



THE MIND'S I

FANTASIES AND REFLECTIONS ON SELF AND SOUL

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Basic Books 50 YEARS

Preface

What is the mind? Who am I? Can mere matter think or feel? Where is the soul? Anyone who confronts these questions runs headlong into perplexities. We conceived this book as an attempt to reveal these perplexities and make them vivid. Our purpose is not so much to answer the big questions directly as to jolt everyone: people who are committed to a hard-nosed, no-nonsense scientific world view; as well as people who have a religious or spiritualistic vision of the human soul. We believe there are at present no easy answers to the big questions, and it will take radical rethinking of the issues before people can be expected to reach a consensus about the meaning of the word "I." This book, then, is designed to provoke, disturb and befuddle its readers, to make the obvious strange and, perhaps, to make the strange obvious.

We would like to thank the contributors and the many people who have advised and inspired us.....

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Introduction

You see the moon rise in the east. You see the moon rise in the west. You watch two moons moving toward each other across the cold black sky, one soon to pass behind the other as they continue on their way. You are on Mars, millions of miles from home, protected from the killing frostless cold of the red Martian desert by fragile membranes of terrestrial technology. Protected but stranded, for your spaceship has broken down beyond repair. You will never again return to Earth, to the friends and family and places you left behind.

But perhaps there is hope in the communication compartment of the disabled craft you find a Teleclone Mark IV teleporter and instructions for its use. If you turn the teleporter on, tunes its beam to the Teleclone receiver on Earth, and then step into the sending chamber, the teleporter will swiftly and painlessly dismantle your body, producing a molecule-by-molecule blueprint to be beamed to Earth, where the receiver, its reservoirs well stocked with the requisite atoms, will almost instantaneously produce, from the beamed instructions – you! Whisked back to Earth at the speed of light, into the arms of your loved ones, who will soon be listening with rapt attention to your tales of adventures on Mars.

One last survey of the damaged spaceship convinces you that the Teleclone is your only hope. With nothing to lose, you set the transmitter up, flip the right switches, and step into the chamber. 5 4, 3, 2, 1, FLASH! You open the door in front of you and step out of the Teleclone receiver chamber into the suny, familiar atmosphere of Earth. You've come home, none the worse for wear after your long-distance Teleclone fall

from Mars. Your narrow escape from a terrible fate on the red planet calls for a celebration, and as your family and friends gather around, you notice how everyone has changed since you last saw them. It has been almost three years, after all, and you've all grown older. Look at Sarah, your daughter, who must now be eight and a half. You find yourself thinking "Can this be the little girl who used to sit on my lap?" Of course it is, you reflect, even though you must admit that you do not so much recognize her as extrapolate from memory and deduce her identity. She is so much taller, looks so much older, and knows so much more. In fact, most of the cells in her body were not there when last you cast eyes on her. But in spite of growth and change, in spite of replacement cells, she's still the same little person you kissed goodbye three years ago.

Then it hits you: "Am *I*, really, the same person who kissed this little girl goodbye three years ago? Am I this eight year old child's mother or am I, actually a brand-new human being, only several hours old, in spite of my memories – or apparent memories – of days and years before that? Did this child's mother recently die on Mars, dismantled and destroyed in the chamber of a Teleclone Mark IV?

Did I die on Mars? No, certainly *I* did not die on Mars, since I am alive on Earth. Perhaps, though, *someone* died on Mars – Sarah's mother. Then I am not Sarah's mother. But I must be" The whole point of getting into the Teleclone was to return home to my family! But I keep forgetting; maybe *I* never got into that Teleclone on Mars. Maybe that was someone else – if it ever happened at all. Is that infernal machine a *tele-porter* – a mode of transportation – or, as the brand name suggests, a sort of murdering twinmaker? Did Sarah's mother survive the experience with the Teleclone or not? She thought she was going to. She entered the chamber with hope and anticipation, not suicidal resignation. Her act was altruistic, to be sure – she was taking steps to provide Sarah with a loved one to protect her – but also selfish – she was getting herself out of a jam into something pleasant. Or so it seemed. How do I know that's how it seemed? Because I was *there*; I *was* Sarah's mother thinking those thoughts; I *am* Sarah's mother. Or so it seems.

