

Unsnarling the World-Knot

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*Consciousness, Freedom,
and the Mind-Body Problem*

David Ray Griffin

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Unsnarling the World-Knot
Consciousness, Freedom, and the Mind-Body Problem
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For Charles Birch, who inspired it

Science seems to have driven us to accept that we are all merely small parts of a world governed in full detail (even if perhaps ultimately just probabilistically) by very precise mathematical laws. Our brains themselves, which seem to control all our actions, are also ruled by these same precise laws. The picture has emerged that all this precise physical activity is, in effect, nothing more than the acting out of some vast (perhaps probabilistic) computation—and, hence, our brains and our minds are to be understood solely in terms of such computations. . . . Yet it is hard to avoid an uncomfortable feeling that there must always be something missing from such a picture.

ROGER PENROSE, *THE EMPEROR'S NEW MIND*

I am confident that in our entire philosophical tradition we are making some fundamental mistake, or set of fundamental mistakes in the whole discussion of the free will problem.

JOHN SEARLE, "THE MIND-BODY PROBLEM"

The idea that the mind-body problem is particularly perplexing flows from our unjustified and relatively modern faith that we have an adequate grasp of the fundamental nature of matter at some crucial general level of understanding.

GALEN STRAWSON, *MENTAL REALITY*

Almost all really new ideas have a certain aspect of foolishness when they are first produced.

ALFRED NORTH WHITEHEAD, *SCIENCE AND THE MODERN WORLD*

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My primary ongoing debt is to my wife, Ann Jaqua, who, among many other things, provides a context in which I can focus on matters such as the mind-body problem.

KEY TO ABBREVIATIONS

AI	Alfred North Whitehead, <i>Adventures of Ideas</i> .
AO	Walter F. Elsasser, <i>Atom and Organism: A New Approach to Theoretical Biology</i> .
BABF	Gerald M. Edelman, <i>Bright Air, Brilliant Fire: On the Matter of the Mind</i> .
BH	Charles Hartshorne, <i>Beyond Humanism: Essays in the Philosophy of Nature</i> .
BM	Keith Campbell, <i>Body and Mind</i> , 2d ed.
BP	William S. Robinson, <i>Brains and People: An Essay on Mentality and Its Causal Conditions</i> .
C	William G. Lycan, <i>Consciousness</i> .
CE	Daniel E. Dennett, <i>Consciousness Explained</i> .
CI	Charles Hartshorne, "The Compound Individual."
CIP	William Seager, "Consciousness, Information, and Panpsychism."
CM	Colin McGinn, <i>The Character of Mind</i> .
CN	Jacques Monod, <i>Chance and Necessity: An Essay on the Natural Philosophy of Modern Biology</i> .
CR	Owen Flanagan, <i>Consciousness Reconsidered</i> .
CS	Colin McGinn, "Consciousness and Space."
CSPM	Charles Hartshorne, <i>Creative Synthesis and Philosophic Method</i> .
DL	Charles Hartshorne, <i>The Darkness and the Light: A Philosopher Reflects upon His Fortunate Career and Those Who Made It Possible</i> .
EM	H. D. Lewis, <i>The Elusive Mind</i> .
EOS	W. D. Hart, <i>The Engines of the Soul</i> .
ES	H. D. Lewis, <i>The Elusive Self</i> .
FAR	Peter F. Strawson, <i>Freedom and Resentment and Other Essays</i> .
FOR	Alfred North Whitehead, <i>The Function of Reason</i> .
FR	John C. Eccles, <i>Facing Reality</i> .
FU	David Chalmers, "Facing Up to the Problem of Consciousness."

