of his idealism, when we have illusions, we have perceptions that do not have physical things as their objects, but other private objects distinct from them. In these cases, we are aware of something very much like the double-existence theory's ideas as distinct from physical objects. The direct realist does not have to accept double existence in every case, however. He can hold that in veridical perception we are acquainted with real physical objects and in illusions with other objects distinct from them. But this only shifts the problem, for illusory perceptions are sometimes taken to be veridical even though they do not result in cognitive contact with an external thing.

Suppose I seem to see an object out of the corner of my eye; I seem to see the cat moving from behind the sofa to behind the chair. On reflection, I recall that the cat is at the veterinarian and there is no sign of any other animal in the room. I conclude that I was not acquainted with the cat, but with some mental replica that resembled it. This is a common enough illusion. The reason for thinking it was an illusion is that other perceptions do not confirm the belief

that I saw the cat. There are also no traces of it, such as a rustling of the drapes, and it does not come when I call it. Hence, I justly conclude that it was an illusion and the object of my awareness was not real. The problem is that except in unusual cases (such as when we are dealing with traces of subatomic particles), we assume that physical objects have continued existence and endure through some stretch of time, that is, if x is a physical object (of middling size), x endures for some longer or shorter time.[10] This means that in order for the direct realist to have evidence that a momentary perception is of an external object, he must have corroborating evidence—some other perception must cohere with the original one. Otherwise, for all he knows the perception is an acquaintance with something other than an external object. Even though we are directly aware of physical objects (most of the time, we suppose), the belief that a physical object is present is based on something more than the acquaintance itself. Just as in the representationalist's theory, the belief is inferential in the broad sense. The result is that Berkeley's confidence in direct realism is misplaced.

The argument here has the following form:

1. If the object of my acquaintance O at t_1 is a physical object, it must exist at some other time t_n.

2. Acquaintance assures me of its existence only at t_1.

3. The fact that O exists at t_1 does not entail that it exists at t_n.

4. Thus, my knowledge that O exists, i.e., that it is a real physical object, rests on other beliefs.

It also follows that I am not acquainted with O at t_1, if we assume that acquaintance with an object provides noninferential knowledge that it has certain properties. The object I am acquainted with at t_1 is not the enduring physical object, but a time slice of it. This bears a closer resemblance to the fleeting ideas posited by the representative realist than to the robust object of common sense.

The general problem here is that physical objects transcend experience even for the direct realist. Whereas the representationalist holds that physical objects are distinct from ideas and so transcend them, the direct realist holds that they transcend the object of our acquaintance at the time of the experience. Both views hold that they exist beyond the present perception. This means that the theories face similar problems. First, the belief that O is an enduring physical object reduces to a hypothesis to explain an experience. It is thus an inference and a conjectural one at that. Second, if we press the claim that such inferences fall short of knowledge, direct realism is just as much in danger of lapsing into skepticism as representationalism. The result is that nothing about the experience on either account shows that there is an enduring physical object and both theories have to appeal to further evidence. Perception is inferential in the broad sense on both theories.

It is clear that the inference is abductive for the representationalist. As Berkeley and Hume observed, we cannot experience a constant conjunction of the idea and an object that is not an idea without having an idea. The best we can do is to compare ideas with ideas. Berkeley thinks this gives his theory an advantage over Locke's, but this is mistaken. He cannot get from objects at one time to objects at another by induction any more than Locke.[11] Let us look at Berkeley's account more closely.

He claims that he knows that the desk exists in the next room when he is not perceiving it because he can go there and verify its existence.[12] Locke, however, can never step outside of his mind (or body) and check on a material substance. They are always beyond what we can experience. But note that what Berkeley verifies is that the desk exists while he is in the room perceiving it. He does not directly verify that it existed in the room a moment before when he was in the other room thinking about it. He cannot get from one room to the other fast enough to catch the desk as it was when he was in the other room. The most he can claim is that its existence while he is next door is a plausible hypothesis that explains his actual perceptions. But this is precisely what Locke claims about material objects distinct from ideas. The inference in

both cases is a hypothesis to explain the present perception or perceptions (when we take several of them together).

As an aside, it may be noticed that, if Berkeley's main argument in favor of his idealism is correct, he cannot even conceive of the desk's existing when he is not in the room. The reason is that now when he is in this room and not perceiving the desk, he is conceiving the desk existing unperceived. Yet he claims that this is impossible, that is, that it is impossible to conceive of an object existing unperceived. Since by hypothesis he is not perceiving the desk in the next room, he cannot even conceive of its existence. In short, Berkeley's argument for idealism condemns him to a rejection of all transcendence and reduces his view to solipsism.

The implication of this is that the basic act of mind is not acquaintance, but something simpler, an intentional act of mind that has an immanent object that may or may not also exist independently, i.e., an act that does not imply the existence of its object. Various terms have been proposed for this mental state. The medieval term is "intention" from the metaphor *intendere arcum in*, to aim a bow. Just as we can aim at what does not exist, so the medievals held that an intention is directed at an object that may not exist.[13] Hume's term for this state was "perception," while Peirce used the term "cognition" (as a count noun) and Santayana "intuition." The best term may be the Latin one, since it carries the implication of intentionality on its face, but it would have to be understood in this general and technical sense and not in its ordinary sense in English as a goal of action. I propose to refer to it as thinking about, or having a thought about, and to call such acts "thoughts." Thinking about resembles acquaintance except that "S is thinking about x" does not imply that x exists while "S is acquainted with x" does. Furthermore, "thinking about" differs from "thinking that" in that "thinking that" always has a propositional object and implies belief. We can plausibly say that "thinking that" implies "thinking about" since "S thinks that O is F" seems to imply that S has a thought about O.[14]

The argument against direct realism can then be put as follows. Since O, the presumed object of acquaintance at the moment,

cannot be guaranteed at the moment to exist, the most we can say about it is that it is an intentional object. That is, our relation to it is that we are thinking about it and not that we are acquainted with it in Russell's sense. It may be distinct from our perception and have continued existence, but our evidence for this is abductive, just as in the case of representative realism.

III

There are several objections to this argument. The two most important, I think, are (1) that it fails to take account of the logical realism espoused by many direct realists, which holds that even intentional acts like thinking about have real objects, and (2) that, contrary to what the argument claims, we can determine by an appeal to direct consciousness when an object of acquaintance exists and is not simply intentional.

In reply to the first objection, according to the doctrine I am calling logical realism, all "thinking about" is directed at an object which, although not real in the sense in which apples and planets are, still exists and so can be the subject of qualities. Such objects are said to subsist and do not exist in the ordinary sense of that term; that is, even though they do not exist in space and time, they are not mere fictions either. As a result, when we think about an object, we can still correctly ascribe properties to it. The transcendence argument is thus mistaken in claiming that thinking about is not acquaintance in the Russellian sense. On this theory, thinking about an object is an intentional act, but only in the extended sense in which all awareness is. It is not intentional in the sense that it is directed at something that does not exist in any sense.

One problem with logical realism is the notion of subsistence. Russell held that subsistent and what we call existent objects both exist in a more general sense of being subjects of qualities. Thus unicorns and frogs both exist. The difference is that unicorns and the concept of unicornhood do not exist in space and time, while frogs do. Similarly, one might hold that Hamlet subsists while

Napoleon exists (although Russell himself did not hold this view) and mean by this that Hamlet exists only in the realm of imagination while Napoleon existed in space and time. But there are counterexamples to this account of subsistence. Theists hold that God exists and does not merely subsist (like a fictional character) even though he is outside of space and time. So being nonspatial and nontemporal cannot be the mark of subsistence. A better way of drawing the distinction is to hold that existent entities (in the narrow sense) are constituents of the causal order while subsistent ones are not. This allows us to claim that both God and Napoleon are existent, while holding that concepts and imaginary beings merely subsist, since they are neither causes nor effects.

Whether this helps to clarify the notion of subsistence or not, the objection still fails as a defense of direct realism. Positing a sense of existence in which illusions can be said to exist does not solve the problem of how we can know immediately that the apple tree exists in the ordinary sense. The most that can be known, according to transcendence argument, is that we are having a certain type of experience. Whether it is veridical, i.e., about an external existent in the strong sense, can only be known by considering other experiences and comparing them—or at least that is the charge being made against direct realism. To hold that the present moment assures us that we are aware of an existent in the weak sense, i.e., of a subsistent object that may not exist in the ordinary sense, does not answer this objection, but instead makes a wholly irrelevant point. If someone claims that a minister has no children, it is no objection to claim that even though this is true in the ordinary sense, he is still a father to this flock and so has children in another sense. As a result, logical realism does not provide a defense of direct realism, whatever its merits in dealing with other issues.

We might put the point as follows. Let the ordinary causal sense of existence be "exists"$_1$ and subsistence be "exists"$_2$. The objection to direct realism is that a momentary experience does not give us any evidence that a sensed object exists$_1$ since it does not furnish us with any grounds for thinking the object has continued existence. To claim that the experience at least shows that some-

thing is present to the mind in the other sense, i.e., that it $exists_2$, does not show that it $exists_1$. In fact, it does not even show that the object has continued existence as a subsistent object. For all we know, subsistent objects might $exist_2$ only at the moment when something is thinking about them. The reason is that just as a present experience does not show that an external physical object $exists_1$ in the gaps when it is being perceived, so it does not show that a subsistent object $exists_2$ in the gaps when we are not thinking about it. The problem of transcendence that troubles direct realism also troubles logical realism with equal ferocity.

The second objection is that we can directly know when an object of acquaintance exists, and hence that the transcendence argument fails. This raises a more serious challenge. The claim is that despite what the transcendence argument asserts, we can and do know immediately when we are perceiving external physical objects without comparing experiences. Ordinary experience has a clarity and vividness that fleeting illusions lack, and these qualities are present on the face of the experiences. As a result the direct realist might argue that momentary experiences do provide the sort of evidence the critic demands. J. L. Austin, for instance, held that "it seems perfectly extraordinary" to say that there is no qualitative difference between illusory and veridical experiences. Dreams have "a dream-like quality" and if dreams were not qualitatively different from waking experiences, every experience would have this quality.[15] Locke also held that we "plainly find" a difference "between any idea revived in our minds by our memory and actually coming into our minds by our senses, as we do between any two distinct ideas." "I ask anyone whether he is not invincibly conscious to himself of a different perception, when he looks on the sun by day and thinks on it by night, when he actually tastes wormwood or smells a rose or only things on that savour or odour."[16] To put it differently, veridical perception can be distinguished from nonveridical perception by intrinsic marks of which we are all conscious.

It should be noted that the direct realist does not have to claim that the difference between the experiences is infallible. It is

enough if he can show that the immediate marks of veridicality give us some reason to think the object is real. But even in this weakened form, this appeal to consciousness fails to save direct realism. The problem is that the marks of veridicality (lacking a dreamlike quality, for example) must not only be noninferential in the sense that we are not conscious of making any inference, but presuppositionless. In other words, they must not only be phenomenally obvious, but also must be certified immediately to be reliable. If m is such a mark, it must be the case (1) that m is present to consciousness and (2) that the principle that m is a justifying mark of veridicality is also known immediately. If "m is an indicator of veridicality" is based on experience, appealing to m to distinguish illusion from reality rests on a presupposition and, despite what it appears to be phenomenologically, still goes beyond the experience of the moment. Vividness and the absence of a dreamlike quality meet the first condition, but it is unlikely they meet the second. We learn to trust certain kinds of experiences and distrust others probably in the first few years of life. After we have acquired a sense of reality, it may seem intrinsically warranted that we are not suffering illusions, but introspection is a poor guide in cases like this. All we introspect is the present feeling and its phenomenal character; its preconditions are not present to us.

IV

If this is right, direct realism does not enjoy an epistemological advantage over representational realism. But they both still accept acquaintance, although of widely different objects. I now wish to argue that, by an extension of the transcendence argument, even this residue of acquaintance is problematic. If this is right, there are good grounds for thinking that we are not acquainted with anything in Russell's full-blooded sense, neither introspective states, universals, nor necessary truths.

The reason is that, just as physical objects transcend objects

sensed at a moment, so claims to truth go beyond the present. Believing and being certain that (in the doxastic sense) are propositional attitudes and affirm that their propositional objects are true. As Descartes would put it, to have a belief is to assent to a proposition. We might call these assertive propositional attitudes. Other propositional attitudes are nonassertive. Examples are wondering whether something is true, pretending, doubting, and supposing (within a proof). These are directed at propositions, but they do not involve assent to them.

Two comments should be made here. First, a useful way to describe the assertive attitudes is to say that they are all holdings for true, and, since belief in the generic sense is a holding for true, this means that they are all species of belief. To have an assertive attitude toward p, then, is to believe that it is true. We might run through the assertive attitudes, e.g., belief, knowledge, conviction, opining, and analyze their differences, but this is a problem for the philosophy of mind (which is a branch of metaphysics) and not epistemology. The important point is that they assert or assent to the proposition's truth.

Second, a minimal condition for the notion of truth here is that, in believing that p, we claim that what p depicts is independent of what is thought about it; it does not depend on what you or I assert or deny, and anyone who disagrees is in error. One term for this propositional object is "state of affairs," but unfortunately this is usually restricted to continent facts, whereas one can have a belief about any kind of proposition. Peirce's term for what makes the proposition true was "real" taken as a count noun.[17] Following the medievals, he held that x is real if and only x exists independent of what anyone thinks about it. As a result, to believe that p is to assert that p depicts a real propositional object, or a real for short.[18] But this is an idiosyncratic use of "real," so I will use "fact" instead. When one asserts or holds p for true, he claims that the putative fact p depicts is real. Since p can be a contingent, necessary, or value proposition, there can be contingent, necessary, or value facts.

The question that arises is whether at any moment we can distinguish between holding p for true, which does not imply that p

is true, and knowing that it is, which does. Since truth goes beyond what we think at the moment, the same problem of transcendence arises for assertive propositional attitudes as for nonpropositional awareness. In holding at a given moment t_1 that p is true, we are committed to claiming that it is not true just for me (whatever that might mean) at t_1, but that it is true for everyone at all times. If we are right, anyone who disagrees and thinks it is not true is in error regardless of what he believes about it. In other words, truth and falsity are independent of our view of it and so transcend us just as physical objects transcend our momentary awarenesses of them.

If this is right, the problem of transcendence does not affect just representational realism and direct realism, but spreads to every apparent act of acquaintance. The representational realist was only half right: every holding for true is about an object independent of act and not just those directed at physical objects.

There seem to be only two approaches to this argument. One is to accept its implications and hold that the basic act is thinking about or having an intention in the medieval sense, which rests on background beliefs and is directed at an intentional object. Furthermore, beliefs are also about intentional objects that may or may not be real. This is the theory I am calling radical "representionalism." The proponent of acquaintance would have to hold that, despite these claims, we can tell directly when we are aware of something real and read off facts about this object without appealing to background beliefs.

V

There are several objections to this general transcendence argument, two of which I will consider here. The first objection is that, if there is no acquaintance, there is no knowledge, since something must be immediately known in order for anything to be. Husserl, for example, holds that "absolute givenness is an ultimate." To deny it is "to deny every norm, every basic criterion which gives significance to cognition." Furthermore, he says, "one would have

to construe everything as illusion, and, in a nonsensical way, also take illusion as such to be an illusion; and so one would always relapse into the absurdities of scepticism."[19]

Some comments. First, the radical representationalist does not have to "construe everything as illusion," as Husserl claims. The fact that nothing is absolutely given does not imply that we cannot have beliefs, and as we just saw, to believe something is to deny that it is illusion. Second, giving up givenness does not imply that we cannot have norms for believing. Since the goal of believing is to have true beliefs and avoid error, doxastic habits can be evaluated in terms of their capacity to produce true beliefs. We can interpret noninferential warrant in terms of reliable belief-producing mechanisms (such as perception, memory, and introspection) and take logic to define inferential warrant. I have discussed how to do this elsewhere.[20]

But these points are secondary to Husserl's central point. He holds that knowledge requires "absolute givenness," i.e., acts of acquaintance that are phenomenally noninferential and presuppositionless, since otherwise we would have an infinite regress. If this is right, his other claims would seem to follow and we would not be able to explain how we have any beliefs or norms. But it is not clear that this is an acceptable objection. Husserl would claim that we know that knowledge requires givenness by examining the concept of knowledge, but what are his grounds for this? If he claims that this awareness is itself direct knowledge based on acquaintance, he has begged the question. The most he can claim for it is that he firmly believes it. Furthermore, if the radical representationalist is right, the requirement of givenness is probably just a presupposition supported by the weight of tradition. And, finally, giving up acquaintance does not imply an infinite regress. Knowledge can be taken to rest on what Hume called "natural beliefs" or, in Santayana's phrase, on "animal faith." This makes knowledge relative to background assumptions and so denies what Husserl would call absolute knowledge, but it is not clear that such relativity implies that there are no norms.

The second objection raises less familiar issues. One can argue

that, despite claims to the contrary, we are aware of mental states and other facts (such as mathematical and logical truths) in a direct and presuppositionless manner, since we have luminous intuitions of them. They are up front to the mind and present themselves to us in their entirety. Husserl also makes this point. He says that the only person who can argue against "the skeptic" is "the man who sees the ultimate basis of knowledge, who is willing to assign a significance to 'seeing,' inspecting evidence." Of the person who does not or will not see, Husserl says: "there is nothing we can do with him." He adds:

> We cannot answer: "obviously" it is the case. For he denies that there is any such thing as "obviously." It is as if a blind man wished to deny that there is any such a thing as seeing, or still better, as if one who has sight wished to deny that he himself sees and that there is any such thing as seeing. How could we convince him, assuming that he has no other mode of perception? [21]

The traditional reply to this is that Husserl's critics are not blind, but that he sees too much. He imagines he has insight and is seeing things when he is not. It is not a clearing in the woods he has come upon, but an illusion. To use an unflattering analogy parallel to his, he is like a madman who says he sees gremlins and tries to convince us we are blind. Unfortunately, this reduces the debate to name calling. A more reasoned way of putting the reply is that, despite his protestations, Husserl's claim to luminous grasping of truth is nothing more than an appeal to firm conviction which does not provide evidence for truth. Conviction is a species of belief and differs from simple holding for true only in the force of the psychological compulsion; it is not luminous intuition, but from the epistemological view, just another claim to truth. Without a criterion for distinguishing when the claim is true and when it is false, the experience is nonevidential. I suspect that Husserl thinks no mark is needed, since the experience reveals itself as true. But, according to the reply, this is just another appeal to conviction, as if the madman tried to confirm his belief in the gremlins by looking again or by reflecting on the fact that he could not possibly be mad because he is a university professor.

One way to put the point is that Husserl's claim that the experience certifies itself reduces to psychology and hence is an instance of psychologism. Let us consider a more modest defense of acquaintance than Husserl's. Suppose one were to argue that, although we cannot be certain, it is still more plausible that we directly read off the properties of an after-image than that we are making an unconscious inference. This is a weaker claim than Husserl's, but it is still psychological. There is no ground for such an assessment beyond the conviction that it is true. We may be more inclined to believe the awareness is direct, but this does not make it more plausible in the relevant epistemic sense.

The notion of psychologism here is broader than the usual understanding of it. Usually it is taken to be the claim that the principles of logic are psychological laws and cannot be about anything beyond the workings of the mind. Husserl rejects psychologism in this sense, as does Frege and most twentieth-century logicians, and indeed he grew indignant when challenged on the point. But this is too narrow a view of psychologism.[22] The problem with the appeal to psychology in logic and epistemology (of which logic is a branch) is that it takes warrant and logical norms to rest on psychological states. Since truth is independent of what is thought about it and warrant is truth conducive, it cannot rest on psychological considerations. This broader notion implies the narrower one, since, if warrant cannot be psychological, logical laws that provide warrant cannot be either. But the converse does not hold: the narrow sense does not imply the broader one. One can hold, as Husserl and perhaps Gottlob Frege did, that logic is about structures independent of thought and still accept self-evidence as a source of warrant.[23] The most common form of this holds that the axioms of logic are intuited while logical laws describe nonpsychological facts. But in the absence of a way to distinguish conviction from intuition in the epistemic sense, this view is also psychologistic.