In the days that follow, your spirits soar and plummet, the moments of relief and joy balanced by gnawing doubts and soul searching. *Soul searching*. Perhaps, you think, it isn't right to go along with Sarah's joyous assumption that her mother's come home. You feel a little bit like an imposter and wonder what Sarah will think when some day she figures out what really happened on Mars. Remember when she figured out about Santa Claus and seemed so confused and hurt? How could her own mother have deceived her all those years?

So, now it's with more than idle intellectual curiosity that you pick up

This copy of *The Mind's I* and begin to read it, for it promises to lead you on a voyage of discovery of the self and the soul. You will learn, it says, something about what and who you are.

You think to yourself.

Here I am reading page 5 of this book; I see my hands holding this book. I have hands. How do I know they're my hands? Silly question. hey're fastened to my arms, to my body. How do I know this is *my* body? I control it. Do I own it? In a sense I do. It's mine to do with it as I like, so long as I don't harm others. It's even a sort of legal possession, for while I may not legally sell it to anyone so long as I am alive, I can legally transfer ownership of my body, to, say a medical school once it is dead.

If I *have* this body, then I guess I'm something *other than* this body. When I say "I own my body" I don't mean "This body owns itself" - probably a meaningless claim. Or does everything that no one else owns own itself? Does the moon belong to everyone, to no one, or to itself? What can be an owner of anything? I can, and my body is just one of the things I own. In any case, I and my body seem both intimately connected and yet distinct. I am the controller, it is the controlled. Most of the time.

Then *The Mind's I* asks you if in that case you might exchange your body for another, a stronger or more beautiful or more controllable body.

You think that this is impossible.

But, the book insists, it is perfectly imaginable, and hence possible in principle..

You wonder whether the book has in mind reincarnation of the transmigration of souls, but, anticipating the wonder, the book acknowledges that while reincarnation is one interesting idea, the details of how this might happen are always left in the dark, and there are other more interesting ways it might happen. What if your brain were to be transplanted into a new body, which it could then control? Wouldn't you think of that as switching bodies? There would be vast technical problems, of course, but, given our purposes, we can ignore them.

It does seem then (doesn't it?) that if your brain were transplanted into another body, *you* would go with it. But, *are* you a brain? Try on two sentences, and see which one sounds more like the truth to you:

I have a brain.

I am a brain.

Sometimes we talk about smart people being brains, but we don't mean it literally. We mean they have good brains. You have a good brain, but who or what, then, is the you that has the brain? Once again, if you have a brain, could you trade it in for another? How could anyone detach

you from your brain in a brain switch, if you are always *go with* your brain in a body switch? Impossible? Maybe not, as we shall see. After all, if *you* have recently returned from Mars, you left your old brain behind, didn't you? So suppose we agree that you have a brain. Have you ever stopped to ask yourself how you know you have a brain? You've never seen it, have you? You can't see it, even in a mirror, and you can't feel it. But of course you do know you have a brain. You know it because you know that you're a human being and all human beings have brains. You've read it in books and been told it by people you trust. All people have livers too, and strangely enough what you know about your own brain is rather like what you know about your own liver. You trust what you've read in books. For many centuries people didn't know what their livers were for. It took science to discover the answer. People haven't always known what their brains were for either. Aristotle is said to have thought that the brain was an organ for cooling the blood – and of course it does cool your blood quite efficiently in the course of its operations. Suppose our livers had been in our skulls and our brains were snuggled into our ribcages. As we looked out at the world and listened, do you think we might have found it plausible that we *thought with our livers*? Your thinking seems to happen behind your eyes and between your ears – but that is because that's where your brain is, or is that because you locate yourself, roughly, at the place you see from? Isn't it in fact just as mind boggling to try to imagine how we could think with our brains – those soft grayish cauliflower shaped things – as to imagine how we could think with our livers – those soft reddish brown liver shaped things?