- GET J. T. Fraser, *The Genesis and Evolution of Time*.
 HBP John L. Pollock, *How to Build a Person: A Prolegomenon*.
 HM Nicholas Humphrey, *A History of the Mind*.
 HS John C. Eccles, *How the Self Controls Its Brain*.
 IHM Thomas Reid, *An Inquiry into the Human Mind*, ed. Timothy Duggan.
 JS Ernest Lepore and Robert van Gulick, eds., *John Searle and His Critics*.
 M J. J. C. Smart, "Materialism."
 MAC Paul M. Churchland, *Matter and Consciousness: A Contemporary Introduction to the Philosophy of Mind*, rev. ed.
 MBP John R. Searle, "The Mind-Body Problem."
 MBS John R. Searle, *Minds, Brains and Science: The 1984 Reith Lectures*.
 MBSC Ted Honderich, "Mind, Brain, and Self-Conscious Mind."
 MBWP John R. Searle, "Minds and Brains without Programs."
 MC William Seager, *Metaphysics of Consciousness*.
 MM Geoffrey Madell, *Mind and Materialism*.
 MMB Curt J. Ducasse, "Minds, Matter and Bodies."
 MMBP Michael E. Levin, *Metaphysics and the Mind-Body Problem*.
 MN John B. Cobb, Jr., and David Ray Griffin, eds., *Mind in Nature: Essays on the Interface of Science and Philosophy*.
 MQ Thomas Nagel, *Mortal Questions*.
 MR Galen Strawson, *Mental Reality*.
 MT Alfred North Whitehead, *Modes of Thought*.
 MW Colin Blakemore and Susan Greenfield, eds., *Mindwaves: Thoughts on Intelligence, Identity, and Consciousness*.
 NYR Thomas Nagel, "The Mind Wins!"
 OCC Karl R. Popper, *Of Clocks and Clouds*.
 PC Colin McGinn, *The Problem of Consciousness: Essays Towards a Resolution*.
 PCH Lewis Edwin Hahn, ed., *The Philosophy of Charles Hartshorne: Library of Living Philosophers XX*.
 POP William James, *Principles of Psychology*, vol. 1.
 PP Charles Hartshorne, "Physics and Psychics: The Place of Mind in Nature."
 PR Alfred North Whitehead, *Process and Reality: An Essay in Cosmology*.
 PRE John Passmore, *Philosophical Reasoning*.
 PS Sewall Wright, "Panpsychism and Science."
 PU William James, *A Pluralistic Universe* (published with *Essays in Radical Empiricism*), ed. Ralph Barton Perry.
 RM John R. Searle, *The Rediscovery of the Mind*.
 RIM Alfred North Whitehead, *Religion in the Making*.
 SAB Karl R. Popper and John C. Eccles, *The Self and Its Brain: An Argument for Interactionism*.
 SB Lynne Rudder Baker, *Saving Belief: A Critique of Physicalism*.

SM	Jaegwon Kim, <i>Supervenience and Mind: Selected Philosophical Essays</i> .
SMP	Roger Sperry, <i>Science and Moral Priority: Merging Mind, Brain, and Human Values</i> .
SMW	Alfred North Whitehead, <i>Science and the Modern World</i> .
UU	David Bohm and B. J. Hiley, <i>The Undivided Universe: An Ontological Interpretation of Quantum Theory</i> .
VN	Thomas Nagel, <i>The View from Nowhere</i> .
VRE	William James, <i>Varieties of Religious Experience</i> .
WJP	Marcus P. Ford, <i>William James's Philosophy: A New Perspective</i> .

Introduction

This book suggests both a formal procedure for making progress on the mind-body problem and a substantive solution to it, with special attention to consciousness and freedom. The mind-body problem, which Arthur Schopenhauer called the “world-knot,” has arguably been the central problem in modern philosophy since its inception in the seventeenth century. With regard to the twentieth century in particular, John Searle in *The Rediscovery of the Mind* (1992) has expressed his considered judgment that, “contrary to surface appearances, there really has been only one major topic of discussion in the philosophy of mind for the past fifty years or so, and that is the mind-body problem” (*RM*, 29).

As indicated by the titles of a number of recent books—for example, Nicholas Humphrey’s *Consciousness Regained* (1983), William Lycan’s *Consciousness* (1987), Paul Churchland’s *Matter and Consciousness* (1988), Alastair Hannay’s *Human Consciousness* (1990), Colin McGinn’s *The Problem of Consciousness* (1991), William Seager’s *Metaphysics of Consciousness* (1991), Daniel Dennett’s modestly titled *Consciousness Explained* (1991), and Owen Flanagan’s *Consciousness Reconsidered* (1992)—consciousness has widely come to be seen as lying at the heart of the mind-body problem. Consciousness, says McGinn, is “the hard nut of the mind-body problem” (*PC*, 1). Dennett says (somewhat optimistically), “Human consciousness is just about the last surviving mystery” (*CE*, 21). Seager, speaking of the difficulty of fitting psychology into the hierarchy of the sciences, says that “the source of the difficulty is consciousness” (*MC*, 185–86). Humphrey, in *A History of the Mind* (1992), says, “The mind-body problem is the problem of explaining how states of consciousness arise in human brains” (*HM*, 2–3). John L. Pollock, in *How To Build a Person* (1989), has said, “The most perplexing problem for any materialist theory of the person is that of making sense of