This wider understanding of psychologism is found in Peirce. He defended what he called "an unpsychological view of logic" and, like Frege after him, denied that logical laws are psycho-

logical truths.[24] But he also rejected intuition and self-evidence. He defined an intuition as a cognition determined solely by its object and not by other mental states, i.e., as "a premiss not itself a conclusion," on the ground that we have no criterion for distinguishing evidential belief from psychological compulsion.[25] Within logic, he took Ernst Schröder to task for making "the correctness of feeling 'the last anchor-hold' of all certainty." His worry was that Schröder could not distinguish the logical aspects of the feeling from the psychological ones, or, to use the jargon of German logic at the time, that he could not distinguish between "logical necessity" and "psychological necessity."[26]

VI

If all knowledge is representational as I have argued, important consequences follow for our conception of knowledge. In closing, I would like to comment on three of them.

(1) Phenomenal closeness to the mind is no guarantee of truth or even of justification. We have to learn how to identify our mental states just as we have to learn how to identify external events. The fact that a pain is mine and not yours is an important fact about it and me, but it does not mean that my knowledge of it is different from my knowledge of any other kind of fact. My judgment is still an interpretation based on past experience.

(2) The epistemic status of a proposition is independent of the sort of proposition it is. If we accept a realist theory of mathematical truth and reject all traces of psychologism, knowing mathematical truths poses the same problems as knowing any other kinds. Just as there are contingent physical facts independent of what we think of them, so there are independent necessary facts. The fact that they are different sorts of objects does not affect our ability to know them except for local factors such as that we never learned how to do proofs in the branch of mathematics at issue. In every case, the claims transcend the experience of the moment and depend on background assumptions and knowledge.[27]

(3) Finally, our conception of knowledge itself needs overhauling. Despite his realism and apparent empiricism, the early Russell followed Leibniz and Descartes in holding that human knowledge is based on unacquired awareness. We only have to look to have knowledge of objects; no guessing is required so long as our view is unobstructed. Furthermore, these awarenesses result from what Sellars calls "an unacquired ability to be aware of determinable repeatables."[28] We may call this faculty reason. Experience does not shape it, but serves only to trigger it. As Descartes recognized, this amounts to excluding it from nature. He says that instead of taking nature to include "the sum of all things given me by God," he will restrict the term to "those things given by God to me as a being composed of mind and body."[29] Those that pertain to "mind alone, and not mind and body in conjunction," he holds, are not part of nature. Reason which knows "an infinitude" of things "without the help of the body" is non-natural, if not supernatural, and ultimately cannot be understood by science. The alternative account is that all cognitive abilities are structured by experience. We have innate capacities to experience and interpret phenomena, but they cannot produce knowledge until they are shaped by experience. Russell and Descartes are thus mistaken that the only role of stimulation is to elicit awareness. Reason does not come preassembled so that it only has to be plugged in, but requires assembly. The argument I have given supports the latter, non-Cartesian view. As Peirce put it, "all human knowledge, up to the highest flights of science, is but the development of our inborn animal instincts."[30]

NOTES

1. Edmund Husserl, *Cartesian Meditations*, trans. Dorion Cairns (Dordrecht, The Netherlands: Martinus Nijhoff, 1960), p. 15.

2. Bertrand Russell, "Knowledge by Acquaintance and Knowledge by Description," in *Mysticism and Logic* (Garden City, N.Y.: Doubleday, 1957), pp. 202–203.

3. Russell later held that we are not acquainted with the self. See "The Nature of Acquaintance," in *Logic and Knowledge* (London: Allen and Unwin, 1956), pp. 127–74.

4. The importance of this distinction is stressed by Wilfrid Sellars. See "Empiricism and the Philosophy of Mind," in *Science, Perception and Reality* (London: Routledge and Kegan Paul, 1963).

5. Bertrand Russell, *The Problems of Philosophy* (New York: Oxford University Press, 1959), p. 74.

6. As John Locke put it: "'Tis evident the mind knows not things immediately, but only by the intervention of the ideas it has of them." *An Essay Concerning Human Understanding*, ed. Roger Woolhouse (Harmondsworth, England: Penguin, 1997), IV, iv 3. In Locke's terminology, the stages are: perception of an idea, intuitive knowledge about its qualities, and what he calls "sensitive knowledge" of the external thing by inference. *Essay*, IV, ii 14.

7. George Berkeley, *Principles of Human Knowledge and Three Dialogues*, ed. Roger Woolhouse (Harmondsworth, England: Penguin, 1988), pp. 181, 124.

8. On the various varieties of theories here, see H. H. Price, *Perception*, 2nd ed. (London: Methuen, 1950).

9. Other versions use the language of sense data and hold that they are "on the surface of the object" (as Berkeley put it) or identical with it (as Moore put it). See Berkeley, *Dialogue III*, p. 177, and G. E. Moore, "Some Judgments of Perception," in *Philosophical Studies* (Paterson, N.J.: Littlefield, Adams, 1959), pp. 220–52.

10. A point made by David Hume, *A Treatise of Human Nature* (Oxford: Oxford University Press, 2000), I, iv 2.

11. Hume was aware of this, although he did not distinguish clearly between induction and abduction. See *Treatise*, I iv 2.

12. Berkeley, *Principles of Human Knowledge*, sect. 3.

13. Peter Geach, *God and the Soul* (London: Routledge and Kegan Paul, 1969), p. 108. For the medieval view of intentions, see Thomas Aquinas, *On the Truth of the Catholic Faith*, trans. C. J. O'Neil (Garden City, N.Y.: Doubleday, 1957), book 4, chap. 11, pp. 79–90.

14. This is not strictly the case, since belief has a dispositional component that thinking about lacks. For instance, one can believe that Napoleon was a great general without thinking about Napoleon at all, since the belief is not present to consciousness at every moment.

15. J. L. Austin, *Sense and Sensibilia* (Oxford: Oxford University Press, 1962), pp. 48–49.

16. Locke, *Essay Concerning Human Understanding*, IV, ii, 14.

17. Charles S. Peirce, *Collected Papers*, ed. Charles Hartshorne, et al.

(Cambridge, Mass.: Harvard University Press, 1931–1958), vol. 5, paragraph 384. Hereafter this work will be abbreviated *CP* and references will be indicated by volume and section number with the year, for example *CP* 5.384, 1877.

18. See also *CP* 5.405, 1878. As Peirce himself noted, this does not commit us to denying idealism. We might hold that *x* is independent of what you or I think, but not of "thought in general." See *CP* 5.408, 1878.

19. Edmund Husserl, *The Idea of Phenomenology*, trans. William P. Alston and George Nakhnikian (The Hague: Martinus Nijhoff, 1964), p. 49.

20. *The Likelihood of Knowledge* (Dordrecht, The Netherlands: Kluwer, 1988).

21. Ibid.

22. For a discussion of this broader sense of psychologism, see Wilfrid Sellars, "Realism and the New Way of Words," in *Readings in Philosophical Analysis*, eds. Herbert Feigl and Wilfrid Sellars (New York: Appleton-Century-Crofts, 1949), p. 430, note 2.

23. Frege objected to Husserl's appeal to *Evidenz* as psychologism and can be interpreted as rejecting psychologism in the broad sense in which it is taken here. On the dispute between Husserl and Frege, see John Aach, "Psychologism Reconsidered: A Re-evaluation of the Arguments of Frege and Husserl," *Synthese* 85 (1990): 315–38, especially pp. 319–21. Unfortunately, it is not clear that Frege's appeal to grasping senses and axioms is not itself psychologistic.

24. *The Writings of Charles S. Peirce*, ed. Max H. Fisch, et al. (Bloomington: Indiana University Press, 1982), vol. 1, p. 322.

25. *CP* 5.213, 1868.

26. *Manuscripts of Charles S. Peirce*, Microfilm Edition (Cambridge, Mass.: Harvard University Microreproduction Services, 1963), MS 787, n.d.

27. This is argued at greater length in Robert G. Meyers, *The Likelihood of Knowledge* (Dordrecht, The Netherlands: Kluwer, 1988), chapter 3.

28. Sellars, "Empiricism and the Philosophy of Mind," p. 159.

29. René Descartes, "Meditation VI," in *The Philosophical Works of Descartes*, trans. Elizabeth S. Haldane and G. R. T. Ross (New York: Dover, 1955), vol. 1, p. 193.

30. *CP* 2.754, 1883.

12 A Pragmatic Realism

Murray G. Murphey

The dominant intellectual issue in late nineteenth century America was, as we all know, the controversy between science and religion sparked by the publication of Darwin's *Origin of Species* in 1859. While religious leaders such as Charles Hodge denounced evolution[1] and evolutionists like John William Draper denounced religion,[2] most sought for some compromise position that would preserve religion yet support science. In philosophy, it was idealism that provided the most viable compromise position and the popularity of Hegel and other absolute idealists in this period is therefore hardly surprising. Among these idealists, one group in particular succeeded in creating a philosophic stance that was acceptable to many scientists and some religious believers. That group was the pragmatists.

That the original pragmatists were idealists is not news. Charles Peirce was explicitly so throughout his career. William James was an avowed pluralistic idealist. Josiah Royce was the most systematic idealist in the group, but he also called himself an "absolute pragmatist." John Dewey was a Hegelian whose so-called naturalism was less a naturalized Hegelianism than a Hegelianization of nature.[3] C. I. Lewis, the chief heir of this group, abandoned idealism, yet his debts to Peirce and especially to Royce are matters of record.[4] It was Royce that Lewis called "my

ideal of a philosopher,"[5] and as Lewis listened to James and Royce debate in their famous Philosophy 5 course in Sever Hall, he thought Royce won the debate by "a technical knockout."[6] As Lewis himself has pointed out, the "conceptual pragmatism" of *Mind and the World Order* owed as much to Royce as to James.[7]

But pragmatism need not take an idealist form, as Lewis's work demonstrates. Today, Lewis is remembered chiefly as the uncompromising advocate of the "given," and those who, like Richard Rorty, celebrate Wilfrid Sellars's work regard Lewis as passé. But it should be remarked that Lewis's theory of the pragmatic a priori advanced a holism as radical as W. V. Quine's "Two Dogmas of Empiricism."[8] And Lewis was not so wrong about the given as is currently believed.

Epistemological inquiry can address either of two very different questions. One is how the individual can justify his claims to knowledge; the second is how the community can justify its claims. These two lines of inquiry are not the same, because the second takes as a premise the existence of the community, and so of real objects, other minds, and some form of common culture, whereas the first regards this premise as a claim that itself requires justification. Once this claim is justified, the two lines of inquiry may converge, but only then. Dewey, Sellars, Rorty, and others have taken the second line, and so begged the question so far as the first line of inquiry is concerned. Lewis took the first line of inquiry, and was I believe right in doing so.

As Lewis among others emphasized, what justifies us in calling knowledge "empirical" is its relation to experience. No pragmatist could argue, after James, that our sensory experience reveals the world as it really is. The human sensorium is an instrument capable of registering a very limited range of environmental factors. But Lewis made two claims about our sensory experience: that we can know with certainty the given in experience,[9] and that this given element "remains unaffected by any change in mental attitudes or interests."[10] Such statements have been taken to mean that Lewis considered the given to be independent of any form of inference or conceptualization. If that were so, the second claim could not stand.

Perception is a process in which sensory inputs are converted into percepts, which are usually percepts of objects, states, or events. This "conversion" is an unconscious interpretative process that involves not only the sensory inputs, but past experience, and therefore culture, and innate factors that function as rules.[11] We are programmed to perceive a world of objects,[12] to divide the color continuum in terms of focal colors,[13] to categorize sounds in particular ways,[14] and so on. To some extent, therefore, our perceptual experience is what Kant called a "preformation system."

Our perceptual judgments tell us what our percepts are percepts of. Typically, they take the form "This is green" or "That's a dog." Such judgments are classificatory judgments, and can be false. There *are* illusions, and we can make mistakes in classification. But perception also yields what I will call "S statements" of the form "This looks green" or "At t, this looked green." These are statements about our sensory experience, not about the world. They can be false if one lies, but they cannot be false otherwise. When Jerome Bruner's subjects in the famous fake playing card experiment saw purple spades where no such things existed, they were wrong about the fake cards but not about their visual experience.[15] If S statements are taken to be the "given," Lewis was right in saying we can be certain of them.

S statements are occasion statements. They cannot be false because nothing can contradict them. If I saw at t_1 something that looked green and at t_2 that thing looked blue to me, there is no contradiction because t_1 and t_2 are different occasions. Nelson Goodman denied this, claiming that if, to the two S statements just given, I add a further one—that the apparent color was constant over the period covering the two occasions,[16] then one of the three statements must be false. Lewis's reply was "There is no requirement of consistency which is relevant to protocols,"[17] by which he meant S statements, and Lewis was right. Consider for example the well-known duck-rabbit figure. At one moment the figure looks like a duck's head, and at the next moment it looks like a rabbit's head. But the linear figure that is the proximal stimulus remains constant throughout. This constancy of the figure is true

of all reversible figures, such as the rat man, the young woman-old woman, the face-vase, the Necker cube, and so forth. But no one rejects any of the S statements on this account. Indeed, the concept of a reversible figure would be meaningless if the figure itself changed during the reversals. There are even color examples that refute Goodman. In the white triangle illusion, the surface of the illusory triangle appears to be a more luminous white than the surrounding background. But a glance at the triangle's edge shows that there is no difference in luminosity, and one is aware of this constancy even while the illusion operates. The problem of S statements is not to make them consistent, for they need not be consistent; the problem is to explain them.

This brings us to the question of the word "looks." Sellars claimed that color words are first learned as predicates of physical objects, and that "the sense of 'red' in which things *look* red is, on the face of it, the same as that in which things *are* red."[18] That is, Sellars claimed that a physical thing language is logically prior to any experiential language. But this assumes that we know the real colors of real physical objects, which is just what must be shown. What is surely true is that we first learn color words as predicates of *perceived* objects. To claim that these *perceived objects* are real physical objects is to claim that our perceptual judgments are true.[19] This becomes very clear when Sellars discussed what he called the "necessary truth" that

> x is red if and only if x would look red to standard observers under standard conditions.[20]

This claim appears to be a definition of "is red" in terms of "looks red." Sellars denied this and claimed instead that it was a definition of *standard conditions*. But I think Sellars was wrong here. This "necessary truth" has four variables. We can eliminate "standard observers" by taking them to be just those to whom x looks red in standard conditions. "Looking red" is a fact about our visual experience, however we come by the term "red." Sellars claimed that "'standard conditions' means conditions in which things look what they are."[21] This assumes that we know how things really

are. But anything looks red under some conditions. What conditions are taken as standard is purely arbitrary; we could set up a standard light in Paris like the standard meter and define colors in terms of that. There is no reason but convenience to hold daylight to be the standard; any other would do. But Sellars's necessary truth can define "standard conditions" only if "x is red" already has an absolute meaning—that is, if we already know what is red independently of how it may look. Since this is just what we do *not* know, Sellars's "necessary truth" does define "is red" as "looks red" under conditions that are fixed by fiat.

Sellars then contrasted three propositions:

1. Seeing that x over there is red
2. It looking to one that x over there is red.
3. It looking to one as though there were a red object over there.[22]

Sellars claimed these three share what he called the "propositional content" that "x over there is red"[23] and claimed that proposition 1 endorses the propositional content, proposition 2 partly endorses it, and proposition 3 does not endorse it at all. But the "decisive point" according to Sellars is that *"if the common propositional content were true,* then all these three situations would be cases of *seeing that* x, over there, is red."[24] This analysis is incorrect.

Proposition 1 trades on the ambiguity of seeing/seeing that. It is correct to say "I see a blue sky"—that is a statement about my visual perception. But to say "I see *that* the sky is blue" is a statement about what I know to be the case about the sky. I cannot say "I see *that* the sky is blue but it isn't really blue," whereas I can say "The sky looks blue to me but it really isn't." Thus it is quite correct to say "I see *that* there is no greatest cardinal number" or "I see *that* Hitler was evil" where it is clear that "see that" means to know or to understand and cannot refer to visual perception. But propositions 2 and 3 are statements about how something looks to one and so they are about visual perception, not about what one knows to be the case. These propositions are true or false independently

of the truth or falsity of Sellars's propositional content; neither endorses it, and neither would be a case of *seeing that* x over there is red even if the so-called propositional content were true. Sellars construed "looks" statements as half-hearted claims that perceptual judgments are true. There are *some* "looks" statements that can be so described, but propositions 2 and 3 are not among them. These "looks" statements are statements about our visual experience. They are not, it should be stressed, statements about sense data or other mysterious entities. There is nothing mysterious about visual experience.

What then is the justification for perceptual judgments such as "This is green"? Sellars said of its "authority," by which I take it he means its justification, "clearly . . . the only thing that can remotely be supposed to constitute such authority is the fact that one can infer the presence of a green object from the fact that someone makes this report."[25] Furthermore, Sellars said

> For a *Konstatierung* "This is green" to "express observational knowledge," not only must it be a *symptom* or *sign* of the presence of a green object in standard conditions, but the perceiver must know that tokens of "This is green" *are* symptoms of green objects in conditions which are standard for visual perception.[26]

I take it that what Sellars meant here is that the perceptual judgment "This is green" is a justified observational report just in case one has been trained to utter the sentence "This is green" in the presence of green things, and one also knows that such a response to this sensory stimulation is a reliable indicator that one is in the presence of something green in standard conditions. Trained by whom? Trained by the linguistic community to which one belongs. This of course assumes the existence of other persons who constitute a community, but Sellars did make this assumption. Trained how? On Sellars account, the basic training that makes the sentence token "This is green" a reliable symptom is by conditioning, although the subsequent recognition that "This is green" *is* a reliable symptom goes beyond conditioning.[27] But we have already seen that "This is green" means "This looks green to one under

conditions fixed by fiat." What this comes to saying therefore is that the perceptual judgment "This is green" is justified if one has been taught that the corresponding S statement is a reliable indicator of the presence of an object that is really green. But that the perceived object *is* really green is just what we do *not* know. To assume that we do is to adopt a God's-eye view whereby our subjective experiences can be compared to external reality, except that for Sellars the community plays the part of God. The result is a justificatory procedure that takes for granted what has to be proven.

The justification for a perceptual judgment is an S statement; what justifies observational reports is observation. Excluding lies, S statements are certain, and they do justify perceptual judgments. Suppose that you perceive something green, and thereupon cry "That's green." If you were challenged, what would you say? I suggest that you would say "That looks green to me." Should the challenge continue, you could then argue about conditions of perception, but whatever the conditions, if both you and your challenger share them and he denies that the object is green when it looks green to you, you would question his eyesight. Your perceptual judgment may be false (you may be hallucinating) but questions of justification are not questions of truth. What justifies perceptual judgments are S statements.

To say that "x is green" is to classify "x" as green. To say that "x looks green" is to say that "x (the presentation) is something classified as green." In the "looks" locution, green functions to identify the presented quale as one that falls under the concept "green." The locution assumes the classification; it does not make it.

S statements *are* the data; the problem is to explain them. When Bruner's subjects reported seeing purple spades, the perceivers's expectations had to be invoked to explain their reports.[28] If perception is "permeable" by conception (and apparently not all perception is),[29] then concepts must be used as explanatory variables. But what is to be explained is the percept and the corresponding S statement. That is the foundation.

Our normal way of explaining our percepts is to assume that our perceptual judgments are true. If it looks to me as though there

is a table there, the simplest explanation for my perception is that there *is* a table there. In ordinary life we assume that the world is as we perceive it to be. And for most purposes most of the time, this common sense explanation works fine. But as we all know, it does not always work. Sometimes we find ourselves with perceptual judgments that contradict each other or that are inconsistent with theories we accept. In such cases, we may reject the perceptual judgment, but we do not reject the S statement; rather, we seek an alternative explanation for it. Thus we may decide we have been hallucinating or dreaming; as Lewis pointed out,[30] we may define the object we thought we perceived as unreal. But we cannot deny the S statement, for we did in fact have that particular experience.