The idea that what you are is not simply a living body (or a living brain) but also a soul or spirit seems to many people to be unscientific, in spite of its ancient tradition. "Souls," they might want to say, "have no place in science and could never fit into the scientific world view. Science teaches us that there are no such things as souls. We don't believe in leprechauns and ghosts any more, thanks to science, and the suspect idea of a soul inhabiting a body – the 'ghost in the machine' – will itself soon give up the ghost." But not all versions of the idea that you are something distinct from your purely physical body are so vulnerable to ridicule and refutation. Some versions, as we shall see, actually flourish in the garden of science.

Our world is filled with things that are neither mysterious and ghostly nor simply constructed out of the building blocks of physics. Do you believe in voices? How about haircuts? Are there such things? What are they? What, in the language of the physicist, is a hole – not an exotic black hole, but just a hole in a piece of cheese, for instance? Is it a physical thing? What is a symphony? Where in space and time does "The Star

Spangled banner” exist? Is it nothing but some ink trails on some paper in the Library of Congress? Destroy that paper and the anthem would still exist. Latin still *exists*, but it is no longer a living language. The language of the cave people of France no longer exists at all. The game of bridge is less than a hundred years old. What sort of thing is it? It is not animal, vegetable or mineral.

These things are not physical objects with mass, or a chemical composition, but are not purely abstract objects either – objects like the number π , which is immutable and cannot be located in space and time. These things have birthplaces and histories. They can change and things can happen to them. They can move about – much the same way a species, a disease, or an epidemic can. We must not suppose that science teaches us that every *thing* anyone would ever want to take seriously is identifiable as a collection of particles moving about in space and time. Some people may think it is just common sense (or just good scientific thinking) to suppose *you* are nothing but a particular living, physical organism – a moving around of atoms – but in fact this idea exhibits a lack of scientific imagination, not hard-headed sophistication. One doesn’t have to believe in ghosts to believe in selves that have an identity that transcends any particular living body.

You are Sarah’s mother, after all. But is Sarah’s mother you? Did she die on Mars, or was she moved back to Earth? It seems to you she returned to Earth – and of course it seemed to her before she stepped into the teleporter that she would return to Earth. Was she right? Maybe, but what would you say about the results of using the new, improved Teleclone Mark V? Thanks to the miracles of noninvasive CAT-scanning techniques, it obtains its blueprint *without destroying the original*. Sarah’s mother still might decide to push the button and step into the chamber -- for Sarah’s sake, and in order to get the full story of her tragedy back to earth in the words of an eloquent spokeswoman – but she would also expect to step out of the chamber and find herself still on Mars. Could someone – some *one* – literally be in two places at once? Not for long, in any case, but soon the two would accumulate different memories, and different lives. They would be as distinct as any two people could be.

Private Lives

What makes you you, and what are your boundaries? Part of the answer seems obvious – you are a centre of consciousness. But what in the world is consciousness? Consciousness is both the most obvious and

the most mysterious feature of our minds. On the one hand, what could be more certain or manifest to each of us that that he or she is a subject of experience, an enjoyer of perceptions and sensations, a sufferer of pain, and entertainer of ideas, and a conscious deliberator? On the other hand, what in the world can consciousness be? How can living physical bodies in the physical world produce such a phenomenon? Science has revealed the secrets of many initially mysterious natural phenomena – magnetism, or photosynthesis or digestion are in principle equally accessible to any observer with the right apparatus, but any particular case of consciousness seems to have a favored or privileged observer, whose access of any others – no matter what apparatus they may have. For his reason and others, so far there is no good theory of consciousness. There is not even agreement about what a theory of consciousness would be like. Some have gone so far as to deny that there is any real thing for the term “consciousness” to name.