consciousness" (*HBP*, 28). Thomas Nagel, whose work, especially "What Is It Like to Be a Bat?" has provoked much of the current ferment, says, "Consciousness is what makes the mind-body problem really intractable" (*MQ*, 165). In *Mental Reality* (1994), Galen Strawson, using "experience" synonymously with "consciousness," says that "the existence of experience is the only hard part of the mind-body problem for materialists" (*MR*, 93).

The problem of consciousness, as the central feature of the mind-body problem, is also widely seen as a problem for science (not simply for philosophy). Colin Blakemore and Susan Greenfield, editors of *Mindwaves: Thoughts on Intelligence, Identity, and Consciousness* (1987), say that "the nature of consciousness may come to be seen as the central problem of research on the brain" (*MW*, vii). A few recent books (besides some of those already mentioned) illustrating this point are Roger Penrose's *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics* (1989), Gerald M. Edelman's *Bright Air, Brilliant Fire: On the Matter of the Mind* (1992), and Israel Rosenfield's *The Strange, Familiar, and Forgotten: An Anatomy of Consciousness* (1992).

Whereas it is now widely recognized by dualists and materialists alike that human consciousness creates a serious, perhaps intractable, mind-body problem for modern philosophy and science, the fact that human freedom is part of that problem is much less widely recognized, especially among materialists. Nevertheless, I will argue, we all inevitably presuppose that we have not only consciousness but also (a significant degree of) freedom, so that any acceptable solution to the mind-body problem must also be able to account for our freedom. I have pointed to the equal importance of this issue by including "freedom" in this book's subtitle. Indeed, I consider chapter 9, in which freedom is defended, to be the most important chapter of the book. The earlier chapters, although important in their own right, prepare the way for understanding how the kind of freedom that we all presuppose in practice can be affirmed in theory.*

This book is based on the conviction that a development that has occurred in the intense and extensive current discussion provides an opportunity for a breakthrough with regard to the central metaphysical assumption that has led to the intractability of the mind-body problem, an intractability that has taken the form of a standoff between dualists and materialists. Although dualists were in the majority in the early part of the modern period and materialists have been in the ascendancy since the second half of the nineteenth century, each side has always faced insuperable difficulties. During most of this period, given the assumption that materi-

*Jaegwon Kim says, "Mental causation arguably is the central issue in the metaphysics of mind" (*SM*, xv). (Although the affirmation of mental causation is not ipso facto an affirmation of genuine freedom, it is a necessary condition.)

alism (sometimes called physicalism) and dualism were the only serious options, dualists were content to rest the case for their position primarily on the fact that materialism confronted insoluble problems. Materialists in turn rest their case primarily on the insuperable obstacles faced by dualism. Each side, accordingly, largely ignored or at least minimized the problems in its own position. The recent development that has occurred is a much greater willingness by advocates on both sides to admit the deep problems in their own positions.

On the dualist's side, Geoffrey Madell, in *Mind and Materialism* (1988), has been particularly frank about "the difficulties which any dualist position confronts" (*MM*, preface [n.p.]). While arguing that materialism's problems are so great that "interactionist dualism looks to be by far the only plausible framework in which the facts of our experience can be fitted" (*MM*, 135), he admits that "the nature of the causal connection between the mental and the physical, as the Cartesian conceives of it, is utterly mysterious" (*MM*, 2). He also concedes the "inexplicability" of the appearance of consciousness at some point in the course of evolution and in the development of each embryo, prior to which everything was understandable in terms of physical laws alone (*MM*, 140f.). He offers, accordingly, only "a limited and qualified defense of dualism" (*MM*, 9).