Our theories of other persons, other minds, and even culture rest ultimately upon our sensory experience, in the sense that they provide our best explanations for our S statements. These theories are very complex and often involve the postulation of entities that are theoretical constructs, as for example in the case of other minds. No one saw this more clearly than Sellars, and whatever the problems involved in his Myth of Jones, he was quite right in saying that our knowledge of other minds is theoretical knowledge.[31] But it is theoretical knowledge that rests upon a foundation of sensory experience.

But common sense is not good enough. The development of modern science, from Copernicus on, has been marked by an increasing divergence from common sense. The common sense way of explaining experience, in an immensely sophisticated version, is what one finds in Aristotle. Every major development of modern science has meant a step away from common sense. That motion could be as natural a state for a body as rest, that material bodies that seem to have continuous surfaces are composed of discrete atoms, that air is a compound, that combustion is a combinatorial process, that human beings evolved from animals—all of these were profoundly counterintuitive to the common sense mind. (And in Kansas, some of them still are.) But it is in this century that science has become, from the common sense point of view, utterly bizarre. Some of us remember the time when we were told that only

twelve men in the world could understand Einstein. And as if relativity were not bad enough, we then got quantum mechanics. Waveicles, indeterminacy, virtual particles—surely the layman was not wrong in considering this theory crazy. When even Niels Bohr said that no one could think about quantum mechanics without feeling dizzy,[32] and Richard P. Feynman said, "I can safely say that nobody understands quantum mechanics,"[33] most people just gave up trying to understand what was going on. And yet this theory, that even its practitioners call "weird,"[34] is the most accurate theory we have ever had. The lesson here is that the better our science becomes the more it departs from common sense.

But what does "accurate" mean here? Scientific theories are tested against observation, that is, the results of perception. But if the perceptual world is partly the product of a preformation system and partly of culture, including the very theories being tested, are there any grounds for saying our scientific theories are true? And is there a real world, or just an illusion we are programmed to construct? If sensory perception does not reveal the real world, what grounds can we ever have for thinking such a thing exists?

Is science circular? Does the fact that our observation terms are theory laden mean that our theories determine the outcomes of our observations? It does not. A statement such as "If the litmus paper is dipped into solution Y, it will turn blue" contains theory laden terms such as "blue," not to mention "litmus paper." But if the experiment is performed, the paper may very well turn red. Nature is not constrained by our theorizing. Our theories may determine what experiments we perform, but they do not determine their outcomes.

The only basis that I can see for believing that our science is true is pragmatic. But is that enough? Let us try to be more precise here. Let us say that one theory has greater *adequacy* than another if it gives us greater ability to predict and explain our sensory experience, and let us say it has greater *power* if it gives us greater ability to control and manipulate nature. Now is it or is it not the case that as science evolves, its theories acquire greater and greater

adequacy and power? I think the proposition that it is the case is incontestable. Compare modern medicine with the conjuring cures of the Ojibwa or the bleedings and purges of seventeenth-century medicine. Compare the results of today's chemistry and physics with those of any preceding era. The examples are legion. There is simply no doubt that today's science exceeds that of any other era in power and adequacy.

So what? Have we not been taught by Kuhn that scientific progress is an illusion? The popularity of that claim among humanists is a sad testimony to the depth of their inferiority complex. Kuhn did successfully debunk one simplistic notion of scientific progress: science does not advance by the simple elimination of false statements and the substitution of true ones. Scientific revolutions do result in the substitution of new and different theories for old ones. But according to Kuhn we have no ground for saying the new theories are "truer," or "closer to the truth," than the old ones. Kuhn is explicit that scientific change, like Darwinian evolution, is change *from* a starting point, not *toward* a goal; it is a directionless process that has nothing to do with truth.[35]

Kuhn's theory is one of the most bizarre theories of science ever propounded. It should be noted that it has had no influence among real scientists, and that, if it is true, those who engage in science have been systematically wrong about what they were doing since Archimedes at least. Even on its own terms, Kuhn's theory is incoherent. A Darwinian process of fortuitous variation leads to an ever increasing proliferation of different organic forms. If this is how science changes, one would expect to find a constant proliferation of different competing scientific theories. Kuhn himself emphasized that that is not what one finds in science; rather, after the revolution scientists unite behind the new theory. Why do they do *that*? Why don't they form different competing schools? What is the equivalent of natural selection that eliminates the variants and leaves us "after the Revolution" with a single new paradigm? Kuhn says it is the nature of the scientific community.[36] But *what* about the nature of the scientific community? Kuhn never says, nor has anyone else. And lacking such an explanation, the

theory cannot account for what Kuhn himself takes to be one of the chief characteristics of scientific change.

How on Kuhn's theory is one to account for the increase in the power and adequacy of science over time? So far as I can see, Kuhn has no explanation at all. Indeed, given the process as Kuhn describes it, one would predict that there would be no increase in power, and it is not clear there should be an increase in adequacy. Yet the increase of the power and adequacy of scientific theories is surely a striking characteristic of scientific change that needs explaining.

I take it that one theory is better confirmed than its rival if the former gives a better explanation and prediction of our sensory experience than the latter, if it is logically consistent, and consistent with other well-confirmed theories. The pragmatists were right when they rejected the copy theory of truth and emphasized instead the fit of the theory to sensory experience. One cannot of course say that a well-confirmed theory is true, for the usual reasons, but one can say that our best confirmed theory is our best estimate of the truth.

But it will be objected that reference to truth here is gratuitous and that we would do better to talk only about relative confirmation, since the invocation of truth seems to invoke some ill-defined standard. But following Peirce I would define a true theory as a theory that will ever after be affirmed—that is, one that will always prove to be better confirmed than any challenger, and would do so even if inquiry were to continue indefinitely. This is of course an ideal definition, but there is nothing wrong with ideal definitions, and this one does not require an infinity of actual investigations.

How then is one to account for the increasing power and adequacy of scientific theories? The only way I can think of is to assume that there exists a real world of which science gives us increasingly accurate knowledge. I think most would agree that *if* there is a real world, and *if* science does give us increasingly accurate accounts of that world, *then* one would expect our theories to exhibit increasing power and adequacy. And such a reality would

also provide the missing selective factor in Kuhn's theory. The reason that one theory triumphs and the rest are consigned to limbo is that it gives us a better grasp of the real. But would this not also imply just the sort of convergence of scientific theories that Kuhn attacked? I think not. What it does require is a reality sufficiently complex so that it can be conceptualized in quite different ways, depending upon our access to it. These alternative *theories* may not show any obvious convergence. Yet the fact that science continues to increase in power and adequacy gives us good grounds for believing that over time our successive theories capture more and more of reality, and so that in the long run some future theory will prove true.

But if there is such a reality, what is it? Our best estimate of what reality is whatever the best theory says it is. And this seems to me eminently reasonable. For scientific theories do assert the existence of various sorts of entities, whether waves or particles or superstrings. And what else could one mean by saying that quarks are real except that they are postulated to exist in the best confirmed theories that we have? That there is a real world is a general postulate required to account for, among other things, scientific development. What the specific character of that real world is revealed by the best confirmed theory. Thus Peirce was right—the real is what is said to exist in a true proposition.

Curiously, if this theory is correct, then our theories about the real do correspond to the real as it really is. But this reappearance of the correspondence theory is trivial, for obviously if we take the real to be what a true theory says is real, then the theory has to correspond to the real.

Einstein once said that the most incomprehensible thing about the universe is the fact that it is comprehensible. We do not know that it is comprehensible, at least to minds such as ours. It is already clear that our theories have gone beyond the preformation system that structures our common sense world; that is clearly true with quantum mechanics, and the theory that reality consists of p-branes in eleven dimensions takes us even farther. It is a remarkable fact that our equations can describe what we cannot

imagine. Perhaps there is a limit to how much of reality we can comprehend, but if so that limit has yet to be found. There is therefore no reason to abandon the quest for truth and settle for aimless conversations.

NOTES

1. Bruce Kuklick, *Churchmen and Philosophers* (New Haven, Conn.: Yale University Press, 1985), pp. 222–23.

2. John William Draper, *History of the Conflict Between Religion and Science* (New York: D. Appleton and Company, 1875).

3. Kuklick, *Churchmen and Philosophers*, chaps. 16–17.

4. C. I. Lewis, *Mind and the World Order* (New York: Charles Scribner's Sons, 1929), p. xi. C. I. Lewis, "Autobiography" in *The Philosophy of C. I. Lewis*, ed. Paul Arthur Schilpp (LaSalle, Ill.: Open Court, 1969), pp. 1–21.

5. Lewis, "Autobiography," p. 5.

6. Ibid.

7. Ibid., p. 17.

8. Lewis, *Mind and the World Order*, p. 309.

9. Ibid., p. 310.

10. Ibid., p. 66.

11. Irvin Rock, *The Logic of Perception* (Cambridge, Mass.: MIT Press, 1983), pp. 324ff.

12. Elizabeth Spelke, "The Origins of Physical Knowledge" in *Thought Without Language*, ed. L. Weiskrantz (Oxford: Oxford University Press, 1988), pp. 168–84. Elizabeth Spelke, "Perception of Unity, Persistence and Identity: Thoughts on Infants' Conceptions of Objects," in *Neonate Cognition*, eds. Jacque Mehler and Robin Fox (Hillsdale, N.J.: Lawrence Erlbaum, 1985), pp. 89–113. Renee Baillargeon, "Representing the Existence and the Location of Hidden Objects: Object Permanence in 6- and 8-Month Old Infants," *Cognition* 23 (1986): 21–41. Claes von Hofsten and Elizabeth Spelke, "Object Perception and Object-Directed Reaching in Infancy," *Journal of Experimental Psychology: General* 114 (1985): 198–212. Philip Kellman, Elizabeth Spelke and Kenneth Short, "Infant Perception of Object Unity from Translatory Motion in Depth and Vertical Translation," *Child Development* 57 (1986): 72–86.

13. Israel Abramov and James Gordon, "Color Appearance: On

Seeing Red, or Yellow, or Green, or Blue," *Annual Review of Psychology* 45 (1994): 451–85.

14. Patricia Kuhl, "Categorization of Speech by Infants," in *Neonate Cognition*, pp. 231–62.

15. Jerome Bruner, *Beyond the Information Given* (New York: W. W. Norton, 1973), chap. 4.

16. Nelson Goodman, "Sense and Certainty," *Philosophical Review* 61 (1952): 160–67.

17. C. I. Lewis, "The Given Element in Empirical Knowledge," *Philosophical Review* 61 (1952): 173.

18. Wilfrid Sellars, *Empiricism and the Philosophy of Mind*, with an introduction by Richard Rorty and a Study Guide by Robert Brandom (Cambridge, Mass.: Harvard University Press, 1997), p. 35.

19. Ibid., pp. 38–40, 43, 47, 53.

20. Ibid., p. 36.

21. Ibid., p. 43.

22. Ibid., pp. 49–50.

23. Ibid.

24. Ibid., p. 51.

25. Ibid., p. 74.

26. Ibid., p. 75.

27. Ibid., pp. 75–77.

28. Bruner, *Beyond the Information Given*, chap. 4.

29. Zenon Pylyshyn, *Computation and Cognition* (Cambridge: MIT Press, 1984), pp. 130ff.

30. Lewis, *Mind and the World Order*, pp. 221–27.

31. Sellars, *Empiricism and the Philosophy of Mind*, pp. 98ff.

32. Brian Green, *The Elegant Universe* (New York: W. W. Norton, 1999), p. 88.

33. Ibid., p. 87.

34. Ibid., p. 112.

35. Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970), chap. 13.

36. Ibid., pp. 167–69.

13

Scholastic Realism as Contextual Pragmatism

Frank X. Ryan

Consider This a Ransom Note from a Kidnapper of Pragmatism

We have your beloved Peirce. If you want to see him again, whole and intact, here are our eminently negotiable demands:

1. Refrain from depicting Peirce as a commonsense realist of the stripe who claims direct access to or the intrusion of an "independently there otherness."
2. Stop promoting him as an epistemological realist for whom our cognitive apparatus presents an indirect or indefinitely delayed representation of reality beyond experience.
3. Resist the notion that he is an epistemological idealist for whom finite minds are inexorably cut off from at least a "residue" of the "really-real."
4. Do what you can to disabuse him of the objective idealism that springs, in the words of our ringleader "Chicago John," from an unfortunate "predilection for panpsychism."

Although the wide divergences displayed by this "ransom note" seem to indicate the literal drawing and quartering of Charles Peirce, in fact they present a plausible progression. To trace a select but representative sequence, in the compulsiveness of brute shock,

or secondness, Richard Bernstein finds the perceptual link to "a world which forces itself upon us."[1] Yet Bernstein acknowledges that such directness is feeling, not knowledge, for even a judgment about a feeling invokes mental mediation or thirdness. Christopher Hookway thinks the same analysis supports representational realism, for the "continuous spread of reaction and feeling" must be structured by mental activity that "enables us to bring our cognitive experience under control, but does not itself correspond to anything real."[2] Carl Hausman takes this a step farther: Peirce is led to epistemological idealism because the cosmos itself sustains a bit of secondness, "residue resistance," that is inexorably incognizable.[3] But in this drift Charles Hartshorne finds the reincarnation of the impenetrable veil between mind and *ding an sich* that Peirce most ardently wanted to overcome. As absolution from this sin he offers objective idealism: secondness traps us in the subjectivity of our own thoughts unless it can be reconfigured in terms of a cosmic "ideal awareness."[4]

I lay no claim to having recovered the "real" Peirce, but I will propose a way to free him from the weary carousel that circulates through various realisms and idealisms. This strategy is inspired by his famous student, "Chicago John" Dewey. Dewey agrees that a top priority of any philosophy is to settle the question of subject and object, mind and nature, experienc*ing* and that which is experienc*ed*. But, he laments, nonpragmatic approaches "begin with the results of a reflection that has torn in two the subject matter experienced and the operations and states of experiencing," and then face the intractable problem of piecing them together again.[5] Dewey completely overthrows the model of a "cognitive apparatus" having to confront an "independently there otherness." Instead, experience in its "primary integrity" is an "unanalyzed totality" *from which* thought and thing, subject and object, experiencing and the experienced, are "products discriminated by reflection out of primary experience."[6]

Dewey admits a "hidebound terminology" sometimes obscures the fact that Peirce is first and foremost a pragmatist who repudiates wholly "independent reality" for "a truly experiential

philosophy which does not, like traditional empirical philosophies, cut experience off from nature."[7] The categories of firstness, secondness, and thirdness are not merely connected, but *interpenetrate* one another; in Peirce's phrase, they are "inextricably mixed."[8] Firstness, Dewey's "primary experience," is settled, secure, noncognitive, precisely *because* it is imbedded in habituated or dispositional patterns generated by products of reflective experience, or thirdness. Secondness is not the "knock of the noumenal" subsequently structured by cognitive activity, but shock or brute resistance *within* experience—a problematic intrusion marking the transition from primary experience to the reflective function of diagnosis and solution formation *within which* the subject-object distinction becomes relevant. Thirdness, finally, is not "mind-stuff" in anyone's head or in the cosmos at large. In fact, it isn't *in* anything. Thirdness is not a stuff or content, but a *way* of responding that is to some degree structured, orderly, lawlike. In human endeavors thirdness has indeed evolved to the level of reflection, and through this glassy orb we gain knowledge of all things great and small, sentient and nonsentient. But as *methods* of resolving problems, even the most sophisticated scientific operations are not exclusively mental, but are extensions of and continuous with primitive inductions and regularities of the "purely" physical realm.

All of this, of course, calls for elaboration and justification. But as an opening move, let me offer the following as tenets essential to the recovery of Peirce as a contextual pragmatist.

1. First and foremost, maintain a steadfast vigilance against the thing-in-itself, including its echos or "anteceptive pulsations." With allowance for Peirce's "hidebound terminology," accept "no thing which is in-itself in the sense of not being relative to the mind."[9]

2. Admit, pursuant to this, that the only adequate realism is an *extreme realism* in which "the phenomenal manifestation of a substance is the substance."[10]

3. Be open to the suggestion that this "substance," in its primal integrity, is *firstness*: a noncognitive unity of particularity and generality out of which are generated "thought" and "thing," "mind" and "object," as respondents to an onset of doubt.

4. Accept, finally, that *reality* is not an antecedent state of affairs merely "discovered" by inquiry, but an attained *objective* of inquiry—the overcoming of the shock of secondness with connections established within thirdness.

To be honest, we might well ask whether Pierce himself would have deemed these tenets sufficiently "realistic," and therefore in cahoots with the *real* kidnappers such as William James and F. C. S. Schiller. These pragmatic nominalists denigrated "real generals" to the point of personal or social "satisfactions," and headed for the hills in a trail of dust pursued by Nelson Goodman, Richard Rorty, and "Kuhnians."[11] So if, indeed, we are to vindicate ourselves as protective custodians rather than kidnappers, we must show that our position is realistic rather than nominalistic. For it is quite reasonable to wonder whether there is sufficient "grist" of secondness in our scheme to fend off, as John McDowell might say, the "frictionless" spinning of contents we conceptually control. One might even wonder whether ours is a whitewater slide to idealism.

To allay such suspicions we must first recall the expansiveness of Dewey's notion of "experience." Not only does it embrace both *how* and *what*, method and content, but the latter incorporates "the planted field, the sowed seeds, the reaped harvests, the changes of night and day, spring and autumn, wet and dry, heat and cold, that are observed, feared, longed for."[12] Thus there is no doubt about objects external to perceiving subjects, or of things that impose themselves upon us against our will. The relevant issue is whether such shocks of secondness mark transitions *within* experience or are calling cards of an "otherness" inexorably *beyond* experience. In Dewey's metaphysics, whatever we can say about what the world ultimately *is*, in a whole and robust sense, lies within the reciprocal and open-ended play of increasingly sophisticated methods of dis-

covery and the outcomes attained in such practices. In this Dewey regards himself as a successor to Peirce, whose intent "was to interpret the universality of concepts in the domain of *experience* in the same way in which Kant established the law of practical reason in the domain of the *a priori*."[13]

But how are universal concepts, or "real generals," integral to our grasp of the "real world"? Here scholastic realism enters the fray. Peirce's attraction to scholastic realism arises from his desire to surmount the nominalistic distinction between linguistic content and the "really real." If universals are merely mental constructs, and not part of the world itself, nominalism commits the "heresy" of rendering the world unknowable.[14] Scholastic realism counters this by insisting that generality is not merely *de dicto*, but in re. Avoiding the Platonic extreme of wholly autonomous forms, Scotus proposed a "common nature" which, though itself neither universal nor *res*, conveys both universality and particularity when "contracted" within an individual."[15] But though this in re generality is what the mind seizes in its cognitive grasp of objects, it is not typically aware of the universal per se—it grasps an individual horse, not horseness. This surreptitious "use" of a universal, as opposed to its cognitive grasp, is what Scotus called being in the mind *habituliter* rather than *actualiter*.

I hope to show that the *habituliter*, recast by Peirce as *habit*, is the gateway to a genuine contextual pragmatism. Though inspired by Scotus's integration of the individual and the universal, Peirce turns the model around: instead of the common nature instantiated and defined by the individual, it is the individual that is delimited by the common nature. The common nature, recast as "thirdness-into-firstness," routes lawfulness or regularity into furrows of habit that frame both the qualitative immediacy of firstness and cases where incursions of secondness are recognized as such. Nor is an individual an antecedent reality to which thought relates; instead, an individual is an end, a real achievement of hypotheses in a network of real relations. Contextual pragmatism thus acknowledges only the friction of secondness within the experienced world, *not* the friction of an occult "given." It justifies this, however, not by an

appeal to idealism, but by an *extreme* scholastic realism—extreme in the sense that the common nature, the dispositional background, is not merely contracted in the individual, leaving awkward questions about its uncontracted being, but interpenetrating and interpenetrated in a sense we'll strive to articulate.