The mere fact that such a familiar feature of our lives has resisted for so long all attempts to characterize it suggests that our conception of it is at fault. What is needed is not just more evidence, more experimental and clinical data, but a careful rethinking of the assumptions that lead us to suppose there is a single and familiar phenomenon, consciousness, answering to all the descriptions licensed by our everyday sense of the term. Consider the baffling questions that are inevitably raised whenever one turns one’s attention to consciousness. Are other animals conscious? Are they conscious in the same way we are? Could a computer or a robot be conscious? Can a person have unconscious thoughts? Unconscious pains or sensations or perceptions? Is a baby conscious at or before birth? Are we conscious when we dream? Might a human being harbour more than one conscious subject or ego or agent within one brain? Good answers to these questions certainly will depend heavily on empirical discoveries about the behavioural capacities and internal circumstances of the various problematic candidates for consciousness, but about every such empirical finding we can ask: what is its bearing on the question of consciousness and why? These are not directly empirical questions but rather conceptual ones, which we may be able to answer with the help of thought experiments.

Our ordinary concept of consciousness seems to be anchored to two separable sets of considerations that can be captured roughly by the phrases “from the inside” and “from the outside.” *From the inside*, our

Own consciousness seems obvious and pervasive, we know that much goes on around us and even inside our bodies of which we are entirely unaware or unconscious, but nothing could be more intimately known to us than those things of which we are, individually, conscious. Those things of which I am conscious, and the ways in which I am conscious of them, determine *what it is like to be me*. I know in a way no other could know what it is like to be me. From the inside, consciousness seems to be an all-or-nothing phenomenon – an inner light that is either on or off. We grant that we are sometimes drowsy or inattentive, or asleep, and on occasion we even enjoy abnormally heightened consciousness, but when we are conscious, *that* we are conscious is not a fact that admits of degrees. There is a perspective, then, from which consciousness seems to be a feature that sunders the universe into two strikingly different kinds of things, those that have it and those that don't. Those that have it are *subjects*, beings *to whom* things can be one way or another, beings it is like something to be. It is not like anything at all to be a brick or a pocket calculator or an apple. These things have insides, but not the right sort of insides – no *inner life*, no point of view. It is certainly like something to be me (Something *I* know “from the inside”) and almost certainly like something to be you (for you have told me, most convincingly, that it is the same with you), and probably like something to be a dog or a dolphin (if only they could tell us!) and maybe even like something to be a spider.

Other Minds

When one considers these others (other folk and other creatures), one considers them perforce from the outside, and then various of their observable features strike us as relevant to the question of their consciousness. Creatures react appropriately to events within the scope of their senses; they recognize things, avoid painful experiences, learn, plan, and solve problems. They exhibit intelligence. But putting matter this way might be held to prejudice the issue. Talking of their “senses” or of “painful” circumstances, for instance suggests that we have already settled the issue of consciousness -- for note that had we described a robot in those terms, the polemical intent of the choice of words would have been obvious (and resisted by many). How do creatures differ from robots, real or imagined? By being organically and biologically similar to us – and we

are the paradigmatic conscious creatures. This similarity admits of degrees, of course, and one's intuitions about what sorts of similarity count are probably untrustworthy. Dolphins' fishiness subtracts from our conviction that they are conscious like us, but no doubt should not. Were chimpanzees as dull as seals, their facial similarity to us would no doubt nevertheless favour their inclusion in the charmed circle. If houseflies were about our size, or warmblooded, we'd be much more confident that when we plucked off their wings they felt pain (*our* sort of pain, the kind that matters). What makes us think that some such considerations ought to count and not others?