Madell's confession of inexplicable mystery was anticipated in 1977 by fellow dualist Karl Popper. In an earlier book, Popper had seemed confident of finding a solution. "What we want," he said, "is to understand how such nonphysical things as *purposes, deliberations, plans, decisions, theories, tensions, and values* can play a part in bringing about physical changes in the physical world" (*OCC*, 15). But in the 1977 book he wrote with John Eccles, *The Self and Its Brain: An Argument for Interactionism*, he admitted that understanding *how* interaction occurred between nonphysical mind and physical brain was perhaps impossible. "Complete understanding, like complete knowledge," said Popper, "is unlikely to be achieved" (*SAB*, 105). Popper was not as ready as Madell now is to admit that this constitutes a serious problem for the dualistic hypothesis, but his admission is significant nonetheless.

More remarkable and extensive has been the change in attitude on the part of those who reject dualism in favor of some form of physicalism or materialism.* On this side, Thomas Nagel's writings have been especially influential. While rejecting a distinct mind or soul and hence dualistic in-

*Throughout most of this book I use "physicalism" and "materialism" interchangeably, in line with widespread practice (e.g., Jaegwon Kim [*SM*, 266n]). Accordingly, I normally refer to the position I advocate, panexperientialism, as an alternative to both dualism and physicalism. In chapter 10 as well as in a few anticipatory references, however, I point out that my kind of panexperientialism could be considered a form of physicalism. This usage implies a distinction between "materialist physicalism" and "panexperientialist physicalism."

teractionism (*MQ*, 182, 190, 211; *VN*, 29), Nagel has said that the drive to develop a physicalist account of mind has led to “extremely implausible positions” (*VN*, 15). Although he is not ready to conclude that physicalism must be false, he does say that “physicalism is a position we cannot understand because we do not at present have any conception of how it might be true” (*MQ*, 176). Colin McGinn, having been stimulated by Nagel, has created a considerable stir by going even further. While rejecting dualism and affirming physicalism more emphatically than does Nagel,* he argues that our present perplexity is terminal, that we will *never* be able to resolve the mystery of how consciousness could emerge from the brain (*PC*, 1–2, 7). William S. Robinson is equally emphatic. Although he thinks that a physicalistic approach can do justice to more mental phenomena than do Nagel and McGinn, he argues in *Brains and People* (1988) that it cannot handle sensations, such as pains. There is no imaginable story, he says, that leads from talk of neurons in the brain to “our seeing why *such* a collection of neurons has to be a pain.” And this absence of understanding, Robinson adds, “is not merely a temporary limitation” (*BP*, 29). William Seager, although not ready to declare that physicalism will never solve the mind-body problem, says that the record thus far suggests that this may well turn out to be the case. In spite of holding that physicalism “still deserves our allegiance” (*MC*, 224), he says that “the degree of difficulty in formulating an explicit version of physicalism which is not subject to immediately powerful objections is striking” (*MC*, 4). Reviewing the various types of physicalism (type-identity theory, functionalism, token-identity theory, psychological instrumentalism, eliminative materialism), he says, “Taken as a group they appear as an orderly retreat becoming a rout” (*MC*, 32). The attempt to deal with consciousness in terms of the normal explanatory method of physically resolving higher phenomena into lower elements results, Seager says, in “a ‘principled breakdown’ of the explanatory scheme,” adding that “it remains true, and may forever remain true, that we have no idea whatsoever of *how* the physical states of a brain can constitute consciousness” (*MC*, 195). In a similar vein, Galen Strawson says that the “mysteriousness, for us, of the relation between the experiential and the physical-as-discerned-by-physics is . . . a sign of how much is at present, and perhaps forever, beyond us” (*MR*, 50). Likewise, Jaegwon Kim’s 1993 book, *Supervenience and Mind*, concludes with the reflection that the physicalists’ attempt to save the reality of the mental seems “to be up against a dead end” (*SM*, 367).

*Although (as I know from personal conversation) McGinn would reject physicalism or materialism under one definition, according to which it holds that consciousness is identical with the brain in such a way as also to be a spatial entity or property, he does, like Nagel, accept a two-aspect version of physicalism.