We'll begin with a sketch of scholastic realism as outlined by Scotus and appropriated by Peirce—an account that accentuates the evolution from *habituliter* to habit. Next we'll see how Pierce reconstructs the problem of generals and individuals in two ingenious formulations: extreme realism and the phenomenological categories. Here Dewey's guidance becomes crucial, for we must grasp how thirdness penetrates firstness without recourse to objective idealism.

Given the many significant interpretations about what Peirce's scholastic realism is or should be, I'll briefly discuss roads not traveled here. (1) Susan Haack, among others, has directed scholastic realism toward issues in scientific realism, specifically the reality of abstract objects.[16] While I agree this is a fruitful way to contrast realism to nominalism, I want to make the bolder claim that Peirce actually tackles, following Kant, the general problem of objectivity, or at least the plausibility of its pursuit.[17] (2) I shall not heed Robert Almeder's warning that scholastic realism is a "logical realism" about universals quite distinct from the concern of "epistemological realism" about our knowledge of the external world.[18] I have two reasons. First, although it is indeed important to distinguish ideas about things from the ideas we have about those ideas, Scotus's "first" versus "second" intentions, this distinction between epistemology and logic arises within discussions of scholastic realism. Second, I'm not sure Almeder always follows his own advice.[19] (3) I'll forego the temptation to contribute yet another chapter on "Peirce's Intellectual Development," despite the oft-heard outcry that Peirce's scholastic realism cannot be appreciated until the scientific-realist-cum-objective-idealist Peirce is disassociated from the wet-behind-the-ears-pragmatist Peirce.[20] For one thing, I find no persuasive evidence that Peirce tells anything other than a consistent story about scholastic realism

throughout his career; but, and more to the point, I repeat I am *not* engaged in the dubious project of recovering the "real" Peirce, but rather a Peirce most congenial to the eradication of the *ding an sich* while sustaining a clear and defensible realism. Finally, (4) despite my belief that contextual pragmatism is as manifest in Peirce's theory of signs as it is in his phenomenological categories, I can pursue only the latter here. Peirce's truculent claim that the referent of a sign is always another sign was ably explained and defended by Dewey, who chastised conventional realists for trying to relate discrete minds, signs, and objects.[21] The story is fascinating and revealing, but too involved to attempt here.

Ditching the *Ding an Sich*

Peirce's contempt for the thing-in-itself is well documented, but I would like to pursue the idea that overcoming this "scandal" is the *ursprung* of his philosophical development. As early as 1868, Peirce argues not merely that "there is no conception of the incognizable, since nothing of that sort occurs in experience," but that "*cognizability* (in its widest sense) and *being* are not merely metaphysically the same, but are synonymous terms."[22] Reality, he writes in the early seventies, "in no case can transcend thought altogether,"[23] for "the conception of a reality as it is in itself in contradistinction to the reality as it may be known is a self-contradictory statement."[24] And those who take solace in the famous assertions that reality is "independent of the vagaries of you and me" might consider not only that "this conception essentially involves the notion of a COMMUNITY,"[25] but further that "the Real thing *is* the ultimate opinion about it."[26]

Clearly Peirce is not just making the epistemic claim that mind-independent reality has access to experience, but the bolder ontological claim that reality is somehow within the indefinite progression of human inquiry. As such, neither direct nor representational realism offers a satisfactory model. Of the two, Peirce says, direct causal realism has the advantage of simplicity and common

sense, though this falls woefully short of an adequate philosophical justification.[27] But representational realism creates the bizarre scenario in which "each of us is like the operator in a central telephone office, shut off from the external world of which he is informed only by sense-impressions."[28]

Yet the failure of modern realisms to resolve the problem of external reality does not warrant a headlong flight into idealism. Quite to the contrary, it calls for a realism more extreme than any philosophy had yet envisioned. In such a realism, "the immediate object of thought in a true judgment *is* the reality," a solution "instantly fatal to the idea of a thing in itself."[29] Even before his turn to pragmatism, Peirce pursued two unlikely paths to his radical reconstruction of realism, scholastic realism, and the categories of Kant.[30]

CONTRACTUAL OBLIGATIONS

The chief obstacle to realism is nominalism, for it erects the very barrier between objects of thought and reality Peirce wants to overcome. That he first examined the medieval debate between nominalism and realism is thus not as unlikely as seems. In light of the many fine works on Peirce and scholastic realism, I will limit my inquiry to issues directly relevant to contextual pragmatism: nominalism and realism, the contracted common nature, real and formal distinctions, moderate versus extreme realism, and *habituliter* and habit.

Medieval nominalists were justifiably concerned about philosophers who conflated universals as wholly mental concepts (*ens rationis*) with conceptions of generality in real things (*ens reale*). Such confusions led the Platonists to maintain that universals can exist apart from any physical instantiation, which drew the nominalistic reply that universals are purely mental constructs.

Although nominalists such as Ockham fully affirmed that thoughts are connected to external realities, it was apparent that such connections are unknowable given that they exceed the

bounds of cognition. To combat this subjective and skeptical result the scholastic realists proposed a middle way between Platonism and nominalism, a "moderate realism" wherein generality *ens real* is in each case "contracted" within an individual "supposit." This generality, or "common nature," does not have a distinct locus outside of its supposits, its unity is "less than numerical."[31] But, conversely, a common nature is not simply imposed upon a preexisting individual—the individuation of a common nature is its *haecceity*, the attainment of a specific perfection in a unique individual.[32]

The introduction of a common nature sustains the distinction between universals *ens rationis* and generality *ens reale* without the nominalistic snare of subjectivism. "Socrates is a man," for example, can mean either a simple subject-predicate relation or the contraction of a common nature, man, in the individual, Socrates. About this the scholastic realists were in agreement. They differed, however, in their interpretation of the relation between the instantiated common nature and its reality apart from the mind. Aquinas, it is well known, insisted upon a real distinction between the contracted and uncontracted common nature. He held that the individuating principle is matter, and form limited by matter is not the same as form in its unlimited condition. Scotus rejects this because it seems to open yet another rift between reality as conceived and as in-itself, and Aquinas's assurance that the intellect can grasp unlimited form seems as empty as Ockham's confidence in "behind the scenes" external reality. In Boler's phrase, "for Scotus, the Common Nature must come across whole,"[33] thus the only permissible distinction is this: what "in-itself" has "less than numerical unity" acquires such a unity in the mind so that one property may be predicated of many things. Thus, in addition to the logical and real distinctions acknowledged by Aquinas, Scotus must posit a tertium quid, a "metaphysical mode" wherein the uncontracted common nature is formally, though not really, distinguishable from its contraction in the individual. Cut even more finely, we can conceive of the difference between the contracted and uncontracted common nature, and since it is not a logical distinction it must mark a difference in the world and not just in the

way we think about it. Nonetheless, a contracted and uncontracted nature are not qualitatively distinct, nor does a common nature exist in the world in anything other than a contracted state.[34]

This solution is more extreme than Aquinas's, and clearly it is this feature that attracted Peirce. Yet Peirce ultimately finds Scotus's realism insufficiently extreme, indeed "separated from nominalism only by the division of a hair."[35] As we learn in a late (1905) letter to Mario Calderoni, the problem is rooted in the notion of contraction:

> Even Duns Scotus is too nominalistic when he says that universals are contracted to the mode of individuality in singulars, meaning, as he does, by singulars, ordinary existing things. The pragmaticist cannot admit that.[36]

Peirce's complaint with Scotus is not unlike Scotus's critique of Aquinas: even if the distinction is merely formal, the very idea of contracting an in-itself nature into an individual creates an insufferable division. Moreover, the primacy of individuals, of "ordinary existing things," is the typical nominalist fallacy of placing individuals before laws and relations.[37] Extreme realism reverses this: the common nature, in whatever incarnation, is a real generality that interpenetrates the individual. It is an exaggeration to say, with Boler, that this amounts to the "denigration of the individual," or that Peirce is "emptying the physical mode of its content."[38] However, we would not be far afield to aver that individuals or objects are defined within or even achievements of a delimiting common nature.

As we shall discover shortly, Peirce's reincarnation of the common nature is "thirdness-into-firstness," and the philosophy that transforms the contraction of qualities into the experimental methodology of doubt-belief is pragmatism. Before this chrysalis takes flight, however, we must look at Peirce's appropriation of the scholastic use of "habit."

FROM *HABITULITER* TO HABIT

Actually, it is too facile to characterize the scholastic view of a common nature in an individual as simply a "contraction of qualities." As Charles McKeon has observed, a closer depiction is that of a habit or disposition that may be actualized as a universal upon demand.[39] For Boler, the scholastic maxim *operari seuitur esse* is "an interesting forerunner to pragmatism," though here too Peirce would reverse the inference: instead of "operation follows from being," he would say "being follows from operation."[40]

Peirce himself tackles this question in "The Works of Berkeley." Scotus's problem of the common nature was to figure out how the very same nature could be universal in the mind yet particular in the external entity; i.e., how could it be both "horseness" and "this horse"? The solution, says Peirce, lies in distinguishing

> two ways in which a thing may be in the mind,—*habituliter* and *actuliter*. A notion is in the mind *actuliter* when it is actually conceived; it is in the mind *habituliter* when it can directly produce a conception.[41]

Some philosophers claim that a universal exists only when it is actually conceived, but Scotus denies this. Instead, various activities and relations establish a *species intelligibus*—a noncognitive awareness which, though itself neither universal nor particular, allows us to recognize things as universal in the mind yet particular outside of it.[42]

Hobbled by Aristotle's fixed natural kinds and an aversion to tying ontology to action, Scotus wrongly concludes that the *habituliter* is an "intellectual intuition" merely bestowed upon the mind. Peirce, nonetheless, has uncovered a vital piece to the puzzle of pragmatism. For this noncognitive intelligibility, recast as firstness, is now shown to be integrally connected to thirdness, the realm of relation and law. *Habituliter*, recast as habit, is the interstice between achieved cognitive relations and qualitative immediacy or feeling. With these components secure, we need only locate secondness in an inclusive pattern.

PRIMING THE PUMP OF PRECISSION

Predating his pragmatism, and concurrent with his early studies in scholastic realism, Peirce became engrossed with Kant's system of categories. Like Kant, Peirce wanted to isolate conditions necessary for objective knowledge, but by the mid-nineteenth century it was clear that no amount of ingenious "synthesizing" would bring together sensible and intellectual conditions taken to be a priori to and externally imposed upon experience. Instead, as Hegel and his successors realized, such conditions must be found within the organic unity of experience. It is to experience itself, Peirce thus declares, that we must look if we are to find categories that are "true and natural" in a "purely experiential" sense.[43]

Peirce's own effort to reconstruct Kant's deduction begins with what Eugene Freeman calls the "ontological postulate":

> The principles of formal logic and epistemology are directly related to the principles of being, [and] the structure of logic is the key to the structure of reality.[44]

This suggests an outrageous logicism unless we recall Peirce's admonition that the method of inquiry trumps a priori structures as the best way to "fix" beliefs. Thus even logical and mathematical relations are secure not by virtue of self-evident canons of reason, but by their reliability as secure tools of inference in inquiry. Categories no longer require "pure" forms, creatures of "apart thought" magically bestowed upon the understanding. Instead, as Freeman notes, "to get categories which have factual objective validity, we must start from concrete factual experience."[45]

Peirce devoted the "hardest two years" of his mental life to restructuring Kant's categories.[46] To penetrate the core of the unity of experience, he reasoned that each thought depends upon some other, more fundamental thought that underlies or mediates it. By determining a hierarchy of mediating and mediated concepts, experience could be shown to have a discrete order instead of being a mere hodgepodge of sensations.

Though powerful new logical techniques were vital, the long-

sought reagent actually lay in the old scholastic notion of formal distinction, which Peirce recasts as "precission." Scotus, we recall, set up a tripartite model of logical, formal, and real distinctions—formal distinction being the key to seeing how the same real nature can be conceived as different in a contracted versus an uncontracted state. Similarly, precission is the second of three "grades" of ideas, and should not be confused with the others. The first grade, "distinction," is the mere recognition of a semantic difference. Space and color, for example, are distinct from each other because they have different meanings. Precission, however, is a separation rooted in conceived or supposed differences. In this case space can be prescinded from color, for I suppose the space between myself and the wall across the room to be uncolored, yet color cannot be prescinded from space, for I cannot suppose any actual occurrence of color that does not occupy space. The third and most restrictive grade is "dissociation," the psychological ability to actually create an image of an idea. Color and space cannot be dissociated from each other, for it is as impossible to visualize space without color as it is to visualize color without space.[47]

Precission generates asymmetrical relations to reveal their inherent order. Because color cannot be prescinded from space, yet space can be prescinded from color, therefore color presupposes space. It follows that space is immediate in its relation to color, though color is mediate in its relation to space. A hierarchy of concepts ordered by precission yields a foundational set of categories grounded in experience instead of a priori principles.

New and Newer Lists of Categories

Peirce's Kantian meditations bore first fruit in "On a New List of Categories." This 1867 essay opens with an account of what he later calls "firstness." How can we characterize "what is present in general," an "IT in general," encountered "before any comparison or discrimination can be made"? We can only say "this." After all, even "this is black" or "this is a stove" mark rudimentary discrim-

inations made within this most primitive sort of experience. After Aristotle, we call this "substance" in the sense of what can only be subject, wholly unconditioned by predication.[48] Yet substance alone is not existence, but only its possibility. To actually *be something* requires the qualification, limitation, or interpretation of substance by a predicate.[49] The copula "is" forms the existential link between substance and predication. Thus we have a basic categorical scheme of substance, being, and qualification (or quality).

This	Is	Black
Substance	*Being*	*Quality*
(firstness)	*(secondness)*	*(thirdness)*

As we might suspect, precission yields the "deduction" of these three basic categories. The "it-general" "this" is immediate; and since it is the mere possibility of something grasped as an existing being, substance may be prescinded even from being. Yet being cannot be prescinded from substance, for every assertion "is" is *of something*. Being can, however, be prescinded from quality, for we can certainly suppose a general "this" without a distinct color, even though we cannot imagine it.

If this seems a bit dry and abstract, try this simple perceptual experiment. Notice the blackness of the letters on this page. My question is, how was this blackness perceived just *prior* to my calling attention to it? Most philosophers will agree there was no cognitive conception of "blackness," but my question runs deeper than this: was there even a *sensation* of blackness? Was there a sensation similar to what you might have experienced had I said, "look in this sack and find the one black marble among the white ones?"

Clearly there was something experienced—after all, the letters were there all along. But if you agree you experienced something other than a discrete sensation of blackness, what was it? Was it a particular? Well, yes, in a way, because it was right there; but also no, in a way, for there was no discrete sensation of blackness. Was it general? Well, yes, in a way, because I'm "habituated" to blackness, all these letters share it, and I'm expecting its continuity from

page to page—its disruption by a randomly inserted red letter would make this evident; but also no, in a way, for I certainly was not entertaining the concept of blackness.

So perhaps this was an "it-general," something neutral between universal and general, yet tacitly incorporating both. But isn't this, in a completely banal case, a knock-down illustration of Scotus's common nature?—neutral, yet capable of manifesting itself as universal in the mind and particular on the page?—not quite a sensation but the possibility of a sensation. Once you see things this way, you can never go back to the empiricists' notion that objects are constructs of "simple" sensations, for even a sensation of color is a selection from the undifferentiated "it-general" selections or limitations culled from a habituated background[50] in response to an encountered challenge, such as having to select a black ball or grasping the point of a thought experiment.

One puzzling thing about the "New List" is that the terms Peirce uses for existence (secondness) and interpretation (thirdness), respectively "being" and "quality," are later employed as various characterizations of firstness! Perhaps this was mere carelessness, but given Peirce's scrupulous use of terminology it is more likely that the "New List" is a halting attempt to depict the interpenetration of the categories—that existence and interpretation are somehow manifest even in firstness, that even sheer immediacy is mediated by a background of habits and dispositions.

Whatever we make of this fledgling effort, the "New List" is important for setting forth the triadic pattern Peirce continues to tinker with yet never abandons. Later, the subject-predicate form is replaced by inferences in a logic of relations, and "bonds" and "valencies" supplant simple connections. Such advances reflect the growing guidance not only of science but of pragmatism as well, for they reveal that even basic questions about reality involve the integration of "*meaning*" with "what one *means* to do."[51] Perhaps the most dramatic instance of this is the integration of firstness and thirdness found in the phenomenological categories. Though only implicit in the "New List," the "inextricable mixture" of the categories is a mainstay of his later articulations.

Peirce typically defines firstness as "qualitative possibility," a direct "suchness" that involves no cognitive analysis yet "has its own positive quality."[52] Like Dewey's "qualitative immediacy," which is "ineffable" simply because it is settled rather than problematic, Peirce's "qualitative possibilities" are "inexplicable" only in the sense that "they require no explanation, since they contain only what is universal."[53] Of course, firstness is also the epitome of particularity, thus we welcome again the "it-general." But the "it-general," or common nature, is what it is only because "thirdness pours in upon us through every avenue of sense," a background of "leading principles" that surreptitiously condition these directly felt immediacies.[54]

Thirdness, then, is the imposition upon firstness of mediacy, law, structure, that enables immediacy to be just what it is. This explains why quality, though immediate, is "shot through" with mediacy, for

> a quality, as such, is never an object of observation. We can see that a thing is blue or green, but the quality of being blue or green is not things which we see; they are products of logical reflection.[55]

Though we thus understand the crucial link between firstness and thirdness, the biggest beneficiary is the heretofore neglected partner, secondness. As viewed through the peephole of standard, rather than extreme, realism, the "brute imposition" of secondness is the knock of "in-itself" reality—albeit a hollow knock since we have access not to the "in-itself" but only to the echo subjectively produced "in-us." This spectral solicitor vanishes with the realization that the "shock" or "resistance" of secondness is not the "anteceptive pulsations" of an "independently-there-otherness," but a requisite phase in the redirection of experience, from within experience. For now,

> it is compulsion, the absolute constraint upon us to think otherwise than we have been thinking *that constitutes experience*. Now constraint and compulsion cannot exist without resistance, and resistance is effort opposing change. Therefore, there must be an

> element of effort *in experience*; and it is this which gives it its peculiar character.[56]

Dewey offers an engaging account of the interrelation of the categories in his 1935 essay "Peirce's Theory of Quality." Considered as or in itself, firstness is, as we have seen, an unanalyzed totality of particularity and generality, an ineffable "qualitative immediacy."[57] Directed toward secondness, however, firstness is the possibility, or (better) the material potentiality, of the experience of some-*thing*—even a mere sensation of color. Secondness, itself sheer resistance or shock, culls from firstness the generality needed to actualize this some-*thing*. On the other hand, to grasp the *meaning* of a thing requires the intervention of thirdness, of law and relation.[58] Secondness is terminated by successfully reorganized relations that subsequently return to and enrich the dispositional background of firstness.