The obvious answer is that the various "outside" indicators are more or less reliable signs or symptoms of the presence of that whatever-it-is each conscious subject knows from the inside. But how could this be confirmed? This is the notorious "problem of other minds." In one's own case, it seems, one can directly observe the coincidence of one's inner life with one's outwardly observable behaviour. But if each of us is to advance rigorously beyond solipsism, we must be able to do something apparently impossible: confirm the coincidence of inner and outer in others. Their telling us of the coincidence in their own cases will not do, officially, for that gives us just more coincidence of outer with outer; the demonstrable capacities for perception and intelligent action normally go hand-in-hand with the capacity to talk, and particularly to make "introspective" reports. If a cleverly designed robot could (seem to) tell us of its inner life, (could utter all the appropriate noises in the appropriate contexts), would we be right to admit it to the charmed circle? We might be, but how could we ever tell we were not being fooled? Here the question seems to be; is that special inner light really turned on, or is there nothing but darkness inside? And this question looks unanswerable. So perhaps we have taken a misstep already.

My use of "we" and "our" in the last few paragraphs, and your unworried acceptance of it, reveals that *we* don't take the problem of other minds seriously – at least for ourselves and the human beings with whom we normally associate. It is tempting to conclude that insofar as there is a serious question yet to be answered about the imagined robot (or about some problematic creature) it must turn out to be answerable by straightforward observation. Some theorists think that once we have better theories of the organization of our brains and their role in controlling our behaviour, we will be able to use those theories to distinguish conscious entities from nonconscious entities. This is to suppose that somehow or other the facts we get individually "from the inside" reduce to facts publicly obtainable from the outside. Enough of the right sort of

Outside facts will settle the question of whether or not some creature is conscious. For instance, consider neurophysiologist E.R.John's* recent attempt to define consciousness in objective terms.

.. a process in which information about multiple individual modalities of sensation and perception is combined into a unified multidimensional representation of the state of the system and its environment, and integrated with information about memories and the needs of the organism, generating emotional reactions and programs of behaviour to adjust the organism to its environment.

Determining that this hypothetical internal process occurs in a particular organism is presumably a difficult but empirical task in the province of a new science of neural information processing. Suppose that with regard to some creature it were completed successfully; the creature is by this account, conscious. If we have understood the proposal correctly, we will not find any room to wonder further. Reserving judgment here would be like being shown in detail the operations of an automobile engine, and then asking, "But is it *really* an internal combustion engine? *Might* we not be deluded in thinking it was?

Any proper scientific account of the phenomenon of consciousness must inevitably take this somewhat doctrinaire step of demanding that the phenomenon be viewed as objectively as accessible, but one may still wonder if, once the step is taken, the truly mysterious phenomenon will be left behind. Before dismissing this skeptical hunch as the fancy of romantics, it would be wise to consider a striking revolution in the recent history of thinking about the mind, a revolution with unsettling consequences.

Freud's Crutch

For John Locke and many subsequent thinkers, nothing was more essential to the mind than consciousness, and more particularly self-consciousness. The mind in all its activities and processes was viewed as transparent to itself; nothing was hidden from its inner view. To discern what went on in one's mind one just "looked" – one "introspected" – and the limits of what one thereby found were the very boundaries of the mind. The notion of unconscious thinking or perceiving was not entertained, or if it was, it was dismissed as incoherent, self-contradictory nonsense.

*For additional information on the authors and the works cited in the text, consult "Further Reading" beginning on p. 465.

For Locke, indeed, there was a serious problem of how to describe all one's memories as being continuously in one's mind when yet they were not continuously "present to consciousness." The influence of this view has been so great that when Freud initially hypothesized the existence of unconscious mental processes, his proposal met widely with stark denial and incomprehension. It was not just an outrage to common sense, it was even self-contradictory to assert that there could be unconscious beliefs and desires, unconscious feelings of hatred, unconscious schemes of self-defense and retaliation. But Freud won converts. This "conceptual impossibility" became respectably thinkable by theorists once they saw that it permitted them to explain otherwise inexplicable patterns of psychopathology.

The new way of thinking was supported by a crutch, one could cling to at least a pale version of the Lockean creed by imagining that these "unconscious" thoughts, desires, and schemes *belonged to other selves* within the psyche. Just as I can keep my schemes secret from you, my id can keep secrets from my ego. By splitting the subject into many subjects, one could preserve the axiom that every mental state must be someone's conscious mental state and explain the inaccessibility of some of these states to their putative owners by postulating other interior owners for them. This move was usefully obscured in the mists of jargon so that the weird question of whether it was like anything to be a superego, for instance, could be kept at bay.

