MULTIMIND

By Robert Ornstein

On the Experience of Time

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Multimind

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ROBERT ORNSTEIN

MULTIMIND

A new Way of looking at Human Behavior

MALOR BOOKS

Los Altos, CA

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and for
each and every one
of her minds.
May they all meet
one day.

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MIND ON MIND

Nasrudin went into a bank with a cheque to cash. "Can you identify yourself?" asked the clerk. Nasrudin took out a mirror and peered into it. "Yes, that's me all right," he said.

— Idries Shah, The Subtleties of the Inimitable Mulla Nasrudin

Introduction: Many Diverse Points on the Many Diverse Problems of Understanding the Mind

IT WAS Marilyn Monroe who first got me thinking about the puzzling nature of the mind.

Of course, she stimulated my first thoughts about many things, but something happened after her death that stuck in my mind. Her suicide was a shock to me and to many others, but that was not so puzzling.

For the next few months, I kept reading about many other suicides, and all of it began to bother me. Why were so many people killing themselves after Marilyn Monroe did so? It wasn't that people were grieving that much: many of the suicides had hardly heard of her. But the overall suicide rate in the USA went up by 12 percent after Marilyn's suicide; then it went down again.

I forgot about Marilyn and her suicide for many years. Then the comedian Freddie Prinze killed himself and the same thing happened. The suicide rate shot up by 8 percent for a while.

This and many other apparently puzzling things happen to us because of the way our mind is segmented.

Part of the approach of this book stems from my conviction that, while one can learn much about the mind from

reading the great philosophers and psychologists, there is much to discover by observing other people and considering many daily events.

You walk along Fifty-Seventh Street, quietly minding your own business. A balloon man leaps in front of you and says, "A free balloon if you smile." You can't resist. You smile. You get a free balloon. And, of course, you buy something from him, although buying a balloon was hardly the top thing on your mind. However, the balloon man's maneuver helped make it so.

In a college town in the Midwest, a young man named Billy Milligan was arrested for raping a woman. The psychologist interviewing him asked for his social security number.

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He shrugged, "I don't know."

The psychologist read his number to him.
... "That's not my number, it must be Billy's."
... "Well, aren't you Billy?"

"I'm David."

"Well, where's Billy?"

"He's asleep."

"Asleep where?"

He pointed to his chest. "In here. He's asleep."
... "I have to talk to Billy."

"Well, Arthur won't let you. Billy's asleep. Arthur won't wake him up, 'cause if he does, Billy'll kill himself."
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One might dismiss all these different "people" inside as a criminal's elaborate ruse to avoid conviction, but the Ohio authorities finally did not. Although "Billy Milligan" committed the crime, it was judged that another "person" inside him was responsible and that Billy as a whole could not be punished for the crime of one of his parts. A course of treatment to attempt to fuse the different personalities was prescribed and was successful.

A friend says to you: "My first marriage broke up because my wife had different political opinions than I. My second wife shared my opinions, but we constantly fought over how to bring up the children. My third wife and I agree on everything like that, and we get along well, but I can't understand so much about her: she doesn't think it is wrong to pad her expense account at work, and she cheats on her income tax. When do I find someone who is perfect for me?"

You go out to a restaurant for the first time. Your waiter tells you not to order the steak Diane, at \$23.95, but to have the veal, at \$19.95, "because it's fresh." You think he's great and buy a very expensive wine on his recommendation as well as an extra salad for everyone. Since he is in the tip business, he makes out well and you love him and return the following week for more of his recommendations.

A poor child is never taught to read by his mother, nor is he taught about the life of Abraham Lincoln. In a one-hour paper and pencil test, he cannot identify Lincoln or any of his achievements. He thus does very badly on his one general intelligence test and is assigned to a "slow" track in school because his IQ is low. Many of his mathematical talents then go to waste.

A recent cover of *People* headlines:

Devout Buddhist \$5,000 an hour shopper Mother of four World class vamp

And how many people are being described? Tina Turner.

Here are more headline stories, all of these from a few months in early 1985.

A family named Walker is accused of selling secrets to the Russians. After the spy scandal breaks, the U.S. Secretary of Defense says that we really must cut some of the five million people who have security clearance. A member of the Senate is interviewed on television and says that it is easier to get security clearance than it is to get an American Express card. Did no one notice this before the scandal?

A chemical leak in a Union Carbide plant in Bhopal, India, exposes hundreds of thousands of people to toxic fumes and causes severe damage to the health of at least twenty thousand. Soon after, hundreds of stories appear in the press announcing the threat to our safety of all the improperly stored chemicals in the United States, describing the generally dangerous and defective safety and storage procedures in many chemical and industrial plants.