Extreme Pragmatism

It is now possible to understand, at least in outline, how extreme scholastic realism and contextual pragmatism reinforce one other. Extreme realism wants to show how the "same nature" that is in the mind is also in the world, and it wants to do so without "contraction" or idealism. Pragmatism strives for the same goal without recourse to the *ding an sich* or concurrent metaphysical frictions. The solution requires recasting the common nature, the unity of generality and particularity, as the unanalyzed totality of primary experience. Things and thoughts, subjects and objects, are individuated for the purpose of overcoming problematic situations, and successful outcomes establish evolving patterns of engagement we know and work with as the encountered world. The world encountered within such patterns is immense and ancient; through these engagements we've learned that much of it is unfathomed and some of it might never be. "Extreme pragmatism" (to combine our guiding notions) says there is more *to* the encounterable world, for the same nature—recombinant patterns

of engagement—holds both for what we know and what we don't now know. But it denies any attempt to conceive of something more than the encounterable world. As Dewey puts it:

> Both Peirce and James are realists. The reasonings of both depend upon the assumptions of real things which really have effects and consequences. Of the two, Peirce makes clearer the fact that in philosophy at least we are dealing with the *conception* of reality, with reality as a term having rational import, and hence with something whose meaning is itself to be determined in terms of consequences. That "reality" means the object of those beliefs which have, after prolonged and cooperative inquiry, become stable, and "truth" the quality of these beliefs is a logical consequence of this position. Thus while "we may define the real as that whose characters are independent of what anybody may think of them . . ." it is only the outcome of persistent and conjoint inquiry which enables us to give intelligible meaning in the concrete to the expression "characters independent of what anybody may think them to be."[59]

In closing I offer two considerations about the "primacy" of primary experience. In an ongoing circle of interrelated categories, there is obviously no discrete "starting place." Yet from a heuristic point of view, at least, it makes good sense to put "primary experience" and "ontological starting point" together. Both Peirce and Dewey endorse this approach: Peirce, as we have seen, claims firstness is the fundamental category because we can prescind firstness from secondness and thirdness, but not the reverse; for Dewey, what *is* is what it is experienced *as* in its qualitative immediacy.[60] As an ontological posit, the unanalyzed totality of the "it-general" undercuts of the rival ontology which starts with the problem of how "minds" get to "objects," and with it the entire "ego-centric" predicament. By insisting that *having* is prior to *knowing*, moreover, it uncovers "the philosophical fallacy" of converting the products of reflective inquiry into antecedent "first principles." Dewey asks:

> Do not a large part of our epistemological difficulties arise from an attempt to define the "real" as something given prior to reflec-

> tive inquiry instead of as that which reflective inquiry is forced to reach and to which when it is reached belief can stably cling?[61]

The second point is closely linked to the first: the "it-general" of primary experience is a function, not a stuff. Peirce announced pragmatism to the world as a method for fixing beliefs, James as a means to the attainment of truth. Had both assiduously held to this, the neutrality of the "it-general" would have remained a dispositional or inferential neutrality—a potentiality to be directed toward "thing" or "thought" under the constraint of inquiry.[62] Unfortunately, Peirce's "predeliction for panpsychism" and James's careless talk of "experience stuff" opens the door to objective idealism, which draws Dewey's corrective that "neutral means neutral *in a specific respect or reference*," specifically *not* a certain sort of stuff which is, intrinsically, neutral.[63]

If these ransom demands are reasonable, your agreement constitutes full payment: let us then celebrate the safe return of Peirce to the encountered world. If not, let's hope your sky boots have sufficient power to retrieve him from the far side of the *ding an sich*.

NOTES

1. Richard Bernstein, "Peirce's Theory of Perception," in *Studies in the Philosophy of Charles Sanders Peirce, Second Series,* eds. Edward C. Moore and Richard S. Robin (Amherst, Mass.: University of Massachusetts Press, 1964), p. 184.

2. Christopher Hookway, *Peirce* (London: Routledge and Kegan Paul, 1985), p. 251.

3. Carl R. Hausman, "Peirce's Evolutionary Realism," *Transactions of the Charles S. Peirce Society* 27 (1991): 495–96. The flip side of epistemological idealism is metaphysical realism, for it is in the very uncognizability of this "residue-resistence" that we affirm "something real that is independent of thought in general."

4. Charles Hartshorne, "A Revision of Peirce's Categories," in *The Relevance of Charles Peirce,* ed. Eugene Freeman (La Salle, Ill.: Monist Library of Philosophy, 1983), p. 89.

5. John Dewey, *The Later Works of John Dewey,* vol. 1: *Experience and*

Nature, ed. Jo Ann Boydston (Carbondale: Southern Illinois University Press, 1987), p. 19. References to *The Early Works* (*EW*), *The Middle Works*, (*MW*), and *The Later Works* (*LW*) use the standard abbreviation followed by volume and page numbers.

6. *LW* 1: 18–19.

7. *LW* 11: 94.

8. Charles S. Peirce, "Phenomenology," in *The Collected Papers of Charles Sanders Peirce*, eds. Charles Hartshorne, Paul Weiss, and Arthur W. Burks (Cambridge, Mass.: Harvard University Press, 1931–1958), vol. 1, paragraph 286. Hereafter references to *The Collected Papers* will be cited by *CP* followed by volume and paragraph number. References to unpublished manuscripts are from Richard S. Robin, *Annotated Catalogue of the Papers of Charles S. Peirce* (Amherst, Mass.: University of Massachusetts Press, 1967), cited by MS followed by manuscript and page number.

9. *CP* 5.311.

10. *CP* 5.313.

11. For a discussion of the latter, see Susan Haack, "Extreme Scholastic Realism: Its Relevance to Philosophy of Science Today," *Transactions of the Charles S. Peirce Society* 28 (1992): 30–31.

12. *LW* 1: 18.

13. *LW* 2: 4.

14. *CP* 6.492.

15. See John F. Boler, *Charles Peirce and Scholastic Realism: A Study of Peirce's Relation to John Duns Scotus.* (Seattle: University of Washington Press, 1963), pp. 46–52.

16. Haack, "Extreme Scholastic Realism," p. 20.

17. I thus find myself in sympathy with writers such as Karl-Otto Apel, Joseph Margolis, and Sami Pihlström, who appeal to the Kantian roots of a "transcendental pragmatism" to undermine metaphysical realism. Unlike Pihlström, however, I believe it is possible to enrich this perspective with a certain interpretation of Peirce's scholastic realism, specifically Dewey's. See Pihlström, "Peircian Scholastic Realism and Transcendental Arguments," *Transactions of the Charles S. Peirce Society* 34 (1998): 383, and the discussion of this topic in the final section.

18. Robert Almeder, *The Philosophy of Charles S. Peirce: A Critical Introduction* (Totowa, N.J.: Rowman and Littlefield, 1980), p. 161.

19. For example, "we cannot grasp the full scope of Peirce's epistemological realism without viewing it in conjunction with his defense of logical realism." Almeder, *The Philosophy of Charles S. Peirce*, p. 169.

20. See Fred Michael's criticism of Boler in "Two Forms of Scholastic Realism in Peirce's Philosophy," *Transactions of the Charles S. Peirce Society* 23 (1988): 341.

21. See Dewey, "Peirce's Theory of Linguistic Signs, Thought, and Meaning." *LW* 15: 141–53.

22. *CP* 5.255, 257.

23. MS 379, p. 6.

24. MS 372, p. 8.

25. *CP* 5.311.

26. MS 587, Df., p. 6, emphasis added.

27. *CP* 7.335.

28. Peirce, "Pearson's Grammar of Science," *Popular Science Monthly* 58 (1900–1901): 302.

29. *CP* 8.16, 13.

30. *CP* 5.453.

31. For a clear discussion of this point, see Boler, *Charles Peirce and Scholastic Realism*, pp. 48–52.

32. But this should not be pushed too far. As Boler notes, "The existent object is not a mosaic of common attributes held together, as it were, by the 'cement of haecceity.' The existing supposit is one, integral individual, and Scotus says that the nature in the supposit is more individual than universal" (ibid., p. 58). As we shall see below, this is significant inasmuch as Peirce's extreme realism turns on what Boler calls the "denigration of the individual" (ibid., p. 64).

33. Ibid., p. 60.

34. I have been putting off, as premature, the distinction between existence and reality Peirce will introduce to clarify the status of a common nature or general. After all, Boler cites textual evidence that Scotus runs these together in, e.g., "the Common Nature has a real existence apart from the mind" (ibid., p. 57). Haack, however, attributes to scholastic realism the insight that whereas generals are real, only individuals exist, and this is certainly a helpful way to approach the formal distinction. See Haack, "Extreme Scholastic Realism," p. 23.

35. *CP* 8.11.

36. *CP* 8.207.

37. *CP* 4.1.

38. Boler, *Charles Peirce and Scholastic Realism*, p. 64.

39. "Peirce's Scholastic Realism," in *Studies in the Philosophy of Charles Sanders Peirce*, eds. Philip P. Wiener and Frederick H. Young (Cambridge, Mass.: Harvard University Press, 1952), pp. 238–50.

40. See Boler, *Charles Peirce and Scholastic Realism*, p. 102. Also see Almeder's caveat that Peirce would erase the distinction between a being's essence and how we come to know it, in *The Philosophy of Charles S. Peirce*, p. 181, n. 14.

41. *CP* 8.18.

42. Ibid.

43. *CP* 1.204.

44. Eugene Freeman, *The Categories of Charles Peirce* (La Salle, Ill.: Open Court, 1934), p. 1.

45. Eugene Freeman, "Peirce and Objectivity in Philosophy," in *The Relevance of Charles Peirce*, ed. Eugene Freeman (La Salle, Ill.: Monist Library of Philosophy, 1983), p. 89.

46. *CP* 1.561.

47. *CP* 5.549, 353. Even empty space, presumably, must be visualized as black.

48. *CP* 1.547.

49. In the "New List," Peirce identifies "three grades" of quality: "pure" quality, relation, and the interpretant (*CP* 1.551).

50. According to Peirce, we do not perceive a color *as* that color by comparing it to "faint" images of it in our memory, as Hume supposed. Instead, colors are unproblematic, "because I have had much training in observing them; but my memory does not consist in any vision but in a habit whereby I can recognize a newly presented color as like or unlike one I had seen before" (*CP* 1.379).

51. *CP* 1.343.

52. *CP* 1.25, 306.

53. *CP* 1.289.

54. *CP* 5.150, 157.

55. *CP* 1.369.

56. *CP* 1.336, emphasis added.

57. *LW* 11: 87–92. Qualitative immediacy can be the pervasive feeling of a nonreflective state, or it can be the nonreflective component of a cognitive experience. The first of these most closely aligns with firstness.

58. One might think generality is conferred by thirdness, and in a way it is inasmuch as firstness is a settled outcome of relations established in thirdness. But inasmuch as Dewey is discussing the mere potentiality of discrete sensation, not concepts of objects of reflection, the drawing from firstness seems appropriate. See *LW* 11: 88.

59. *MW* 10: 77–78.

60. *MW* 3: 158.

61. *MW* 10: 78.

62. Pierce is at his best, I think, in the logic of relatives that vindicates the claim that "the mind is a sign developed according to the laws of inference." In adding "the phenomenal manifestation of a substance is the substance" (*CP* 5.313), extreme pragmatism is as evident in the categories of signs as it is in the phenomenological categories. I hope to demonstrate Dewey's affirmation of this in a sequel.

63. *MW* 10: 49–50.

14

A Pragmatically Realistic Philosophy of Science

John R. Shook

Pragmatic naturalists, despite their explicit affirmation of the reality of natural entities whose existence is not dependent on mind or experience, nevertheless receive censure for failing to be genuine realists. Self-appointed protectors of realism abound, and their high standards demand additional affirmations upon the nature of, and knowledge about, natural entities. Pragmatists have consistently run afoul of such standards, due to their theories of naturalism and scientific method. One version of pragmatic naturalism, based primarily on strands drawn from the philosophies of Charles Peirce and John Dewey, will be defended and examined for its ability to satisfy a variety of realist standards. Pragmatic naturalism developed from an abiding esteem for science and its achievements that was not expressed by most idealisms. But reactions against idealism took a wide variety of forms, and thus realism was a splintered movement from the beginning. While pragmatism was arguing that scientific warrant is measured by a theory's utility in human efforts to reliably control natural processes, realisms were seeking a way to safeguard science from any entanglement with mind dependence.

THE REALITY OF NATURAL ENTITIES

The early years of the twentieth century found naïve realists repelling idealism with the principle that natural entities (to use a neutral term to cover "object" or "event" or "regularity," etc.) have only a contingent relationship with experience. When present to experience, the entity itself is in experience (denying dualistic representationalism), and when the entity departs from experience, it retains the same qualities that were observed while in experience. Unless the entity's qualities were as contingently related to experience as the entity itself, the naive realists argued, idealism would prevail by asking the troubling question of how an entity stripped of its observed qualities could possibly be conceived.

As the twentieth century progressed, an alternative to naive realism and idealism arose in the form of a revived scientific realism, which uses scientific conceptions of entities to give them some experience-independent characteristics.

There are two basic types of scientific realism. Moderate scientific realism affirms that some observed qualities of entities are only in experience, because their existence is dependent on the involvement of a living observer. "Extreme" scientific realism locates *all* observed qualities, even those obtained through scientific instruments, only within experience. The conceptions of the "real" characteristics of entities, and thus the conceptions of the really existing entities themselves, are composed solely of abstract traits that cannot even in principle be observed by any means.

Extreme scientific realism invites the sort of reductionism that supports a privileged status for subatomic physics, but that reductionism is positively irrelevant to the other sciences. No geologist would wait for the natural laws of geophysics and plate tectonics to be expressed solely in terms of subatomic forces, and the natural entities sought in confirmation of a geologist's theories are eminently identifiable in experience. The physicalist conclusion that color, for example, may only be the surface spectral reflectance of an object, is of little interest to a chemist looking for the distinctive color of a fluid's chemical reaction. The practical acceptance of

anomalous monism's respect for the laws of each scientific field is matched in scientific practice by a respect for the experienceable qualities of the entities pursued by the respective sciences.

The respect due to experienceable qualities of natural entities should not be diminished by their necessarily perspectival constitution. Bertrand Russell's famous complaint that no perspective has superior epistemic status, leaving the defining characters of an entity mysterious and thus unobservable, is no longer generally taken to be a good proof that perspectives completely fail to supply qualities of the natural entity itself. Indeed, perspectives are the best explanation of our competence for discriminating between natural entities in external space/time and entities that exist only within us, since such discrimination is predicated on our motile ability to get various perspectives upon the changing qualities of natural entities. The visual aura symptomatic of ophthalmic migraines, for example, remain stubbornly unaffected by blinking, looking around, moving one's head, etc. The rationalistic prejudice toward defining the entity's reality solely in terms of its unchangingly permanent characters has gradually faded, and no longer provokes many philosophers into locating perspectival qualities exclusively within the observer at the perspective's locus. Just as anomalous monism is still naturalistic, so too is a perspectivalism that locates observed qualities in nature instead of within a subjective realm of mind or brain. The decline of rationalism does not imply that observed qualities must be naively located in the object, either.

Scientific realism could, and likely should, prefer the naturalistic perspectivalism promoted by such philosophers as John Dewey, A. N. Whitehead, George Mead, and Justus Buchler. To use the example of colors again, this naturalism agrees with science that color does not exist exclusively in the light source or the photons (after all, a photon could not be seen to be colored upon close scrutiny) or on the object or in the observer, but rather in their interaction together in a particular situation. While some philosophers remain who would prefer that colors exist only where one of these four things are, they cannot explain why making changes to

any of the other three things alter the observed color. Instead, in their fallacious quest for a concrete location for colors, these philosophers at best promote an additional definition of color, and at worst, reductively suppose that their preferred colors really exist instead of the color actually observed.

Pragmatic naturalism is a type of perspectival naturalism which has no complaint against science's novel concepts ("red" light as that radiation of 4.3 x 10^{14} Hz), but protests any substitution of such scientific entities for the observed color. Pragmatic naturalism endorses a situational contextualism for colors and other traditional secondary qualities to replace a naturalism committed to the fallacy of concrete location. To be properly aligned with science and its results, it is quite unnecessary for a naturalism to obey the outdated rationalistic prejudice toward objectification and its concomitant premise that only the intrinsic nonrelational characters of entities are its real characters. Relational qualities are just as natural as intrinsic qualities. Reflected colors exist where they are experienced: in situations that include a source of light, the light, a reflective object, and a sensitive organism. While it is the situation which is colored, it remains convenient to say instead that the reflective object is colored since the reflection occurs on the object's surface and so the color looks to be where the object is. In the language of emergent naturalism, the color is an emergent property (not a supervenient property) of the interacting portions of the situation. And because it is the situation which is experienced, the color is thus a feature of experience. This is a naturalistic understanding of experience, of course. No ontological gap between nature and experience opens up, because experience is directly and immediately of its objects, and should not be confused with some sort of subjectively internal intermediary. The kind of pragmatism defended in this essay endorses naturalistic empiricism, which in turn is compatible with a moderate scientific realism that respects perspectives.

Some realists argue that perspectival naturalism is unable to be truly realistic because relational qualities are by definition not independent of human experience. But relational qualities do not

exhaust reality; perspectivalism is not driven toward sense-data empiricism or positivism. We experience the natural world first and foremost as a world of objects. We learn fairly quickly in life that most natural objects endure through time and tend to continue to exist while they are not being experienced. Pragmatists repudiate a positivist skepticism about the existence of things beyond experience. Our experience in due course brings us to the conception of objects and processes as retaining some characteristics (such as weight, size, motion, growth) after they leave situations in which humans experience them. Against the sensationalist empiricisms of Hume and Mill, Peirce and Dewey found that experience displays stable regularities that make some universal judgments adequate to natural processes. Peirce argued that the observation of a series of events can induce us to firmly believe in real regularities, such as the falling of dropped stones.

> I do know that the stone will drop, as a fact, as soon as I let go my hold; if I truly know anything, that which I know must be real. . . . With overwhelming uniformity, in our past experience direct and indirect, stones left free to fall have fallen. Thereupon two hypotheses only are open to us. Either
>
> 1. the uniformity with which those stones have fallen has been due to mere chance and affords no ground whatever, not the slightest, that the next stone that shall be let go will fall; or
>
> 2. the uniformity with which stones have fallen has been due to some active general principle, in which case it would be a strange coincidence that it would cease to act at the moment my prediction was based on it . . .
>
> Of course every sane man will adopt the latter hypothesis . . . that general principles are really operative in nature.[1]

Peirce therefore could not agree with Hume and Mill that belief in observed regularities was just a result of mental habit that had nothing to do with rational acceptance. Such beliefs are instead the foundation of all rationality. However, natural regularities need

not be, and should not be confused with, universally invariant laws of nature. There will never be evidence sufficient to prove the existence of such fixed laws. Dewey agreed with Peirce completely on these points:

> That there are operations in nature sufficiently stable to be depended upon is testified to by every art and science. But that they are absolutely invariant is both unproved and unprovable, since it is a matter of circumstantial fact where we must be content with an order of probability.[2]

While it is the function of scientific laws to attempt to match natural regularities, there will never be any perfect match. This is so, not because scientific laws need further refinement, but because natural regularities are more like statistical generalities than exact equations. As Dewey explains,

> Universals, definitions, laws, are subject to revision. They are not merely hypothetical in linguistic form (if-then propositions) but what is more important they are, as prescribing operations, working hypotheses, and hence are subject to modification through the consequences to which they give rise. The revision of conceptions and principles is a constant phenomenon of scientific practice.[3]

Many philosophers of science have gradually come around to the idea that scientific realism should not include a commitment to the existence of exact laws of nature. Laws are useful as idealizations that can be used in logical inferences to propose experimental predictions. But as Ronald Giere points out, expressing a widespread conclusion, "they are neither universal nor necessary—they are not even true."[4] But the denial that exact laws are real is not a denial of the regular processes of nature. Following Giere, laws should be understood as important components of models of natural processes. Models "need only be similar to particular real-world systems in specified respects and to limited degrees of accuracy."[5] This conception of models has long been a feature of pragmatic philosophies of

science, going back to Peirce. In the next section, an expanded role for models will be developed that builds on this foundation.

Science is properly concerned with understanding the regular processes of objects and events that we observe in nature. Science uses their independent qualities to explain the behavior of these enduring entities as they interact together regardless of whether they are being experienced as well. Science therefore legitimately investigates the conditions of the existence of both perspectival qualities and independent qualities. It is an open question whether it is best to conceive of the enduring characteristics as themselves relational, or to prefer to conceive of some as intrinsic qualities. Some naturalists hold that enduring independence requires intrinsic qualities, but others have suggested that all qualities are ultimately relational. This a pragmatic question best left to the judgment of future scientific development.