For good measure we can throw in a similar conclusion by an advocate of epiphenomenalism, which, being halfway between dualism and materialism, can be considered an aberrant version of one or the other. Keith Campbell, the second edition of whose *Body and Mind* appeared in 1984, at one time had accepted materialism. But he came to reject it after deciding that phenomenal properties, such as the feeling of pain, could not be properties material objects could have (*BM*, 105–9). His “new epiphenomenalism” says that we do have a spiritual mind, which is produced by the body, but that it does not act back on the body (which allows a physicalist, deterministic account of human behavior, the need for which is a regulative principle for Campbell [*BM*, 125]). Recognizing that his position shares an “embarrassing” question with dualism, namely, how a “spiritual mind”—our awareness with its phenomenal properties—can be “caused by changes in sense organs and brain,” he says: “How this is done we do not know. . . . I suspect that we will never know how the trick is worked. This part of the Mind-Body problem seems insoluble. This aspect of humanity seems destined to remain forever beyond our understanding” (*BM*, 131).

This new situation—the recognition by leading advocates on all sides of unresolved and probably unresolvable problems within their own positions—provides an opportunity for a conceptual breakthrough insofar as it has led to the realization that a satisfactory solution will have to move beyond assumptions of long standing. Nagel has again led the way. “The world is a strange place,” he says, “and nothing but radical speculation gives us the hope of coming up with any candidates for truth” (*VN*, 10). Suggesting the direction that this radical speculation should take, he says that “any correct theory of the relation between mind and body would radically transform our overall conception of the world and would require a new understanding of the phenomena now thought of as physical” (*VN*, 8).

Strawson* agrees. Saying that “the enormity of the mind-body problem” requires a “radical response,” he predicts that a solution, if possible at all, will involve a “revolution” in our conception of the nature of the physical (*MR*, 99, 92). McGinn locates the intractability of the mind-body problem in “our inadequate conception of the nature of the brain and consciousness” (*PC*, 2n). Although doubting that we are up to the kind of radical reconception that would be needed, he does agree that “something pretty remarkable” would be necessary to find a constructive solution to the mind-brain relation (*PC*, 2, 86, 104).

John Searle has been particularly caustic in his treatment of the materialist tradition, saying that the “most striking feature of . . . mainstream phi-

*Because I discuss both Galen Strawson and Peter Strawson, referring simply to “Strawson” could be confusing. However, my discussion of Peter Strawson is limited to section V of chapter 9. All references to “Strawson” before that are to Galen Strawson.

losophy of mind of the past fifty years" is how much of it "seems obviously false" (*RM*, 3). It also, Searle suggests, reflects a neurotic-like pattern of behavior:

A philosopher advances a materialist theory of the mind. . . . He then encounters difficulties. . . . [C]riticisms of the materialist theory usually take a more or less technical form, but in fact, underlying the technical objections is a much deeper objection . . . : The theory in question has left out . . . some essential feature of the mind, such as consciousness or 'qualia' or semantic content. . . . And this leads to ever more frenzied efforts to stick with the materialist thesis and try to defeat the arguments put forward by those who insist on preserving the facts. After some years of desperate maneuvers to account for the difficulties, some new development is put forward that allegedly solves the difficulties, but then we find that it encounters . . . the same old difficulties. (*RM*, 30)

"After half a century of this recurring pattern in debates about materialism," Searle adds, "one might suppose that the materialists and the dualists would think there is something wrong with the terms of the debate. But so far this induction seems not to have occurred to either side" (*RM*, 49). Searle believes that the basic problem is that materialism has accepted the vocabulary and categories of Cartesian dualism, according to which if something is "physical" it cannot also be "mental," and if something is "mental" it cannot also be "physical" (*RM*, 14, 26, 54). A constructive solution will require a reconception in which this "conceptual dualism" (*RM*, 26) is rejected.

Although I do not believe, for reasons I will give later, that Searle's own way of rethinking the relation between physicality and mentality provides the basis for a satisfactory solution, I do believe that his formal recommendations about the kind of radical reconceptualizing that we need, along with those of Nagel, McGinn, and Strawson, point in the right direction. This growing awareness by both dualists and materialists of the inadequacy of their own positions, I have suggested, creates an opportunity for real progress on the mind-body problem, because it reveals the need for more radical reconceptualization. The perception of this need should lead, in turn, to a greater openness to alternative approaches. One philosopher who has especially realized this implication is Strawson. Taking alternative views such as idealism and panpsychism seriously, says Strawson, is part of "a proper response" to the fact that, given standard assumptions about the physical and the mental, the mind-body problem has proved to be intractable (*MR*, 75, 108). My book is an attempt to get a hearing for a particular version of one of these alternative approaches.