The famous movie star Rock Hudson reveals that he has AIDS. Funds for research are increased dramatically only a few days later. An announcer on ABC News said at the time that "AIDS has received more attention in the few weeks after Rock Hudson's announcement than in the previous four years." Another former movie star gets colon cancer; the phone at the American Cancer Society rings off the hook. Because of the widespread publicity, thousands of people may well detect this form of cancer early because they are stimulated to have checkups.

Why do we need shocks and vivid disasters to goad us into action? Why does an event like the suicide of a famous movie star have such influence over the lives and deaths of many? Why do we assume so much about other people only to be disappointed? Why do we judge and test others so harshly? We don't know ourselves well enough, I think.

It has been over a hundred years since the beginnings of modern psychology and a quarter century since the development of modern brain science. It is about time we bring together the evidence for: the way we understand ourselves and the way we understand others which is incomplete and misleading.

At the core of many of our controversies — some intellectual, some philosophical, some personal — is an oversimplified understanding of the nature of our mind. We may ask: Should I act on my emotions or on what I think? Are we rational or does an "unconscious" set our agenda? Are our mental faculties the product of experiences or of learning? Is she conscientious or lazy, is he honorable or sometimes dishonest? The answers to these and to many other supposed either/or controversies is "both."

We often hate ourselves for not behaving as we "should": Why did I get so nervous? Why did I blush when he said that? Why did I buy that expensive pool table when I don't have much money? We are bothered a lot by our behavior: otherwise, why would our face and body posture betray a lie?

It is an odd situation if you consider it: Why are some of the things we do so unacceptable to ourselves? It is because we are not single-minded: the part of our self that is often judging is independent from the part that is behaving.

There is a new view arising about the nature of the brain and the mind:

Stuck side by side, inside the skin, inside the skull, are several special purpose, separate, and specific small minds.

The particular collection of talents, abilities, and capacities that each person possesses depends partly on birth and partly on experience. Our illusion is that each of us is somehow unified, with a single coherent purpose and action. Others present a smooth, seemingly consistent and unified surface as well. But it is an illusion, as we are hidden from ourselves, just as the skin covers a lot of different organs that are only visible once the covering has been lifted.

Similarly, the brain case screens from our view the diversity of the human brain. It has taken the evidence of the past few decades to discern the different separate mental structures that lie, almost hidden, deep within the homogeneous mass of the brain. It has taken us a long time to break the covering of the different minds within, but as a result our view of our own nature is in for a radical change.

"I am large, there is a multitude within," wrote Whitman.

We have inescapable and built-in deceptions and illusions about ourselves. These illusions have caused many of our historically important philosophers and psychologists to overemphasize a single human ability as representative of the entire mind.

There is a fairly standard process of human discovery that we go through when we try to understand anything new. The explorers' first maps of exotic places like Africa showed a simple, undifferentiated continent. Only later, with much more research, did the complexity of the terrain become clear. An appreciation of the complexity and subtlety of painting, music, food, and ideas follows the same pattern.

We have gone through the same process in under-

standing the nature of the human mind. Our view of ourselves is limited by the very structures of the mind itself. We do not have, really, any privileged access to understanding ourselves; in fact, our own introspection is often just an illusion.

We are not a single person.

We are many.

The long progression in our self-understanding has been from a simple and usually "intellectual" view to the view that the mind is a mixed structure, for it contains a complex set of "talents," "modules," and "policies" within. (These terms are unfamiliar, I know, but they will be discussed at length.) All of these general components of the mind can act independently of each other, they may well have different priorities.

The discovery of increased complexity and differentiation has occurred in many different areas of research that touch upon this book: in the study of brain function and localization; in the conceptions of the nature of intelligence; in personality testing; and in the theories of the general characteristics of the mind. We shall have something to say about each aspect.

It should not be surprising that we possess such a simplified understanding of ourselves because the mind operates to simplify: it reduces the complexity of the outside world to standard items easy to act on. For example: circles still signify round three-dimensional plates; cars that look like toys are still treated as real but distant; a friend's voice over the phone summons up the rest of the person — the opinions, ideas, likely judgments. As the brain and skin cover and hide discrepancy and conflict within, so our simplified and select-

ed perceptions hide others' and our real complexity and richness.

There have been many important and certainly long-lasting arguments about the nature of human knowledge. These are the ones we have grown up with and almost absorbed through our pores in school. Perhaps the most important argument for the last two millennia has been the one between the "rationalists," from Descartes on, and the "empiricists," from Aristotle through Locke and behaviorism. It concerns the degree to which we have innate knowledge of the world, abilities such as the understanding of language without special learning. More and more modern evidence makes it clear that we are given a large innate endowment of faculties with which we perceive and understand the world.