Our discussion of the scientific investigation of independent entities (again dropping "objects" as too limiting because science investigates other things like events, patterns of events, processes, etc.) should now recognize that there are five basic kinds of independent entities. These kinds are differentiated by the means used in identifying the identity. Three questions must be asked: is the identifying quality perspectival or independent, is the identifying quality experienced or not, and is the identifying quality discerned by a human sense by the aid of an instrument? Because all perspectival qualities are experienceable by definition, the variant combinations of answers to these questions produce five kinds of entities. The kinds are:

1. the directly observed perspectival quality (DOPQ)
2. the instrumentally observed perspectival quality (IOPQ)
3. the directly observed independent quality (DOIQ)
4. the instrumentally observed independent quality (IOIQ)
5. the instrumentally detected independent quality (IDIQ)

Examples of DOPQ: a chemist identifying a mineral by its color, a ornithologist identifying a bird by its song, and a geologist identi-

fying a rock by its texture. Examples of IOPQ: an astronomer identifying a red giant star by its flickering color through a telescope, and submarine sonar operator identifying a surface vessel by its amplified propeller noise. Examples of DOIQ: a paleontologist identifying a fossil bone by its shape, and an oceanographer identifying a tide by the water height. Examples of IOIQ: an official of the bureau of weights and measures using a standard gallon container to identify a full gallon of gasoline from a station pump, and an engineer using a calipers to measure the size of a machine part. Examples of IDIQ: a physicist identifying a metal by calculating its density from its measured volume and weight, and a geologist identifying an iron ore by measuring its magnetic attraction. These are all respectable examples of the role of entity identification in the pragmatic method of hypothesis confirmation, and illustrate pragmatism's moderate scientific realism.

In actual scientific practice, identifications usually proceed by using a combination of two or more of these means. Extreme scientific realism is irrelevant to most of the sciences' methodologies because they prescribe evidence collection and experimental confirmation in terms of some sort of observable qualities. Unless we were to follow those dualistic philosophers who hold that experience does not include the entities of scientific inquiry but only private inner ideas or sensations or qualia, moderate scientific realism as defined above can suffice to account for most scientific inquiry. Pragmatic naturalism sanctions moderate scientific realism.

There is one kind of natural entity which must receive additional scrutiny in this essay: that entity which, due to the scientific conception of that entity, can *only* be identified by one or more IDIQs, and thus which cannot be identified by any direct or instrumental observation. Examples of such nonobservable entities are black holes, quarks, the force of gravity, and the curvature of space-time. Evidence for such entities must always consist of the detection of their effects on scientific instruments. Extreme scientific realism is strictly focused on this kind of entity, and characteristically claims that in order to be a realist, a philosopher must confess that current theories about nonobservable entities are com-

pletely or at least approximately true. Pragmatism, as we shall see, cannot endorse this extreme scientific realism. We shall directly deal with nonobservable entities after some further issues regarding the nature of scientific theories are disentangled. What has been established in this first section is that there is a robust version of pragmatic naturalism which is fully compatible with, and supportive of, all five modes of scientific identification.

The Realism of Scientific Theories

The best place to start is a provisional definition of a pragmatically realistic philosophy of science. The proposed definition is as follows: the proper object of scientific knowledge is the technologically created natural object in human experience. This definition has three components.

1. The object of scientific knowledge can be experienced. This is a statement of pragmatism's empiricism.
2. Scientific knowledge is directed toward natural objects. This is a statement of pragmatism's naturalism.
3. The object of scientific knowledge is technologically created. This is a statement of pragmatism's productionism.

This definition holds that the object of scientific knowledge is real, not just ideal. Thus, a pragmatist is a realist about the objects of scientific knowledge and hence should be classified as a scientific realist.

From pragmatism's standpoint, realism is lost if any of pragmatism's components are denied. Realism can be put in jeopardy by any one of these three claims:

1. It is claimed that the object of scientific knowledge is not necessarily within human experience.
2. It is claimed that the object of scientific knowledge is not a natural object.

3. It is claimed that the object of scientific knowledge is not technologically created.

Each of these claims mounts a challenge to pragmatism. However, each claim is an obstacle to a genuinely realistic philosophy of science. An examination of each claim will expose its threat to realism.

> Option One: Scientific knowledge aims to describe the world as it really is completely beyond the experience of human knowers. This view can be termed "transcendent realism." The typical justification for option one attests that the experience of a human knower is limited to the private contents of one's conscious states, and that knowledge is a matter of correspondence between human ideas and independent reality.
>
> Option Two: Scientific knowledge is of theories only, and not reality. This view can be termed "scientific idealism." The typical justification for option two argues that genuine scientific knowledge consists largely of propositions with the sort of logical form forbidding them from having a semantic status or referential use.
>
> Option Three: Science aims to understand the world as it proceeds in the absence of any human observation, intervention, or participation. This view can be termed "objectivism." The typical justification for option three affirms that scientific knowledge aims at understanding the world's processes or natural laws, which cannot be created, abrogated, or altered by human powers.

Self-proclaimed scientific realists nearly unanimously accept options one and three, "transcendent realism" and "objectivism," following in the tradition of modern philosophy. This tradition makes a sharp ontological distinction between the "real" features of reality and those features which exist only within human experience. It has been plausibly argued that this philosophical distinction was given new life with the advent of the atomistic materialism of the 1700s. I will not pursue that theme here. But by the late 1800s the proliferation of successful scientific models of unobservable entities, in physics, chemistry, and biology especially, led

some philosophers such as Ernst Mach, William James, and Pierre Duhem to question whether science could still aim at correctly discerning the ultimately real features and processes of nature. This questioning took two different forms. Perhaps science's rightful attempt to correctly describe reality cannot succeed to any significant degree. Alternatively, perhaps science should not attempt to correctly describe reality.

Scientific realism thus confronted two rivals: skepticism and antirealism. The scientific realist not only holds that there really exists an experience-transcendent reality, but also holds that science legitimately aims at, and possesses, some knowledge of it. The skeptic is a transcendent realist who does not question experience-transcendent reality nor science's efforts to gain knowledge of it, but only doubts whether science actually has gained any knowledge. The antirealist rejects as incoherent the idea that science should attempt to know anything of an experience-transcendent reality.

A pragmatic philosophy of science should take the antirealist stance as described here, since the pragmatist holds that transcendent entities are not appropriate objects of scientific knowledge. Pragmatism takes this antirealist stance not because the notion that nature extends farther than experience is incoherent. It is not incoherent because we experience a world of enduring objects and relatively stable processes. Indeed, our experience of nature is of a nature that continually outruns our experiences of it. Nature's depth and breadth seems all the more inexhaustible as we explore its secrets, both microscopically and astronomically, with an ever-expanding array of instruments and probes. An antirealist philosophy of science should not be confused with metaphysical antirealism's claim that no experience-transcendent reality exists.

An antirealistic philosophy of science is more of a stance taken on the nature of science than on the nature of reality. That means that it is antirealism, and not skepticism, which can possibly gain support from the actual procedures and empirical results of scientific investigation. Skepticism can be countered by scientific realism's claim that the future progress of science will erode the

grounds for skepticism, particularly in the areas of theory unification and theoretical refinement. This is so, because the skeptic is a potential realist about specific entities who is waiting for the evidence to rise to some level preset by the skeptic. Scientific realists and skeptics thus get into prolonged debates over how much evidence is needed to show that a sufficient degree of epistemic correspondence has been achieved. An antirealist philosophy of science should not be confused with skepticism, despite the fact that many antirealists start out as skeptics and find themselves taking an antirealist stance as a result. But the reasons for being skeptical about science are not the reasons for being an antirealist. For example, the problem of the underdetermination of theories by experience is only a debatable issue between scientific realists and skeptics because they all agree upon transcendent realism. The antirealist does not construe scientific theories as attempting to correctly describe transcendent reality.

Some antirealists take refuge in scientific idealism, dropping the notion that science aims at knowledge of any natural objects. The debate between scientific realism and idealism proceeds over whether science can legitimately seek causal explanations in which something nonobserved is understood as causing observed effects. Scientific realists understandably complain that without nonobserved causes, patterns of observed events are simply monstrous coincidences. Scientific realists sometimes make this argument against skepticism but it fails, since the skeptic has no difficulty accepting that something nonobserved does cause observes effects; the skeptic simply finds insufficient reason to credit any theory with correctly describing the nonobserved cause. The skeptic rightly complains in response that the understandable need for some nonobserved cause hardly justifies assenting to any specific theory now under consideration. Thus the "inference to the best explanation" argument supporting scientific realism is at best a useful move against idealism but it has no effect on skepticism.

Does the "monstrous coincidence" argument have any force against pragmatic antirealism? To answer this question, the pragmatist should make use of an all-important distinction between

four types of nonobserved things postulated by scientific theories.[6] Some things postulated by science are directly observable by human beings using their own natural senses but no one has yet gone to the trouble of observing them. Some things postulated by science are nonobserved because while current technology permits their observation through instrumentation assisting the natural senses, such observations have not yet been carried out. Other postulated things have not yet been observed because the technology that could permit their instrumental observation has not yet been invented. Finally, some things postulated by science could never ever be even instrumentally observed even using infinitely powerful technology because they are not the sorts of things which possess any detectable features at all. Let us give these labels to these four sorts of things: "directly observable," "instrumentally observable," "hypothetically observable," and "never observable." The first three shall be mentioned in the rest of this paper as "observable" in contrast to the never-observable.

Pragmatism's rejection of transcendent realism entails that science should not attempt to correctly describe postulated things that are never observable. Pragmatism has no objection to the first three kinds of observable things, for they all are potentially within human experience, broadly construed. We will discuss shortly why pragmatism should have such an accommodating notion of experience. If scientific realism's "monstrous coincidence" argument has any relevance against pragmatism, then this move must be formulated as arguing that sometimes a scientific theory *must* postulate a never-observable thing to adequately explain observable patterns of events. Pragmatism's antirealism must counterargue that no scientific theory is ever driven by necessity to undertake that sort of explanation.

The counterargument can only be briefly sketched here. Let us take an example of a scientific theory postulating a never-observable, and let us call such a theory a transcendental theory. First, an analysis of the propositions used by that theory to define the nature of the never-observable will allow the exposure of their logical forms. Second, it is shown that these propositions actually

have the same form, that of the "universal" form, which cannot carry any existential meaning. For example, when a physics text declares that electrons have a charge of –1, it does not mean to say that all of the electrons observed so far have turned out to have a charge of –1. Rather, the text is explaining what current physics means by the term "electron": "If a thing is an electron, then it has a charge of –1." The meaning of a universal proposition is conserved even if no electrons were to exist.

> I take it there is general acknowledgment that a radical difference is found between universal and particular propositions. The latter alone are existential in import, the former being hypothetical or of the "if-then" type.[7]

Third, pragmatism explains that when a thing is defined *only* by universal propositions of a theory, that transcendental theory cannot be understood as taking any existential stance toward the thing. This explains its status in the theory as a never-observable. Fourth, pragmatism accounts for the use of universal propositions by pointing out how they are used in scientific inferences to control the processes by which observable things are manipulated. Fifth, pragmatism explains that universal propositions are evaluated and revised as they are tested against the observable predicted events in experimentation.

In essence, pragmatism holds that the nature of explanation is a matter of locating those things which in the right circumstances will interact to produce another thing. This is a statement of pragmatism's productionism. As Dewey explains, a paradigmatic illustration of the functional role of universal propositions in science

> is provided by hypothetical universals contrary to fact such as are constantly employed in science, as for example the proposition "If bodies interact without friction, then . . ." or "If a body moves upon impact of one body only without being affected by other bodies, then. . . ."
>
> The value of such propositions is proved by their constant use in scientific calculations. Upon any other theory than that of

> the ultimate connection of hypothetical universals with conduct of observational experimental operations in inquiry, the proved utility of propositions contrary to fact presents an insoluble paradox. The attempt has been made to resolve the paradox by saying that while the propositions in question do not affirm anything of existence, they "ascribe to reality a character which is the ground of the connection stated in the hypothetical judgment." Regarding this mode of interpretation, it has been pertinently asked "How can there be the ground in the real universal of something which nevertheless does not exist?" The seeming paradox completely disappears when it is seen that such propositions do not intend or purport to have reference to existence but to be relevant to inquiry into existence—a very different matter.
>
> There is indeed something of the nature of contrary-to-factness in all definitions. For they are ideal as well as ideational. Like ideals, they are not intended to be themselves realized but are meant to direct our course to realization of potentialities in existent conditions—potentialities which would escape notice were it not for the guidance which an ideal, or a definition, provides.[8]

Scientific realism could also have this productionist model of explanation, but in practice most scientific realists instead are objectivists who hold that the object of scientific knowledge is unalterable by human control. If productionism were adopted instead, it would be seen that a transcendental theory does not explain because its transcendent propositions pick out those never-observables which produce observables, but instead it explains because its universal propositions are used to predict how some observables can be used to produce another observable. Universal propositions have only an operational meaning, not a referential meaning, and where a theory defines a term only with universal propositions, that theory is not using the term existentially. No proposition can meaningfully refer to transcendent reality.

Empiricism traditionally refuses to grant to theories in the natural sciences much ability to make existential reference. Van Fraassen's constructive empiricism, for example, finds a proliferation of non-existential propositions in chemistry and physics. Empiricism's antirealism is indeed congenial to pragmatism.

However, any empiricism must clearly decide which types of non-observables should be assigned non-existential status. Van Fraassen notoriously refuses to grant existential reference not only to transcendent propositions but also to propositions putatively about things observable through instruments. His constructive empiricism therefore takes an idealistic stance toward all theories except those concerned solely with direct observables. The most effective rebuttal to this extremely restrictive empiricism points out that the human sense organs are natural instruments that focus and amplify our interactions with the environment. Selecting out the basic equipment nature provides to humans as the epistemic paradigm of maximum verity only endorses a narrow parochialism that cannot even explain why many people benefit from wearing glasses.

Pragmatism understands experience not as something exclusively pertaining to events occurring within passive observers, but rather as a natural process that occurs wherever human beings actively interact with their environment. Technological instruments surely transform the results of our interactions, but only pragmatic considerations should privilege some transformations over others. Dualism was inspired by an excessive privileging of the scientific measurement of primary qualities. However, dualism is not necessarily avoided by the converse privileging of unmediated contact with nature. Naturalistic empiricism, by locating experience in the situational context of organisms interacting with the environment, reconstructs the theory-observation distinction. Since there are no propositions capable of referring to transcendent reality, theories only make reference to observables. Since observables exist within situations of human interaction with nature, a specification of any particular observable is a complex recipe articulating what an observer must do to control a certain kind of environment for the production of the observable. Because theories specify observables and the methods of producing them, the evidence of the observable's actual production is precisely the evidence relevant for justifying the theory. In other words, a theory receives evidential justification to the degree that its specification

of the observable is capable of directing the production of that observable. Theories putatively about never-observables can never receive any evidential support.

Unfortunately, discussion of van Fraassen's constructive empiricism has perpetuated a spurious distinction between epistemic and pragmatic justifications for believing scientific theories. The gratuitous use of "epistemic" in this discussion, apparently a code word for "truth-relevant," gathers together anything "pragmatic" as having nothing to do with a theory's evidential support. The very notion of pragmatic *reasons* for believing a theory to be true is ruled out as a contradiction in terms. But from the standpoint of pragmatism, there cannot be any reasons, epistemic or pragmatic, to believe that theory about never-observables is correct. And for theories about observables, the epistemic-pragmatic distinction collapses. Pragmatically using a theory to produce the postulated observable is the same act as experimentally finding the best kind of evidence to rationally justify acceptance of that theory.

Pragmatism and Technology

Pragmatism does not want to discard the notion of scientific theories as models of reality, but what should be discarded is the notion that theories model simply because they represent. There are two primary meanings of the word "model." An existing structure can be modeled, and a good model, in the first sense, will copy the original. But before a structure is actually built, a model is designed to prepare for the building. The structure is produced from the model in the second sense that the builders use the model to guide their construction. The test of a model in the first sense is correspondence, because a theory aims at copying its object just as it exists prior to being known. The test of a model in the second sense is productivity. Pragmatism recommends that scientific theories should be understood as models in this second sense, and thus the test of a scientific theory is its ability to reliably and efficiently guide the production of the theory's objective. Pragmatism thus relinquishes

the scientific realist's objectivism, instead proposing that a theory's purpose is to direct the application of technology toward producing its object where it had not existed before.

> The office of physical science is to discover those properties and relations of things in virtue of which they are capable of being used as instrumentalities; physical science makes claim to disclose not the inner nature of things but only those connections of things with one another that determine outcomes and hence can be used as means.[9]

Pragmatism owes a detailed account of the relationships between the progress of scientific inquiry and the nature of instrumentally observable and hypothetically observable objects of scientific knowledge. This account will explain why the dividing lines between kinds of objects of knowledge are permeable, since theoretical innovation can bring never-observables into the realm of the hypothetically observable, and technological invention can bring hypothetically observables into the realm of the instrumentally observable. For example, DNA was once the object of a disreputable theory of "germ plasm" responsible for reproductive transmission that aroused critical scorn in the late 1800s for its notorious undetectability. After the germ plasm theory gained respectability and microscope technology improved, the possibility of observation arose and biologists began to theorize upon its chemical structures and features. DNA is now instrumentally observable with advanced electron microscopes. The same sort of scientific development has occurred in atomic theory and cosmology, and in many other sciences.

Scientific realists try to use such developments, despite their rarity in the history of science, to perform a metainduction supporting the existence of the many transcendent entities postulated by present-day science. This metainduction fails, because the history of science is littered with discarded transcendent theories that far outnumber those few transcendent entities that have been successfully transformed into observables. Nor can scientific realism embarrass pragmatism by those few examples of successful trans-

formation, since the pragmatist, unlike the metaphysical antirealist, affirms the notion of as-yet discovered entities and the legitimacy of science's search for them.

A somewhat different type of metaabduction supporting scientific realism has been offered recently by Jarrett Leplin. The best explanation of the predictions of novel phenomena by successful scientific theories is that their descriptions of nonobservable entities is, at least to some degree, representionally accurate. Instrumentalist empiricism (positivism) can only say that successful novel predictions are coincidences. "We thus expect a successful theory to continue to be successful when pressed beyond the phenomena involved in its development, *provided that we interpret the theory realistically*."[10] Unfortunately for Leplin, he does not consider the possibility that there is a weaker abductive conclusion to be drawn: that successful theories have only managed to capture some aspect of the regular processes of nature. There is no need to interpret theories as attempting to accurately represent nonobservable entities. Pragmatism is already committed to the reality of natural regularities, so pragmatism can also account for theoretical success. Pragmatic naturalism, while hostile to realistic interpretations of nonobservables, does not descend to the denial of real processes in nature.

Pragmatism also owes a detailed account of the nature of observable objects. Pragmatism's allegiance to a process-oriented ontology has been one of its durable insights, in light of twentieth century developments in relativistic quantum mechanics. As Dewey explains in *Experience and Nature*, "the ultimate objects of science are guided processes of change."[11] Consistent with its rejection of objectivism, pragmatism not only relieves science of attempting to trace natural processes as they happen in the absence of human involvement. Pragmatism also comprehends natural processes as processes happening in the presence of human involvement. Human efforts and natural events are organic wholes. Our conceptions of natural processes are our conceptions of what we creatively effect when we interact with selected portions of the environment. The objects of science are the events that we can to some degree control.

Quantum physics, at least in its present state of development, has empirically confirmed that a surrender of objectivism as well as transcendent realism is necessary. The international community of physicists have become increasingly satisfied with experimental results confirming that a relativistic quantum system cannot be described by precise values of physical quantities in the absence of observation upon that system. Rather, any theoretical description of a relativistic quantum system is essentially a prediction of what measurable events would occur under certain experimental conditions. But this validation of pragmatism is not also an endorsement of positivistic instrumentalism. Positivism, like its recent cousin constructive empiricism, goes too far in the regressive direction of limiting experimental evidence to what is directly observable in some vain verificationist quest for infallible data. High-energy physics experiments do indeed result in mountains of data. To find one genuine observation of a subatomic particle, computers must sort through millions of measured events. But such measurements are hardly the stuff of which epistemological certainty is made, since only one piece of data in a million, if confirmed by many repeated experiments, may actually count as an observation. This implies that the notion of "observation" must be expanded beyond the observer's own eyes to include the observer's technological manipulation of incredibly sophisticated machinery and the observer's theoretical stance on why this machinery has focused on the desired events to be produced. This also implies that the "observer" is actually the wide community of inquirers that assist in the selection of relevant and reliable observations.