Freud's expansion of the bounds of the thinkable revolutionized clinical psychology. It also paved the way for the more recent development of "cognitive" experimental psychology. We have come to accept without the slightest twinge of incomprehension a host of claims to the effect that sophisticated hypothesis testing, memory searching, inference – in short, information processing – occurs within us though it is entirely inaccessible to introspection. It is not repressed unconscious activity of the sort Freud uncovered, activity driven out of the sight of consciousness, but just mental activity that is somehow beneath or beyond the ken of consciousness altogether. Freud claimed that his theories and clinical observations gave him the authority to overrule the sincere denials of his patients about what was going on in their minds. Similarly the cognitive psychologist marshals experimental evidence, models, and theories to show that people are engaged in surprisingly sophisticated reasoning processes of which they can give no introspective account at all. Not only are minds accessible to outsiders, some mental activities are more accessible to outsiders than to the very "owners" of those minds.

In the new theorizing, however, the crutch has been thrown away.

Although the new theories abound with metaphors – subsystems like little people in the brain sending messages back and forth, asking for help, obeying and volunteering -- the actual subsystems, are deemed to be unproblematic nonconscious bits of organic machinery, as utterly lacking in a point of view or inner life as a kidney or kneecap. (Certainly the advent of “mindless” but “intelligent” computers played a major role in this further dissolution of the Lockean view.)

But now Locke’s extremism has been turned on its head, if before the very idea of unconscious mentality seemed incomprehensible, now we are losing our grip on the very idea of conscious mentality. What is consciousness but, if perfectly unconscious, indeed subjectless, information processing is in principle capable of achieving all the ends for which conscious minds were supposed to exist? If theories of cognitive psychology can be true of us, they could also be true of zombies, or robots and the theories seem to have no way of distinguishing us. How could any amount of mere subjectless information processing (of the sort we have recently discovered to go on in us) add up to that special feature with which it is so vividly contrasted? For the contrast has not disappeared. The psychologist Karl Lashley once suggested provocatively that “no activity of the mind is ever conscious,” by which he meant to draw our attention to the inaccessibility of the processing that we know must go on when we think. He gave an example: If asked to think a thought in dactylic hexameter, those who knew which rhythm that is can readily oblige. For instance: *How in the world did this case of dactylic hexameter come to me?* How we do it, what goes on in us to produce such a thought, is something quite inaccessible to us. Lashley’s remark might seem at first to herald the demise of consciousness as a phenomenon for psychological study, but its true effect is just the opposite. It draws our attention unmistakably to the *difference* between all the unconscious information processing – without which, no doubt, there could be no conscious experience – and the conscious thought itself, which is somehow directly accessible. Accessible to what or to whom? To say that it is accessible to some subsystem of the brain is not yet to distinguish it from the unconscious activities and events, which are also accessible to various subsystems of the brain. If some particular special subsystem is so constituted that that its traffic with the rest of the system somehow makes it the case that there is one more *self* in the world, one more “”thing it is like something to be,” this is far from obvious.

Strangely, enough, this problem is the old chestnut, the problem of other minds, resurrected as a serious problem now that cognitive sci-

ence has begun to analyze the human mind into its functional components. This comes out most graphically in the famous split-brain cases. (See “Further Reading” for details and references.) There is nothing very problematic in granting that the people who have undergone severing of the *corpus callosum* have two somewhat independent minds, one associated with the dominant brain hemisphere, and another associated with the non-dominant brain hemisphere. This is not problematic, for we have grown used to thinking of a person’s mind as an organization of communicating subminds. Here the lines of communication have simply been cut, revealing the independent character of each part particularly vividly. But what remains problematic is whether both subminds “have an inner life.” One view is that there is no reason to grant consciousness to the non-dominant hemisphere, since all that has been shown is that that hemisphere, like many unconscious cognitive subsystems, can process a lot of information and intelligently control some behaviour. But then we may ask what reason there is to grant consciousness to the dominant hemisphere, or even to the whole, intact system in a normal person. We had this thought this question frivolous and not worth discussing, but this avenue forces us to take it seriously again. If on the other hand we grant full “inner life” consciousness to the non-dominant hemisphere (or more properly to the newly discovered *person* whose brain is the non-dominant hemisphere), what will be said about all the other information-processing subsystems posited by current theory? Is the Freudian crutch to be taken away again at the expense of populating our heads, quite literally, with hosts of subjects of experience?