As my comments thus far should make clear, I think that the basic problem has been conceptual, which means that the solution must be a philo-

sophical one. This does not mean that I belittle the role science has to play. On the contrary. One of my central purposes is to remove from the back of scientists a false problem with which they have been saddled by bad philosophy, so that they will be free to work without distraction on the properly scientific dimensions of the problem of consciousness. That is, most scientists working in this area have been trying, among other things, to answer a question that is impossible in principle to answer. No amount of empirical research, no matter how brilliant, can answer such a question.

Little progress has been made on the “problem of consciousness,” beyond the not unimportant progress of heightening the dissatisfaction with both dualism and materialism, I suggest, for a number of interrelated reasons.

1. Insufficient clarity has been attained on exactly *what problem* is being addressed.
2. Insufficient attention has been given to the role that both *paradigmatic* and *wishful-and-fearful* thinking play in determining our intuitions about regulative principles and data and thereby our theories.
3. The kind of *common sense* that can be overridden by scientific theory has seldom been distinguished from the kind that cannot.
4. Insufficient clarity has been attained about the *regulative principles*, both formal and substantive, that should be exemplified if a theory is to be considered a serious candidate for acceptance.
5. There has been insufficient clarity about the *data* to which an adequate theory should do justice.
6. It is seldom realized that the mind-body problem is rooted even more deeply in the “Cartesian intuition” about the body than in that about the mind.
7. In spite of widespread agreement, especially by nondualists, that “mind should be naturalized,” the two fundamental features of mind, *experience* and *self-determination*, have generally not been taken to be fully natural. This has led to the false conclusion that dualism and materialism provide the only realistic options (with “realism” understood as the view that the physical universe really exists, independently of human perception and thought). This false conclusion has meant that the third form of realism, panexperientialism, has been virtually ignored.

These seven problems, I suggest, are the various snarls that together have constituted the world-knot. Unsnarling this knot will require overcoming each of these problems. The first seven chapters of this book deal with these seven problems in turn. Chapters 8 and 9 then provide a solution (begun in chapter 7) to the mind-body problem, focusing on consciousness and on freedom, respectively. Chapter 10 then makes the nature and adequacy of

this panexperientialist position clearer by means of a critique of materialist physicalism as articulated in Jaegwon Kim's *Supervenience and Mind*. Interestingly, it turned out that the order of the chapters, although determined in the light of the logical order in which the various issues had to be discussed, also reflected the difficulty of the various issues. Chapters 1 through 9, accordingly, became progressively longer.

ONE

What Is the Problem?

A perusal of books and essays on “the mind-body problem” or “the problem of consciousness” will often reveal that “the” problem being addressed actually comprises two or even more of the following distinguishable problems:

1. How could *experience* (whether conscious or not) arise out of, and perhaps act back on, nonexperiencing things (or events, or processes)?
2. How could a *unified* experience arise out of, and perhaps act back on, a brain?
3. How could *conscious* experience arise out of, and perhaps act back on, a brain?
4. How could *self-conscious* experience arise out of, and perhaps act back on, a brain?
5. How could conscious animal experience have arisen in the evolutionary process out of nonconscious animal experience?
6. How could self-conscious experience have arisen in the evolutionary process out of merely conscious animal experience?

The failure to distinguish among these various dimensions of the overall problem has led to many a confusion. The most serious has been the assumption that Problem 1 is necessarily part of, perhaps even identical with, any or all of the next three problems. This confusion is so serious because Problem 1 is based on a metaphysical assumption that is pure supposition, and one that, on reflection, is revealed to be dubious. After all, an amoeba, like a neuron, is a single-celled organism, and an amoeba shows signs of spontaneity suggestive of some slight degree of experience. If amoebas might have experience, why might not neurons in the brain have experi-

ence as well? It is, however, almost universally assumed that they do not, and it is this assumption that lies at the heart of the mind-body problem. For example, on the first page of *The Problem of Consciousness*, McGinn formulates the problem in terms of the question, "How could the aggregation of millions of individually insentient neurons generate subjective awareness?" In any case, whatever one's intuitions or judgments about these matters, it should not simply be assumed that a discussion of Problem 2 (and perhaps Problems 3 and 4) necessarily involves Problem 1.