But this inevitable entanglement of theory and observation does not entail any relativistic conclusion that genuine testing of a theory by observation is impossible. To draw that conclusion, it must further be assumed that the purpose of a theory is to model real processes as they occur in the absence of observation. If objectivism is assumed from the outset, then indeed it becomes hard to understand how a theory that creates its own supporting evidence could claim justification. But when the objectivism that lies at the heart of the realism-relativism debate is exposed, questioned, and replaced

with productionism, then the genuine theory-observation relationship can be discovered. The sole purpose of a theory is to direct the production of desired events, so it is no longer a mystery or paradox that theory should produce its own evidence. Indeed, the very best way for a theory to gain rational justification is for it to reliably and repeatedly produce its predicted evidence. Furthermore, theories of greater scope, possessing superior reliability across a wider variety of purposes for the community of inquirers and technology users, are the legitimate aim of progressive scientific inquiry.

In summary, pragmatism offers an empirically naturalistic and moderately realistic philosophy of science. Pragmatism's expansive concept of interactive experience harmoniously complements a naturalism wary of the transcendent. Philosophy of science should embrace pragmatism's view that the proper object of scientific knowledge is the technologically created natural object in human experience. Pragmatism offers the most realistic interpretation of the growth of scientific knowledge that is consistent with both actual scientific practice and experimentally confirmed results.

Notes

1. *The Collected Papers of Charles Peirce*, eds. Charles Hartshorne, Paul Weiss, and Arthur W. Burks (Cambridge, Mass.: Harvard University Press, 1931–1958), vol. 5, paragraphs 94, 100, 101.

2. *The Later Works of John Dewey*, vol. 11, ed. Jo Ann Boydston (Carbondale, Ill.: Southern Illinois University Press, 1987), p. 112. Henceforth references to *The Later Works* will be cited by *LW* followed by volume and page numbers.

3. Ibid., pp. 110–11.

4. Ronald Giere, *Science Without Laws* (Chicago: University of Chicago Press, 1999), p. 90. See also Nancy Cartwright, *The Dappled World: A Study of the Boundaries of Science* (Cambridge, England: Cambridge University Press, 1999).

5. Ibid., p. 93.

6. This distinction is a version of Rom Harré's account of scientific investigation in *Varieties of Realism: A Rationale for the Natural Sciences* (Oxford: Blackwell, 1987).

7. *LW* 5: 197.
8. *Logic: The Theory of Inquiry, LW* 12: 302–303.
9. *Experience and Nature, LW* 1: 6.
10. Jarrett Leplin, *A Novel Defense of Scientific Realism* (Oxford: Oxford University Press, 1997), pp. 104–105.
11. *Experience and Nature, LW* 1: 128.

CONTRIBUTORS

CHI-CHUN CHIU wrote his dissertation on Peirce with Peter Hare at SUNY at Buffalo. He is Associate Professor of Philosophy at the Graduate Institute of Philosophy, National Tsing Hua University, Taiwan. He has published several essays on Peirce and other figures in American philosophy.

VINCENT M. COLAPIETRO is Professor of Philosophy at Pennsylvania State University. His extensive publications focus on Peirce, semiotics, theories of the self, philosophy of art, and morality. He is coeditor of the *Journal of Speculative Philosophy*. Among his books is *Peirce's Approach to the Self: A Semiotic Perspective on Human Subjectivity*.

RANDALL R. DIPERT is the Charles S. Peirce Professor of American Philosophy at SUNY at Buffalo. He has published on the philosophy of Peirce, the history and philosophy of logic, music theory and performance, and aesthetics. He authored *Artifacts, Art Works, and Agency*, and has joined Peter Hare as coeditor of *Transactions of the Charles S. Peirce Society*.

PETER H. HARE is SUNY Distinguished Service Professor Emeritus of Philosophy at SUNY at Buffalo. His books and numerous articles concern William James and other figures in pragmatism, phi-

losophy of religion, the philosophy of C. J. Ducasse, and American naturalism. He is coeditor of *Transactions of the Charles S. Peirce Society*. He is a past President of the Charles S. Peirce Society and the Society for the Advancement of American Philosophy, and a recipient of the Herbert W. Schneider Award from SAAP.

PETER T. MANICAS, a Ph.D. graduate of SUNY at Buffalo, is Professor of Sociology and Director of Liberal Studies at University of Hawaii, Manoa. His research efforts have explored American philosophy, American studies, and the social and natural sciences. He has published eight books, including *A History and Philosophy of the Social Sciences*, and numerous articles concerning pragmatism, metaphysics, value theory, philosophy of science, history, psychology, speech, sociology, political science, and education.

JOSEPH MARGOLIS is Laura H. Carnell Professor of Philosophy at Temple University. He has published more than thirty books and well over four hundred articles across a broad spectrum of topics including realism, knowledge, moral values, aesthetics, continental philosophy, and social theory. His major contributions to the advancement of pragmatism include *Pragmatism without Foundations: Reconciling Realism and Relativism* and *Historied Thought, Constructed World: A Conceptual Primer for the Turn of the Millennium*.

ROBERT G. MEYERS received his Ph.D. from SUNY at Buffalo and is Professor of Philosophy at SUNY at Albany. His publications center on the theory of knowledge and the history of modern empiricism, especially American pragmatism, Peirce, and Hume. He is the author of *The Likelihood of Knowledge*.

MURRAY G. MURPHEY is Professor Emeritus of History at the University of Pennsylvania. He is one of the foremost living scholars on Charles Peirce and the history of pragmatism. He has served as President of the Charles S. Peirce Society and is a recipient of the Herbert W. Schneider Award from the Society for the Advance-

ment of American Philosophy. He authored the two-volume *A History of Philosophy in America* with Elizabeth Flower, and *Philosophical Foundations of Historical Knowledge*.

Sami Pihlström is University Lecturer of Philosophy at the University of Helsinki, Finland. He has written four books, including *Pragmatism and Philosophical Anthropology* and *Naturalizing the Transcendental: A Pragmatic View*, and many articles on a wide variety of metaphysical, epistemological, and ethical issues approached from a pragmatic standpoint.

Sandra B. Rosenthal is Provost Distinguished Professor of Philosophy at Loyola University, New Orleans. She has published eleven books and more than 150 articles on pragmatism, continental philosophy, philosophy of knowledge, metaphysics, and business ethics. She has served as President of both the Charles S. Peirce Society and the Society for the Advancement of American Philosophy. Her most recent book is *Time, Continuity, and Indeterminacy: A Pragmatic Engagement with Contemporary Perspectives*.

Frank X. Ryan is Assistant Professor of Philosophy at Kent State University. He has published several articles on Dewey and the history of pragmatism, and is the series editor of *The American Evolutionists* (19 vols.) He is currently writing a book about Dewey's philosophy of transaction.

John Ryder is Director of the Office of International Programs for SUNY Administration. His publications concern the history of American philosophy, systematic metaphysics, philosophy of education, and philosophy in Eastern Europe. Among his edited books are *American Philosophical Naturalism in the Twentieth Century* and the Blackwell *Guide to American Philosophy*.

John R. Shook wrote his dissertation on Dewey with Peter Hare at SUNY at Buffalo. He is Assistant Professor of Philosophy at Oklahoma State University. He authored *Dewey's Empirical Theory*

of Knowledge and Reality. He edits two book series, *Studies in Pragmatism and Values* and *Pragmatism in American Thought* (23 vols.) He is general editor of the *Dictionary of Modern American Philosophers*, in preparation, and coeditor with Joseph Margolis of the forthcoming Blackwell *Companion to Pragmatism*.

KENNETH R. WESTPHAL is Professor of Philosophy at the University of East Anglia, England. His numerous publications range across Kant, Hegel, idealism, pragmatism, metaphysics, and epistemology. He is the author of *Hegel's Epistemological Realism* and *Hegel's Epistemology: An Introduction to the Phenomenology of Spirit*, and the editor of *Pragmatism, Reason, and Norms: A Realistic Assessment*.

INDEX

Aach, John, 284
abduction, 159, 341
Abramov, Israel, 297
absolute, 70–72
abstraction, 95, 105, 109, 118, 120, 239, 311
activity, 14, 64, 98, 113, 139, 142-143, 219, 341
and experience, 44-46, 50-51, 84, 91, 110, 114, 161
aesthetic, 66, 68, 128
Ahonen, Hanne, 238
Allison, Henry, 170
Almeder, Robert, 169, 304, 318, 320
Alston, William P., 284
Anagnostopoulos, Georgios, 229
analysis, 94, 314–15
analytic philosophy, 17, 29, 33, 49, 60, 148, 152, 154–55, 167, 239
Anderson, Douglas R., 77
antifoundationalism, 8, 13, 43, 50, 87, 144, 224
Anton, John, 80
Apel, Karl-Otto, 16, 212–17, 219–20, 222–24, 231–32, 233, 236, 237, 318
a posteriori, 160
appearance, 11, 111, 119, 158
a priori, 38, 94–95, 132, 140, 151, 156–58, 167, 171, 174, 213, 264, 303, 311, 336
Aquinas, Thomas, 39, 263, 283, 307–308
Archimedes, 135, 294
Aristotle, 30, 32, 39, 108, 144, 228, 234, 292, 309, 312
Aristotelianism, 56, 63, 234, 236
Armstrong, D. M., 226
Auden, W. H., 123
Austin, J. L., 274, 283
Avenarius, Richard, 85
Ayer, A. J., 202

Baillargeon, Renee, 297
Bakhurst, David, 229, 235, 238
Beck, Lewis White, 171, 174
belief, 17, 31, 38, 45, 139, 141, 143, 152, 193, 242–43
fixation of, 111, 317
and will, 245–49, 251, 257–58
Beltrami, Eugenio, 146
Bennett, Jonathan, 98
Bergson, Henri, 108
Berkeley, George, 86, 265–71, 283, 309
Bernard, Claude, 99
Bernstein, Richard, 8, 300, 317
Bhaskar, Roy, 88, 100, 101, 104
Blackburn, Simon, 202, 226
Blanshard, Brand, 27
Blau, Joseph L., 20, 23, 26
Blumberg, Albert, 100
Bohr, Niels, 293
Boler, John F., 307–309, 318, 319, 320

Boyd, Richard, 228
Boydston, Jo Ann, 42, 51, 52, 53, 77, 102, 122, 169, 173, 318, 343
Boyle, Robert, 87, 99, 102
Brandom, Robert, 174, 298
Brightman, Edgar Sheffield, 27
Bruner, Jerome, 287, 291, 298
Buchler, Justus, 19, 21, 23, 26, 27, 56, 60–62, 72, 75, 77, 325
Büchner, Friedrich, 86
Bunge, Mario, 91, 101, 228
Burckhardt, Frederick, 52, 117, 118, 123
Burke, Tom, 90, 103, 105
Burkhardt, Hans, 26
Burks, Arthur W., 52, 118, 147, 169, 318, 343

Cahn, Steven, 20
Cairns, Dorion, 282
Calderoni, Mario, 308
capitalism, 98
Carnap, Rudolf, 133, 154, 156, 160–61, 165, 167, 171–72
Carnes, Mark C., 27
Cartesianism, 29, 31, 35, 38, 167
Cartwright, Nancy, 343
Carver, Terrell, 100
Castañeda, Hector, 148
category. *See* concept
causation, 84, 88, 93, 96, 100, 130, 134–35, 174, 334
certainty, 10, 12, 213–14, 278–80, 287
Chakrabarti, Chandana, 26
Chisholm, Roderick, 101, 240
Chiu, Chi-Chun, 16, 177
Churchill, Winston, 183, 185
Churchland, Paul, 228, 236
Clark, Peter, 196
Clarke, W. Norris, 96, 105
Clifford, William Kingdon, 26, 256
Code, Lorraine, 240, 260
cognitive science, 17, 103, 228, 239, 249, 253–55
Cohen, Stewart, 260
Colapietro, Vincent M., 14–15, 107, 225
color, 45, 74, 144, 287, 311–12, 315, 320, 325–26
community, 69, 73, 232, 286, 294, 305, 343. *See also* society
Comte, Auguste, 85, 99, 100
Conant, James, 169, 197, 226
concept, 31, 93, 95, 109–10, 131–33, 136, 140–41, 143, 152, 154–55, 167, 174, 183–84, 290–91, 309
consciousness, 33, 47, 90, 129, 145, 151, 157, 210, 275
constructive realism, 13, 29–30, 33, 36, 38, 62, 63, 75–76, 227
contextualism, 18, 46, 48, 220, 243, 247, 301, 303, 314
continuity, 45, 47, 50, 52
Copernicus, Nicolaus, 38, 292
Cornu, August, 98
Corrington, Robert, 26, 77
Corti, Walter R., 25
courage, 241
Coyne, Jerry A., 105
Craig, Edward, 144
creativity, 14, 47–48, 64
critical realism, 80
Crowell, Steven Galt, 214–17, 219, 224, 233
culture, 33, 37, 39, 68, 110, 143, 146, 204–205, 237, 292

Dancy, Jonathan, 26
Danto, Arthur, 23
Darwin, Charles, 76, 285, 294
Davidson, Donald, 13, 30-33, 35–40, 41, 42, 126, 229
deconstruction, 63, 113
DeRose, Keith, 179, 195-96
Derrida, Jacques, 48
Descartes, René, 10, 12, 29, 35, 39–40, 86, 178, 215, 231, 276, 282, 284
desire, 15, 107, 111-16
determinism, 9, 47, 93
Devitt, Michael, 156, 170
Dewey, John, 8, 12, 13, 14, 18-19, 21, 26, 29, 32-36, 38–41, 42, 44, 46-47, 49, 51, 52, 53, 56, 58-59, 61-63, 65, 68, 75-76, 77, 79-80, 81, 86, 88-90, 92-96, 98, 102-103, 104, 105, 113, 114, 122, 151, 153, 168, 169, 173, 198, 203, 225, 232, 234, 243, 254-55, 260, 285-86, 300-305, 314-17, 318, 319, 320, 321, 323, 325, 327-28, 336, 341, 343
Dick, Pamela L., 230-31
Dilthey, Wilhelm, 37
Dilworth, Craig, 105
Dipert, Randall R., 15, 125
Dorn, Georg, 27, 230
Draper, John William, 285, 297
Dretske, Fred, 173, 179, 196
dualism, 9, 12-13, 31, 40, 111, 121, 324, 330, 338
Ducasse, Curt John, 21, 23, 24, 25, 27, 240, 260
Duhem, Pierre, 85, 96, 333
Dummett, Michael, 144, 145
Easton, Loyd D., 80, 106
ecological psychology, 90-92, 338
ecology, 74-75
economics, 74
Edel, Abraham, 20, 81
Edman, Irwin, 20
Einstein, Albert, 135, 293, 296
Emotivism, 201, 225
empiricism, 9, 11, 50, 93, 211-12, 282, 326-27, 331, 337-39
Engels, Friedrich, 83, 86, 99
Epistemology, 14, 58, 82, 87-88, 113, 139, 153, 164, 178, 215, 242-43, 286, 339
  and holism, 245, 286
  and reliabilism, 240, 242, 254
  and responsibilism, 17, 216, 240-41, 254
error, 112, 119, 226, 242, 246
essence, 61
ethics, 16, 66, 81, 97, 127, 200, 205, 209, 216, 221-22, 234
  of belief, 17, 239-40, 255-59
Euclid, 132, 134-36, 141, 146
Evans, Gareth, 173
evidence, 17, 88, 139, 164-65, 241, 245, 334-35, 339-42
evolution, 75-76, 100, 106, 285, 294
existentialism, 82
experience, 9, 13, 40, 50, 76, 89, 112, 119, 157, 171, 243, 286, 300-302, 310-14, 329-32
  and environment, 31, 40-41, 43-44, 50, 61
  as immediate, 40, 89, 110, 119, 120, 263-65, 268, 299, 314-17, 326-27, 338
  as transaction, 40, 44, 50, 326-27, 338
experiment, 336

fact, 49, 121, 156, 203, 211, 276
fallibility, 16, 112, 119, 151, 162–66, 180, 213–14, 224, 241
Farber, Marvin, 24, 27, 79–80, 81–84, 86–87, 96–98, 99–100, 101, 104, 105, 106
Fechner, Gustav Theodor, 108, 116
Feigl, Herbert, 284
feminism, 107, 117
Fermat, Pierre de, 66
Feuer, Lewis S., 100
Feuerbach, Ludwig, 99
Feynman, Richard P., 293
Field, Hartry, 142, 172, 188, 197
firstness, 111–12, 114, 119, 121, 301–302, 312–14
Fisch, Max H., 53, 168, 284
Fodor, Jerry, 103, 169
Foley, Richard, 245–49, 254, 260
Foucault, Michel, 37
foundationalism, 43, 87, 92, 213, 235
Fox, Robin, 297
Frankel, Ellen, 226
freedom, 50, 82, 113, 216
Freeman, Eugene, 310, 317, 320
Frege, Gottlob, 280, 284
Fries, Horace S., 234
Funke, Gerhard, 233
future, 250

Gadamer, Hans-Georg, 37
Garrety, John A., 27
Garver, Newton, 80, 255–57, 261
Geach, Peter, 283
generals, 52, 159, 302–303, 307, 313–14, 319, 327
Gibson, J. J., 90
Giere, Ronald, 328, 343
Gilbert, Neal, 79
God, 82, 86, 105, 157, 161, 190, 273, 282
Godwin, William, 26
Goheen, John, 52
Goodman, Nelson, 18, 287–88, 298, 302
Gorbachev, Mikhail, 257
Gordon, James, 297
Gouinlock, James, 20
Gould, Stephen Jay, 97, 105
Gracia, Jorge, 7
Green, Brian, 298
Guddat, Kurt H., 80, 106
Guyer, Paul, 170, 173, 195

Haack, Susan, 172, 210, 230, 304, 318, 319
Habermas, Jürgen, 213, 232
habit, 44, 107, 111, 143, 303, 309–13, 327–28
  and meaning, 44, 47, 109
Haeckel, Ernest, 86
Halberstam, David, 259, 261
Haldane, Elizabeth S., 284
Hale, Bob, 196
Haley, Michael, 118
Hampshire, Stuart, 261
Hand, Sean, 233
Handy, Rollo, 24, 80, 105
Hanzel, Igor, 77
Hare, Peter, H., 7, 17, 19–23, 24, 79–80, 96, 99, 105, 175, 200, 225, 238, 239, 260
Hare, R. M., 226
Harman, Gilbert, 147, 148, 202, 226
Harré, Rom, 80, 85, 91, 93, 95, 100, 101–102, 104, 343
Harris, James, 99

Harrison, Jonathan, 259, 261
Hart, Richard E., 77
Hartshorne, Charles, 21, 24, 27, 51, 118, 147, 169, 283, 300, 317, 318, 343
Harvey, David, 106
Hausman, Carl R., 300, 317
Hazard, Rowland G., 25
Hegel, Georg Wilhelm Friedrich, 15, 30, 32, 35–39, 41, 42, 79–80, 98, 103, 152, 160, 168, 169, 170, 172, 285, 310
Hegelianism, 13, 32–33, 37, 89, 156, 285
Heidegger, Martin, 37, 58, 79, 98, 224, 237
Heinaman, Robert, 228, 234
Helmholtz, Herman von, 88, 100, 104
hermeneutics, 213
Herz, Marcus, 30
Hester, D. Micah, 105
Hick, John, 24
Hilbert, David, 135
history, 34, 37, 110, 200, 222, 235
Hitler, Adolf, 289
Hobbes, Thomas, 134
Hocking, William Ernest, 27
Hodge, Charles, 285
Hodgson, Shadworth Holloway, 27
Hofsten, Claes von, 297
Honderich, Ted, 27
Hook, Sidney, 20, 27
Hookway, Christopher, 300, 317
Horwicz, Adolf, 118
human nature, 222, 234
Hume, David, 79, 84, 93, 94, 99, 134, 174, 270–71, 278, 283, 320, 327
Husserl, Edmund, 79, 98, 215, 218, 233, 263, 267, 277–80, 282, 284
Huxley, Thomas H., 99
hypothesis, 270, 303, 328, 336–37

idea. *See* concept
idealism, 10, 49, 51, 82, 96, 122, 157, 160, 266, 270–71, 285, 299–300, 306, 332
illusion, 119, 249, 252–53, 268, 274, 287, 292, 325
individuality, 73–74, 97, 129, 243, 303, 307–308, 319
induction, 270, 340
Innis, Robert E., 118
inquiry, 48, 69, 71, 74, 111, 120, 139, 147, 302, 305, 310, 343
instrument, 286, 329–35, 338, 340
intention, 271–72, 277, 304
internal realism, 15–16, 29–30, 41, 148, 152–55, 163, 167–68, 172, 227, 230
interpretation, 48, 313
introspection, 18, 263–64, 275
intuition, 157–59, 207, 279