Consider, for example, the striking discovery by the psycholinguists James Lackner and Merrill Garrett (see “Further Reading”) of what might be called an unconscious channel of sentence comprehension. In dichotic listening tests, subjects listen through earphones to two different channels and are instructed to attend to just one channel. Typically they can paraphrase or report with accuracy what they have heard through the attended channel but usually they can say little about what was going on concomitantly in the unattended channel. Thus, if the unattended channel carries a spoken sentence, the subjects typically can report they heard a voice, or even a male or female voice. Perhaps they even have a conviction about whether the voice was speaking in their native tongue, but they cannot report *what was said*. In Lackney and Garrett’s experiments subjects heard ambiguous sentences in the attended channel, such as “He put out the lantern to signal the attack.” Simultaneously, in the unattended channel one group of subjects received a sentence that suggested the interpretation of the sentence in

the attended channel (e.g. “He extinguished the lantern), while another group had a neutral or irrelevant sentence as input. The former group *could not report* what was presented through the unattended channel, but they favoured the suggested reading of the ambiguous sentences significantly more than the control group did. The influence of the unattended channel on the interpretation of the attended signal is processed all the way to a semantic level – that is, the unattended signal is *comprehended* – but this is apparently unconscious sentence comprehension! Or should we say it is evidence of the presence in the subject of at least two different and only partially communicating consciousnesses? If we ask the subjects what it was like to comprehend the unattended channel, they will reply, sincerely, that it was not like anything *to them* – they were quite unaware of that sentence. But perhaps, as is often suggested about the split brain patients, there is in effect someone else to whom our question ought to be addressed – the subject who consciously comprehended the sentence and relayed a hint of its meaning to the subject who answers our questions.

Which should we say, and why? We seem to be back to our unanswerable question, which suggests we should find different ways of looking at the situation. A view of consciousness that does justice to the variety of complications will almost certainly demand a revolution in our habits of thought. Breaking bad habits is not that easy. The fantasies and thought experiments collected here are games and exercises designed to help.

In Part I the exploration begins with some swift forays into the territory, noting a few striking landmarks but mounting no campaigns. In Part II our target, the mind’s I, is surveyed from the outside. What is it that reveals the presence of *other* minds, other souls to the searcher? Part III examines the physical foundation – in biology -- of the mind, and then from this foundation moves up several levels of complexity to the level of internal representations. The mind begins to emerge as a self-designing system of representations, physically embodied in the brain. Here we encounter our first roadblock – “The Story of a Brain.” We suggest some paths around it, and in Part IV we explore the implications of the emerging views of the mind as software or program – as an abstract sort of thing whose identity is independent of any particular physical embodiment. This opens up delightful prospects, such as various technologies for the transmigration of souls, and Fountains of Youth, but it also opens a Pandora’s box of traditional metaphysical problems in untraditional costumes, which are confronted in Part V. Reality itself is challenged by various rivals: dreams, fictions,

simulations, illusions. Free will, something no self-respecting mind would be caught without, is put under an unusual spotlight. In “Minds, Brains, and Programs” we encounter our second roadblock, but learn from it how to press on, in Part VI, past our third roadblock, “What Is It Like to Be a Bat?” into the inner sanctum, where our mind’s-eye view affords us the most intimate perspectives on our target, and allows us to relocate our selves in the metaphysical and physical world. A guide to further expeditions is provided in the last section.

D.C.D.