Making this distinction is especially important if, as I maintain, Problem 1 is insoluble in principle (which Popper, Campbell, Nagel, and Seager have implied and McGinn and Robinson have explicitly asserted). This point has practical as well as theoretical importance: A good deal of money, much of it from taxes, is being spent on research programs in which the first three (and perhaps four) problems are simply equated.

To make this point is not to be antiscience. To the contrary, the point is to distinguish the properly scientific questions, which can in principle be answered by empirical research, from a confused metaphysical question, which cannot be answered. Given Problems 2 through 6, scientists (perhaps in cooperation with philosophers) have a difficult enough assignment without having to do the impossible as well.

Incidentally, although the distinction between Problems 5 and 6, on the one hand, and Problems 3 and 4, on the other, will not play a central role here, I mention it for the sake of completeness and because of its importance. It should not simply be assumed, for example, that an answer to Problem 4, which involves the relation between self-consciousness and the brain, would automatically answer Problem 6, which involves the evolutionary relation of self-conscious experience to prior experience that enjoyed consciousness but not yet self-consciousness. The emergence of distinctively self-conscious experience may have depended on certain social developments rather than, or at least as well as, further neurological changes. This distinction is related to the recent discussion, in physicalist philosophy of mind circles, of the extent to which the content of consciousness is related to "extrinsic" realities beyond the present, "intrinsic" state of one's body.

In summary, the formal point of this chapter is that scientists and philosophers need to become clear about exactly which problem or problems they are seeking to answer. The main polemical point is that Problem 1 is probably a pseudoproblem and should not, in any case, be simply assumed to be involved in any of the other problems. Because it is *the* problem that has made the "mind-body problem" intractable thus far and has led to the growing consensus that it is probably permanently insoluble, separating the other problems from this one is likely to be a precondition for answering them.

TWO

Paradigmatic and Wishful-and-Fearful Thinking

Philosophers and scientists are supposed to be empiricists, in the broad sense of taking into account all the kinds of evidence that are relevant to the question at hand. Various factors conspire, however, to make the reality fall short of the ideal. The most important of these factors are paradigmatic thinking, wishful-and-fearful thinking, and the interaction between them.

Thomas Kuhn's discussion of the role of paradigms in science has led to much greater awareness of the power of paradigmatic thinking, both its inevitability and its dangers. Its chief danger, of course, is that it may blind us to genuine phenomena that do not fit the paradigm or, when these phenomena are forced on our attention, lead us dogmatically to reject them *a priori*. Although we may be genuinely motivated by the desire for truth, we may become so convinced that our present framework is the one and only route to truth that open-minded consideration of the evidence becomes virtually impossible. Strong social dimensions are also involved: We are usually socialized into a paradigm through our schooling, and the paradigm is more or less subtly enforced by hiring, promotion, and tenure committees, by grant-authorizing committees, by journal editors and referees, by book reviewers, and so on. If there are data that do not fit the currently dominant paradigm, it is very difficult for most philosophers and scientists to take them into account—or at least to do so publicly, so that these data would be brought to the attention of other thinkers.

The phenomenon of wishful thinking is also well known. We tend to believe what we wish to be the case. Equally important is the other side of the dynamic, which I follow Susan Haack in calling "fearful thinking."¹ We tend to reject *a priori* all those things that we do not want to be true, or at least do not want to be generally believed. For example, some thinkers seem to espouse a dualistic view of the mind-body relation primarily because they

want to support belief in life after death, perhaps fearing that a loss of this belief will lead to a general nihilism and loss of morality. Other thinkers, considering belief in life after death pernicious (perhaps the "opiate of the masses"), may adopt a materialistic view primarily to support the impossibility of life after death. The way these two types of thinkers weigh data and arguments may at least be significantly influenced by their respective wishes and fears. In this way, the wish (or the fear) may be the parent of the paradigm.