But the modern evidence shows us more. This important argument is not so much out of date but pertains to only a small portion of the mind, one that can be analyzed, put in words, on computers, in logical programs, and one that is suitable for and similar to academic thought.

Most of us have grown up assuming that we are the products of our environment and that anyone can be trained to learn almost anything. A mind trained to reason and analyze can yield limitless accomplishments.

While many important thinkers from Plato onward had a different perspective, the main influence on our thinking, society, and education stems from Locke and Hume, developing a line of thought from Aristotle. Logic and intellection are the components of mind, and knowledge comes from experience. The Western intellectual tradition has in the past few thousand years developed this initial program about as far as it will go.

If Western philosophy is, as someone once said, a set of

footnotes to the Greeks, then modern brain and psychological science has ushered in a new chapter.

It is time for a new perspective.

A major part of the twentieth- and twenty-first-century challenge to this simple intellectual view has come from a view that is often opposed to the intellectual tradition. It is called the analytic tradition, referring to the psychoanalytic work stemming from Sigmund Freud and his critics and followers.

Both traditions have existed side by side for a century now, with neither making any real inroads into the other. Freud and his followers posited a complex structure to the mind in which the conscious, rational part was likened to the tip of an iceberg. Underneath was the repository of wishes, plans, and desires that were not accessible to the rational conscious. Thus people would make slips of the tongue, make motivated mistakes, and behave irrationally but in a way that would fulfill unconscious needs and desires.

There has been a tension and a lack of communication between these two traditions: the pure intellectuals of the Western intellectual tradition and those challenging the single-minded view from outside, for whom Freud and his followers have provided an important alternative.

Each of these great traditions is really quite primitive. They are most often limited to an extreme emphasis upon one way of looking at the mind, and they most often confuse the phenomena that they emphasize with the whole. For one group, the emphasis is on human reason and learning and the possibility of progress through intellection. For the other, the focus is largely on many basic instinctual drives and the many levels of unconscious desire. These are thought to make the mind unstable; in Freud's pessimistic view, we

are doomed to continuous conflict since we possess such an irrational system. We can, from a more modern perspective, combine these insights in a more complete picture.

This book is about why we have the kind of mental system we do and how it got to be that way, what it is good for, and how it has reached a breaking point in the modern world, a world for which it was not made. The book is also about how it is almost inevitable that we so grossly misunderstand ourselves and each other.

The first section contains a general sketch of the operations of our mental system. The second reviews the physiological and evolutionary evidence that we have a brain and nervous system best described as multiple, "designed" to carry out many different programs at the same time. These include different talents, like the ability to talk and to calculate.

The third part concerns current evidence of cognitive psychology, the psychology of consciousness, perception, memory, and thinking. It shows that human consciousness is by necessity extremely limited and therefore *only a small portion of the mind operates on the main stage at once.* Thus our minds are easily altered, our judgments shifted from moment to moment, by the way in which problems are framed and by which portion of the mind is operating at a given instant.

The fourth section considers some of the problems: the tragedy of intelligence testing; the difficulty of attaining a complete and satisfying understanding of another person; and the breakups of the mind that reveal the subpersonalities below.

The last chapter considers a point that many will wish answered: Who is doing the controlling, if anybody? It also discusses how a greater measure of self-understanding and control might be attained by observing one's own inconsistencies and shifts of mood. I would not say this book builds to a conclusion, but I hope that it will open a few doors and make you think about problems, personal and intellectual, that might now be tackled.

Together with the reviews of evidence on mind and brain, intelligence and personality, I wish to present a new perspective on the human mind, one that encompasses the philosophical arguments, the challenges from Freud and from the discoveries of evolution, the new evidence from brain sciences and cognition, the problems of intelligence and personality and multiple personality. I hope this viewpoint will allow many who now see only myriad opposing and conflicting small and useless minor theories to understand that many of the conflicts have been caused by looking at the mind as if it had only one aspect, the aspect that is most highly prized in schools.

Such a concentration on verbal talents and rational sequential analysis has led to a spectacular series of triumphs in our society. We can bounce a signal off the moon, make wafers in space the size of a micron, create weapons in one submarine that have the firepower of all of World War II. But our other talents are not educated or developed along with the reasoning ones.

Our ability to produce has far outstripped our ability to judge what we are doing. We are close to destroying the earth in a few moments with bombs or, in a few years, with the increasing burden of people. We don't know how to feed, clothe, and develop the people we have. We are in a race with ourselves, inside our own minds.

But back to Descartes for a moment.