Jackman, Henry, 175, 234
James, William, 8, 12, 14, 17, 21, 22, 24, 25, 26, 39, 47, 49, 52, 53, 56, 59, 61–63, 65, 79, 86, 88, 100, 102, 104, 107–108, 109, 113, 114, 116–18, 122–23, 127, 147, 192, 203, 217–18, 220, 227, 230, 232, 234, 236, 237, 239–40, 243, 247–49, 253, 255–57, 260, 263, 285–86, 302, 316–17, 333

Kannisto, Heikki, 238
Kant, Immanuel, 15, 30, 32, 37–39,

41, 82–83, 87–88, 132, 134–35, 144, 151–52, 157–60, 162, 166–68, 169, 170, 171, 173, 174, 177, 181, 195, 198, 211–12, 215, 223, 230, 287, 303–304, 306, 310
Kantianism, 70, 88, 102, 152, 227
Kauber, Peter, 25, 260
Kaufman, Felix, 98
Kearns, John, 7
Kellman, Philip, 297
Ketner, Kenneth, L., 147
Kirchoff, Gustav, 85
knowledge, 10–11, 48, 88, 114, 164–65, 189, 239, 255, 286, 331–32
  as absolute, 70
  and acquaintance, 17–18, 154–55, 263–65, 267–69, 277–78
  as relation, 35, 45, 110, 264
  as representation, 17, 48, 58, 88, 100, 119, 123, 263, 265–66, 277
Koehl, Richard, 24
Kornblith, Hilary, 260, 261
Korsgaard, Christine, 236
Kristol, Irving, 106
Kuhl, Patricia, 298
Kuhn, Thomas, 18, 37, 294–96, 298, 302
Kuklick, Bruce, 25, 297
Kurtz, Paul, 20

language, 110, 140, 146, 153–56, 161, 220, 230, 288
  and thought, 34, 145, 188, 197, 213
law. *See* natural laws
Lear, Jonathan, 208–10, 212, 218, 224, 229, 230, 231
Leibniz, Gottfried Wilhelm von, 134–35, 282
Lenin, V. I., 83, 99
Leplin, Jarrett, 341, 344
Lepore, Ernest, 41, 169
Levi, Isaac, 20
Levinas, Emmanuel, 215–16, 220, 233
Levomäki, Irma, 238
Lewis, Clarence Irving, 44, 46–47, 49, 51, 52, 53, 56, 59, 240, 260, 285–87, 292, 297, 298
Lewis, David, 142
Lincourt, John, 25
literature, 80
Lobachevsky, Nikolai, 135
Locke, John, 11, 33, 73, 86, 87, 99, 263, 270, 274, 283
Loewald, Hans, 14, 107, 115, 122
logic, 52, 66, 77, 85, 92–94, 101, 108, 112, 121, 151, 166, 194–95, 280–81, 304, 310–13, 328, 332
Lovejoy, Arthur O., 27
Lovibond, Sabina, 229
Löwenheim, Leopold, 34, 42
Luce, Henry, 258–59
Lucey, Kenneth, 198

Mace, W. M., 103
Mach, Ernst, 83, 85, 96, 99, 333
MacIntyre, Alasdair, 235, 237
Mackie, J. L., 202–207, 211, 218, 225
Madden, Edward H., 20, 23, 24, 25, 80, 85, 91, 93, 95–96, 101, 104, 105, 260
Madigan, Timothy, 27
Malachowski, Alan R., 42
Malpas, Jeff, 233
Mandelbaum, Maurice, 82, 84–85, 99, 100, 101–102
Manicas, Peter T., 14, 79, 101, 103, 173

Margolis, Joseph, 8, 13, 20, 29, 92, 104, 144, 146, 318
Marsoobian, Armen, 26, 77, 103
Marx, Karl, 37, 79–80, 85–86, 89, 98, 99, 100, 104–105, 106
materialism, 9, 56, 81, 85–86, 122, 172
mathematics, 66, 72, 126, 132, 134–35, 138, 142, 146, 151, 166, 281
matter, 61, 86, 161, 270, 307
McDermott, John J., 59, 102, 118
McDowell, John, 30–33, 36–39, 41, 207, 228, 229, 234, 236, 302
McGee, Colin, 145
McGill, V. J., 99, 100, 104
McKeon, Charles, 309
McNamara, Eileen, 7
meaning, 44–45, 47, 72, 155, 166, 181–85, 286–92, 313, 337
Mead, George Herbert, 8, 12, 21, 23, 24, 27, 44, 46, 51, 52, 243, 260, 325
Mehler, Jacque, 297
Mele, Alfred, 148
Menelson, Edward, 123
mereology, 156
metaphysics, 17, 47, 81, 151, 192, 227, 254, 307
Meyers, Robert G., 17–18, 102, 168, 169, 263, 284
Michael, Fred, 319
Migotti, Mark, 173
Mill, John Stuart, 85, 93, 327
Miller, Arnold V., 42
Miller, Dickinson, 21, 24, 240, 260
Miller, Fred D., Jr., 226
mind, 32, 58, 123, 126, 129–33, 152, 282, 303, 305, 316, 323
and representation, 30–34, 58, 181–83, 266–68, 277–78, 281, 283, 325
Misak, Cheryl, 229, 232, 238
Moleschott, Jakob, 86
Montmarquet, James, 240–41, 260
Moore, Edward C., 170, 317
Moore, G. E., 24, 86, 89, 101, 283
moral realism, 199, 201–203, 205, 218–19, 224, 228, 234
morality. *See* ethics
Morris, Charles W., 52
Moser, Paul K., 246–47, 254, 261
Moser, Shia, 79
Mothershead, John, Jr., 52
Murphey, Murray G., 18, 102, 285
Murphy, Arthur, 51
music, 60
Myers, Gerald E., 26

Nagel, Ernest, 60, 94
Nagel, Thomas, 137–38, 229, 230
Nakhnikian, George, 284
Napoleon Bonaparte, 273, 283
naturalism, 7–10, 14, 35, 59–62, 72, 126, 153, 160, 218, 222, 326–27, 333
naturalized epistemology, 59, 234
natural laws, 66, 77, 93–95, 171, 301, 327–28
necessity, 94, 160, 168, 281, 328
Necker, Louis A., 288
Nelson, Everett J., 104
Newton, Isaac, 73, 75, 87, 99, 102, 121–22
Nietzsche, Friedrich, 37, 161, 172
nominalism, 94, 129, 302–303, 306–308
novelty, 46
Nozick, Robert, 179, 196

objectivity, 61, 64, 70–72, 93, 129, 189, 203–204, 207, 212, 220, 226, 229, 238, 304, 332, 341–42
observation. *See* evidence
O'Neil, C. J., 283
O'Neill, Onora, 173
ontology, 62, 154, 157, 162
optimism, 251, 255–56
Orwell, George, 253

panpsychism, 299
Papastephanou, Marianna, 232
Parry, William T., 27, 79, 96, 100, 101
Parsons, Elsie Clews, 23
Passmore, John, 174
Paul, Jeffrey, 226
Peano, Giuseppe, 138
Pearson, Karl, 319
Peirce, Charles S., 8, 12, 14, 17–19, 20, 21, 24, 25, 27, 29, 32–36, 44–45, 47–49, 51–52, 53, 56, 59, 61, 65, 88, 102, 104, 107, 109–12, 114–15, 117, 118, 119, 120–21, 127, 137–39, 144, 147, 148, 151, 154, 157, 159, 168, 169, 170, 173, 210, 217, 228, 229, 231, 232, 234, 235, 243, 260, 261, 271, 276, 280, 282, 283, 284, 285, 295–96, 299–306, 308–11, 313–17, 318, 319, 320, 321, 323, 327–29, 343
Pepper, Stephen, 26
perception, 39, 67, 87, 120, 157–58, 263–74, 279, 287, 291, 338
Perry, Ralph Barton, 90, 98, 103, 117
perspective, 7, 14, 48, 69, 74, 89, 152, 161, 325–27, 329
Peterson, Michael L., 25
phenomenalism, 84, 89, 266–67
phenomenology, 19, 44, 46, 88, 214, 233, 275, 304, 313
physicalism, 128
Pihlström, Sami, 16, 144, 145, 148, 152, 169, 174, 199, 225, 227, 229, 230, 232, 233, 235–36, 237, 318
Plantinga, Alvin, 173
Plato, 108, 143
Platonism, 63, 128, 303, 307
pluralism, 7, 9
poetry, 60
Poincaré, Henri, 85, 96, 136
Pojman, Louis P., 23
Polanyi, Michael, 118, 119
politics, 73, 81, 97, 98
Popper, Karl, 241
positivism, 83–85, 93, 342
possibility, 91, 115, 314, 328
possible worlds, 108, 142
postmodernism, 47, 55, 63–64, 69, 97, 221, 231
practical success, 96, 245, 339–40, 343
  and truth, 48–49, 111, 138, 148, 219, 231, 244–49, 293–96, 341–43
practices, 126, 139, 142, 205, 211–22, 231, 237
pragmatic naturalism, 8–9, 19–20, 55–56, 62, 137–38, 225, 323, 326–28, 331–32
pragmatic realism, 32, 35, 40, 50–51, 76, 107, 111, 137–38, 152, 165–68, 177, 195, 203, 210–11, 217, 220, 224, 235, 333–35, 343
pragmatism, 8, 32, 34–35, 44, 50–51, 57, 62, 107, 116, 126, 137–39, 144, 315–16, 339–41
Price, H. H., 258, 261, 283

problem solving, 94, 254, 301, 315
process, 47, 50-51, 112, 157, 327–29, 333, 341
proposition, 94
psychoanalysis, 14, 107, 113, 117
psychologism, 280
psychology, 89–92, 103, 129, 250, 280
punishment, 258
purpose, 97, 147, 161
Putnam, Hilary, 8, 13, 16, 29–32, 34–35, 37, 39, 41, 42, 152–53, 155–57, 160–68, 169, 170, 171–72, 173, 174, 177–88, 190, 192–95, 196–97, 198, 203–12, 217, 224, 225, 226, 227, 228, 229, 230–31, 234, 254, 261
Putnam, Ruth Anna, 254, 261
Pylyshyn, Zenon, 103, 298
Pyrrho, 178
Pythagoras, 138

quality, 74, 93–94, 109, 274, 302, 308, 312–15, 320, 324–26, 329–30, 338
Quante, Michael, 229
quantum physics, 293, 296, 341–42
Quine, W. V. O., 8, 59, 92, 96, 103, 105, 126, 133–34, 145, 146, 154–55, 162, 169, 180, 196, 233, 286

radical empiricism, 88, 102
Randall, John Herman, Jr., 19, 23, 60
Ransdell, Joseph, 20, 228
rationalism, 10–11, 63, 325
rationality, 11, 73, 207, 236, 327, 139, 245–47
realism, 7, 10, 35–36, 90, 112–13, 115, 121, 125, 127–28, 160, 218, 268–75, 301–306, 316, 331–32
  and antirealism, 15, 140–46, 171, 199–202, 226, 333–34
reality, 10, 30, 34, 49, 73, 107, 111, 113, 121, 138, 187–90, 296–97, 316
  as independent, 35, 44, 46, 65, 86, 90, 93, 110, 113, 118, 126, 130, 152, 157, 172, 300, 305
  as noumenal, 89, 110, 133, 300, 305
  as unobservable, 87–88, 100, 148, 270, 299, 330–35, 339–40
reductionism, 9, 40, 41, 235, 324
Ree, Jonathan, 80
Reed, E. S., 103
reference. *See* meaning
Reichenbach, Hans, 167, 174
Reid, Thomas, 99, 266
relation, 35, 45, 73, 76, 110, 264
relativism, 48, 50, 110, 198, 200, 207–208, 210, 224, 226, 229, 235, 237, 243
relativity, 135
religion, 96–97, 285
Renouvier, Charles Bernard, 27
Rescher, Nicholas, 229
Ricardo, David, 104
Riemann, Bernhard, 135, 146
Robin, Richard S., 21, 27, 317, 318
Rock, Irvin, 297
Romanell, Patrick, 27
Rorty, Richard, 8, 13, 15, 26, 29–39, 41, 42, 48, 57–59, 62, 80–81, 84, 99, 102, 138, 170, 210–11, 230, 231, 286, 298, 302
Rosenberg, Alan, 26

Rosenthal, Sandra B., 13, 43, 119
Ross, Dorothy, 102
Ross, G. R. T., 284
Ross, Stephen, 20
Rothstein, Richard, 106
Royce, Josiah, 21, 56, 59, 79, 260, 285–86
Russell, Bertrand, 17–18, 85–86, 103, 155, 167, 263–67, 272–73, 275, 282, 283, 325
Ryan, Frank X., 7, 18–19, 299
Ryder, John, 7, 14, 26, 55, 77, 101, 103

Santayana, George, 56, 58, 60–61, 76, 144, 149, 271, 278
Sartre, Jean-Paul, 24
Sayer, Derek, 104
Sayre-McCord, Geoffrey, 202, 225, 226, 228
Scheman, Naomi, 14, 107, 112, 122
Schiller, F. C. S., 127, 302
Schilpp, Paul Arthur, 297
Schlick, Moritz, 174
Schmitt, Frederick F., 260
Schneewind, J. B., 99
Schneider, Herbert W., 19, 21, 23, 53
scholastic realism, 18, 303–307
Schröder, Ernst, 281
Schurz, Gerhard, 27, 230
science, 8, 19, 38, 59, 65, 86–87, 119, 134, 142, 148, 153, 207, 223, 293–95, 329–30, 340
  and religion, 97, 99
scientific realism, 89, 92, 95, 127, 156, 295–96, 304, 324–30, 334, 340–41
Scotus, John Duns, 18, 303–304, 307–309, 311, 313, 318, 319
Scriven, Michael, 101
secondness, 34, 111, 300, 302, 312–14
Secord, Paul F., 80, 103
self, 87, 112, 114, 157–58, 213, 216, 316
Sellars, Roy Wood, 27, 56, 99, 103, 104
Sellars, Wilfrid, 18, 101, 282, 283, 284, 286, 288–92, 298
semantics, 15, 145, 154, 156, 167, 184–85, 332
semiotics, 110, 112, 213
sensation, 11, 91, 158, 160, 286–88, 306, 310–13, 320, 330
sensationalism, 100, 327
sense-data, 67–69, 198, 264–66, 277, 286–91, 327
senses, 18, 110
Shapiro, Michael, 118
Shaw, R. E., 103
Sheldon, Wilmon H., 21, 24
Shook, John R., 7, 19, 89, 96, 102, 103, 105, 198, 238, 323
Short, Kenneth, 297
Sidorsky, David, 23
sign, 44, 110, 112, 119, 120, 184, 305
Singer, Beth, 20, 77, 238
skepticism, 14, 16, 19, 31, 40, 177–80, 187–90, 199, 267, 278, 307, 327, 333–34
Skinner, Quentin, 99
Skolem, Albert Thoralf, 34, 42
Skolem-Löwenheim theorem, 34, 42
Sleeper, Ralph, 20, 102, 168
Smith, Adam, 74
Smith, Barry, 26
Smith, John E., 8, 20
social epistemology, 17, 37, 241–43

society, 46, 68, 114–15, 140, 242. *See also* community
Society for the Advancement of American Philosophy, 7, 21, 254
Socrates, 307
solipsism, 215–16, 231, 271
Sosa, Ernest, 26
space, 134–37, 158, 162, 272, 311, 325
Spelke, Elizabeth, 297
Spencer, Herbert, 84–85, 88, 99, 100, 104, 123
Spinoza, Benedict Baruch, 98
Steger, Manfred, 100
Stein, Gordon, 26
Stewart, David, 23
Stewart, Jon, 168
Strawson, Peter F., 167, 170, 174
Ströker, Elisabeth, 233
Stroll, Avrum, 237
Stroud, Barry, 197
subject and object, 30, 36–39, 41, 84, 264, 300, 315
subjective, 50, 82, 97, 220, 223, 300, 307
Sumner, William Graham, 79
synechism, 121
synthesis, 167, 171, 174

Taft, Robert, 259
Talisse, Robert, 105
Tarski, Alfred, 146
Tasioulas, John, 207, 228–29
Taylor, Charles, 221, 235, 237
Taylor, Shelley E., 249–51, 253, 261
technology, 19, 331, 338–43
Thayer, H. Standish, 20, 25
theoretical model, 95, 104, 328, 332, 339–43
theory, 126, 134, 139, 152, 193, 293–94, 331–32, 338–43
thirdness, 34, 111–12, 301, 303, 308, 310, 314
Thomas, Charles, 98
Thomson, Judith Jarvis, 226
thought, 33, 118–20, 130–31, 155–59, 240–41, 250–53, 305–307
Tillich, Paul, 21
time, 46–47, 120, 134, 158, 231
Transactions of the Charles S. Peirce Society, 20, 21
transcendence, 96, 270–72, 277, 305, 332
transcendental argument, 15–16, 151, 157–60, 168, 171, 200, 206–209, 219, 234
transcendentalism, 30, 38, 108, 160, 211, 318
truth, 47, 137, 142, 145, 152–53, 173, 227, 232, 241, 276–77, 279, 289
  as coherence, 31, 36, 41, 48, 193
  as convergence, 138, 147, 296, 305
  as correspondence, 31, 36, 48, 58, 152, 188, 191–93, 295–96, 332, 339
  and justification, 162–65, 191–94, 338–39
  as nonepistemic, 36, 152–53, 162, 191, 244–45
Tukiainen, Arto, 238
Turing test, 184, 185
Turing, Allan, 184, 185
Turvey, Malcolm T., 91, 103

universal, 94, 128, 303–304, 306, 314, 336–37. *See also* generals
useful. *See* practical success

value, 203–204, 206–208, 220, 223, 227–28, 236
Van Fraassen, Bas, 337–39
virtue, 241

Wagner, Steven J., 76
Waldenfel, Bernhard, 233
Wallace, Kathleen, 26, 77
Ward, Lester, 79
Warfield, Ted A., 196
Warner, Richard, 77
Weber, Max, 105
Weinberg, Steven, 136
Weingartner, Paul, 27, 230
Weiskrantz, Lawrence, 297
Weiss, Paul, 52, 118, 147, 169, 318, 343
Weissman, David, 227
Westphal, Kenneth R., 15–16, 42, 103, 151, 168, 169, 170, 171, 172, 173, 228, 232, 238
Wettstein, Howard, 170
White, Morton, 243–44, 260
Whitehead, Alfred North, 21, 26, 27, 85, 117, 260, 325
Whorf, Benjamin, 146
Wiener, Philip P., 319
Wiggins, David, 229
Will, Frederick L., 32–35, 37, 39, 42, 151, 168, 169, 170, 173, 206–207, 228, 229, 230
William of Ockham, 148, 306–307
Williams, Bernard, 202–204, 206–207, 211, 218, 226, 229
Williams, Michael, 189, 197
Williams, S. G., 229
will to believe, 147, 234
Wittgenstein, Ludwig, 37, 58, 60, 63, 209, 211, 220, 224, 230–31, 233, 235, 237
Wohlgelernter, Maurice, 26
Wood, Allen W., 170, 195
Woodbridge, Frederick J. E., 56, 60
Woolhouse, Roger, 283
Wright, Crispin, 140, 147, 148, 179
Wüstehube, Axel, 229

Young, Frederick H., 319

Zack, Naomi, 20