The causal relation can also work the other way, as there can be paradigm-induced wishful-and-fearful thinking, especially among intellectuals, whose personal as well as professional egos may be very attached to the way they have come to understand the world. John Searle regards this dynamic as essential to understanding why the currently dominant materialistic views are held so widely and so tenaciously, in spite of their implausibility:

One of the unstated assumptions behind the current batch of views is that they represent the only scientifically acceptable alternatives to the antiscientism that went with traditional dualism, the belief in the immortality of the soul, spiritualism, and so on. Acceptance of the current views is motivated not so much by an independent conviction of their truth as by a terror of what are apparently the only alternatives. (*RM*, 3)

"The deepest motivation of materialism," Searle suggests, "is simply a terror of consciousness" with its "essentially terrifying feature of subjectivity," which most materialists think to be "inconsistent with their conception of what the world must be like" (*RM*, 55).

Of special importance in trying to see through the assumptions that have made the mind-body problem seem insoluble is the evidence, reported by recent historians of science, that the dualistic worldview, which most scientists and philosophers now wish to avoid, was itself significantly a product of wishful-and-fearful thinking. One motive in the seventeenth century for affirming an absolute dualism between soul and body was to support the immortality of the former: In several of the "Renaissance naturalisms," self-motion, which Plato had seen as distinctive of soul, was attributed to *all* natural entities. On this basis, some "mortalists" were arguing that the evident fact that the soul is a self-moving thing is no argument for its immortality, for the body, which is clearly mortal, is also composed of self-moving things. The assertion by René Descartes, Robert Boyle, Isaac Newton, and other founders of the early modern worldview that matter is totally inert and insentient provided the basis for saying that the mind or soul is different in kind from matter, therefore arguably immortal.² The view of matter as inert also provided an argument for God: Against those who were arguing for an atheistic, pantheistic, or panentheistic view of the universe as a self-organizing organism, Boyle and Newton used the view

that matter is essentially inert to point to the need for an external First Mover.³ Newton also supported the existence of a transcendent deity by interpreting gravity in the light of the view that matter is devoid of all hidden (occult) properties: Because it is absurd to hold that the power to exert attraction at a distance is inherent in matter, he argued, the phenomenon of gravitational attraction points to the need for a transcendent explanation.⁴ This denial to matter of the power to exert influence at a distance was also used by Fr. Marin Mersenne and others to support the notion that the Christian miracles, which had traditionally been taken as divine designations of Christianity as the One True Religion, did indeed point to supernatural intervention. A threat to this belief had been posed by Renaissance naturalists and Hermeticists who, by regarding the capacity to exert and receive influence at a distance as purely natural, described the so-called miracles in the New Testament and the lives of the Christian saints as simply extraordinary but not supernatural happenings, no different in kind from similar types of events in other traditions. To counter this threat, Mersenne chose the Democritean view of matter, recently revived by Galileo and Gasendi, in part because it declared influence at a distance naturally impossible, thereby pointing to the need for a supernatural intervention to account for the Christian miracles.⁵ Still another motive behind the view of matter as totally inert and insentient, evident in both Descartes and Boyle, was the desire to be able to use the nonhuman world for human purposes without compunction.*

The mechanistic view of nature was the product of this kind of wishful-and-fearful thinking more than of any direct insight by the seventeenth-century geniuses into the nature of what matter is in itself. Of course, thinking of matter *as if* it were nothing but what could be treated by the method employed by modern science has proved enormously successful for certain purposes in certain areas. But to assume that matter *really is* nothing but this may be a distorting result of another common form of wishful thinking, that of turning a method into a metaphysic.

The awareness that the dualistic paradigm was significantly based on this kind of wishful-and-fearful thinking becomes even more important when we realize that materialism is simply a decapitated version of the worldview created by the dualistic supernaturalists. That is, materialism lopped off God and the soul while retaining that worldview's idea of matter—even though this idea of matter had been constructed in large part precisely to show the necessity for an external deity and a different-in-kind soul.

*Descartes's denial of experience to "nature," which included all nonhuman animals, was used to justify exploitative practices such as hunting and vivisection (Leonora Cohen Rosenfield, *From Beast-Machine to Man-Machine* [Oxford: Oxford University Press, 1940], 15–16, 22, 47–48).