

Preface

Hilary Putnam's *Representation and Reality* articulates four important theses: the use of Gödel's incompleteness theorems to refute computational functionalism (and how to avoid the simple logical error committed by John Lucas and Roger Penrose), a precise formulation of a triviality thesis (which Frankie Egan has called the hardest problem for cognitive science), a multi-realization argument against computational functionalism, and an argument that there are no computable partitionings of the set of computational multi-realizations of an arbitrary intentional state (which forecloses against the possibility of local computational reductions). Although I think that all four theses ultimately fall, I hope that what I do here will motivate others to re-examine Putnam's magnificent book. The importance of Putnam's four theses, the fact that few philosophers had critically examined all of them, the fact that there appeared to me to be difficulties for each, and Putnam's philosophical artistry were my primary motivations for writing this book.

Putnam is one of the great philosophers of the past hundred years. His depth, originality, ingenuity, and common sense, his moral and political views, and his kindness and generosity have been inspirational to me and to many others in the profession. His philosophical powers and imagination are legendary. He has revolutionized several distinct areas in philosophy. He has written important papers in philosophy of mind, in metaphysics, in philosophy of language, in ethics, in literary criticism, in philosophical logic, in philosophy of mathematics, in philosophy of physics, in mathematical logic, and in other fields. In 1965 he invented computational learning theory, which today figures in molecular biology, in homeland security, in linguistics, in theoretical computer science, in statistics, and in epistemology.

I first came under Putnam's spell when I took his "Decidability and Undecidability" course in the Mathematics Department at Harvard

University. Anything that he writes is a must-read for me. Over the years, along with the rest of the philosophical community, I have witnessed the evolution of his thought and have seen him, sometimes with great courage, shed old views and take on new ones. Writing this book has kept me in almost constant touch with his ideas, and this has given me the greatest pleasure and intellectual satisfaction.

This book began as a doctoral dissertation in the Philosophy Department at Rutgers University. I had thought about the ideas in *Representation and Reality* for several years. In June 2002, I began to see in that work various difficulties. By December of that year, I had a working manuscript. I defended on February 27, 2003. Doing my graduate work at Rutgers, the best place in the world for philosophy of mind and psychology, had a salutary and transformative influence on my ability to do philosophy. Rutgers is not just a place where great philosophy is done; it's also a place where great philosophers are kind, decent, caring people. Without their kindness, decency, and care, my dissertation—and thus this book—would never have been finished. My style is to work alone, and I am fortunate that my dissertation committee allowed me to do that. I am also lucky that some of the very best people in our profession—Frankie Egan (my adviser), Barry Loewer, Brian McLaughlin, and Zenon Pylyshyn—served on the committee. Other people at Rutgers whom I happily remember (and with many of whom I still happily discuss philosophy) are Bob Matthews, the late Bob Weingard, Peter Klein, Dick Foley (before NYU took him from us), Rob Bolton, Ernie LePore, Howard McGary, Martin Bunzl, Doug Husak, Steve Stich, Brian Loar, Vann McGee (before he left for MIT), Jeff McMahan, and Jerry Fodor.

I submitted the dissertation to The MIT Press in mid 2004. It was accepted for publication in February 2005. In the summer of 2005 I did a substantial revision. In the summer of 2006, though hampered by illness, I revised it yet again. My manuscript editor, Paul Bethge, was enormously helpful in spotting grammatical miscreants and backwater locutions and usage and thoroughly tactful in urging me to banish them. My editor, Tom Stone, helped me in many ways, large and small, personal and impersonal, always with great cheer and efficiency.

A profound influence on me has been my teacher and good friend Saul Kripke. I have studied with Kripke since the fall of 1986 and have never ceased being amazed at his raw philosophical powers. Kripke's seminars are unlike anyone else's. You always walk away feeling that this is the best philosophy has to offer. After he retired, I assembled and archived all of his unpublished writings, a task that was extraordinarily rewarding. Listening

to Saul's jokes, anecdotes, and intellectual banter over dinner is a great source of pleasure.

Another profound influence on me has been the philosopher Alan Berger. After a bad accident in the summer of 1997 (I was hit by a pickup truck while jogging and was thrown 65 feet), Berger called me daily during the five weeks I was in a hospital recuperating. He talked philosophy with me. This was important for my self-confidence, because I was worried that head injuries sustained during the accident would adversely affect my ability to do good philosophy. He gave me an outstanding tour through Quine's "Truth by Convention" and through several of Saul's early ideas on the nature of logic. Alan is a good friend who does great philosophy.

The love and trust which the Philosophy Department at Rutgers/Newark bestowed upon me helped immeasurably toward finishing the dissertation and in substantially revising it. Thank you, Anna Stubblefield, Nancy Holmstrom, Raffaella DeRosa, Michael Rohr, and Pheroze Wadia. I experienced your moral goodness and philosophical acumen almost as an enchantment. Dale Howard, my co-teacher in a special critical thinking course for students on academic probation at Rutgers/Newark convinced me in 2002 that I had something important to say and that it would be easy for me to say it. My late father had a keen interest in science and in some areas of philosophy; he would certainly have enjoyed reading this book. My late mother did not share those interests, but that one of her children was about to publish a second book (the first was a critical thinking textbook) made her happy. I have had many pleasant hours of philosophical conversation with Jerry Dolan (*The Boss*), Herman Tavani, and Lloyd Carr, masters of the Nashua Circle. In the summer of 2005, I participated in the Dartmouth Summer Faculty Institute on the Human Genome Project. Ron Green and Aine Donovan, Co-Directors of the Dartmouth Ethics Institute, fostered my new-found interest in bioethics, and I thank them for their warmth, hospitality and philosophical conversations.

During the last two years, I have had the good fortune of working closely with Harvey Feder, former Associate Provost of Rutgers/Newark, who spent 2005–2006 at the Prudential Center for Business Ethics. The Center funded me for two years, and I am grateful to them (especially Oliver Quinn and Harold Davis) for that and for many other things. Harvey is a magician at getting projects done and at stimulating people to do their most creative work. Harvey and I, along with Bob Nahory (a former Bell Labs laser physicist, now a media restoration guru at the Rutgers/Newark Institute for Jazz Studies) and Barry Komisaruk (who has made major discoveries in the psychology and physiology of the human sexual response), put together a

Summer Institute in Bioethics for students in Newark's public high schools. Thanks to Merck and the Prudential Center for funding it and to Bob and Barry for great friendship.

Ed Hartman (now putting together a business ethics program at the NYU Stern School of Business) has been nothing less than my savior, both because he rescued me from a great loss and because he taught me to see the virtue in virtue ethics. Ed has as deep an understanding of the *Nicomachean Ethics* as anyone could possibly have and knows how to skillfully apply its insights to the full spectrum of ethical problems. He is one of the most decent people in the world, and I count myself quite fortunate indeed to have his friendship.

But the person who has helped me most is Karen Chaffee. She is a chemist, but her interests also include philosophy, literature, biology, politics, physics, sociology, education, anthropology, and much else. She read *Representation and Reality* so as to be able to discuss my manuscript with me while I was revising it for the first time. Her incisive criticism, philosophical and scientific good sense, and wonderful friendship made the book much, much better than it would have been without her help. Words can help to express my gratitude, but they can go only so far. Whatever there is beyond words, it is there to show the full extent of my gratitude. Thanks, Karen, for sharing your ideas with me.

Dedication

In memory of my mother and father.
For Karen.