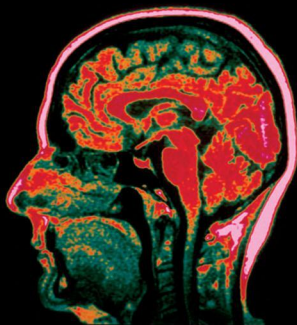


"A lively introduction to a field where neuroscience, philosophy, and secular/spiritual cultural wars are unavoidably intermingled."

—*Publishers Weekly*

The Spiritual **BRAIN**



*A Neuroscientist's
Case for the Existence
of the Soul*

Mario Beauregard & Denyse O'Leary

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THE SPIRITUAL BRAIN

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A Neuroscientist's Case for the Existence of the Soul

MARIO BEAUREGARD
and
DENYSE O'LEARY



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Toward a Spiritual Neuroscience

In June 2005, the historic World Summit on Evolution was held on the remote island of San Cristobal in the Galápagos Islands, off the coast of Ecuador. The unassuming location, Frigatebird Hill, was chosen because it was the very spot where Charles Darwin first docked in 1835 to probe the “mystery of mysteries”—the origin and nature of species, including (and perhaps especially) the human species.

These isolated Pacific islands lying on the equator later became a stop-over for pirates, whalers, and sealers who drove the unique life forms that Darwin studied to the brink of extinction. But still later, under government protection in the twentieth century, the islands evolved into a sort of shrine to materialism—the belief that all life, including human life, is merely a product of the blind forces of nature.¹ In the materialist’s view, our “minds”—soul, spirit, free will—are simply an illusion created by the electrical charges in the neurons of our brains. Nature is, as Oxford zoologist Richard Dawkins famously put it, a “blind watchmaker.”²

The Galápagos meeting was quickly hailed as the Woodstock of Evolution. The scientists present, a “Who’s Who of evolutionary theory,”³ were well aware of their own importance and the significance of the proceedings. “We are simply stunned to be here,” wrote one science journalist, recalling that the elite audience listened to the familiar tale of evolution “rapt, like children hearing the retelling of a favorite story.”⁴

According to the favorite tale, human beings are merely “a bizarre tiny clade,” in the words of one attendee.⁵ And the mission of the next summit promises to tell that tale to the whole world.⁶ However, to judge from the

growing dissension around the teaching of evolution, the world has heard it already.

A Series of Mindless Events?

A key figure at the conference was American philosopher Daniel Dennett. Dennett, who bears a striking physical resemblance to Charles Darwin, is a world-famous philosopher of mind. He is the favorite philosopher of those who think that computers can simulate human mental processes. Curiously, for a philosopher of mind, he hopes to convince the world that there isn't really any such thing as a mind in the traditional sense. He is best known, perhaps, for saying that "Darwin's dangerous idea" is the best idea anyone ever had, because it firmly grounds life in materialism. As he understands it, human beings are "big, fancy robots" and, better still:

If you have the right sort of process and you have enough time, you can create big fancy things, even things with minds, out of processes which are individually stupid, mindless, simple. Just a whole lot of little mindless events occurring over billions of years can create not just order, but design, not just design, but minds, eyes and brains.⁷

Dennett insists that there is no soul or spirit associated with the human brain, or any supernatural element, or life after death. Thus, his career focus has been to explain how "meaning, function and purpose can come to exist in a world that is intrinsically meaningless and functionless."⁸ He came to the Galápagos to testify to that view.

Of course, many people are dismayed by ideas such as Dennett's and hope that they are false. Others welcome them as a means of freeing the human race from restraints imposed by traditional religions and philosophies. Let us progress, they say, toward a more humane system that both expects less of humans and blames them less for their failures—failures they can't help anyway, really.⁹

The question addressed in this book is not whether materialism is good news or bad news. Rather, the question is, does the evidence from neuroscience support it? As constitutional law professor Phillip Johnson, long a foe of materialism, which he terms "naturalism," writes: "If the blind watchmaker thesis is true, then naturalism deserves to rule, but I am ad-

...dressing those who think the thesis is false, or at least are willing to consider the possibility that it may be false.”¹⁰

True or false, materialism was the dominant intellectual current of the twentieth century and provided the impetus for most major philosophical and political movements of the day. Indeed, many thinkers today see the primary purpose of science as providing evidence for materialist beliefs. They reject with hostility any scientific evidence that challenges such beliefs, as we will see in our discussion of the psi effect in Chapter Six. Every year, thousands of books are published, in dozens of disciplines, advancing materialist views.

Not this one. This book will show that Professor Dennett and the many neuroscientists who agree with him are mistaken. It will take you on a journey different from the one he has made. Not to the Galápagos Islands, but inside the brain. It will show you why he is mistaken. In the first place, the materialists' account of human beings does not bear up well under close examination. In the second place, there is good reason for believing that human beings have a spiritual nature, one that even survives death.

But first things first. Why should you embark on this journey unless you see the need for a nonmaterialist account of human nature? A new account is needed because the materialists' account is inadequate. It is failing in a number of areas. So let us begin by outlining some of the failures. Let's start with this question: What would you be left with if you accepted the materialists' explanation of *you*? Would you recognize yourself? If not, why not? What is missing?

Mind, Will, Self, and Soul

The brain and its satellite glands have now been probed to the point where no particular site remains that can reasonably be supposed to harbor a nonphysical mind.¹¹

—*Sociobiologist Edward O. Wilson*

Why do people believe that there are dangerous implications of the idea that the mind is a product of the brain, that the brain is organized in part by the genome, and that the genome was shaped by natural selection?¹²

—*Cognitive scientist Steven Pinker*

What of the mind, the will, the self, the soul? Do they have a future in the new world of science?

Dennett is far from being the only materialist thinker who argues that there really is no *you* in you at all, that consciousness, soul, spirit, and free will are merely illusions bolstered by folklore. On the contrary, his view is in fact the standard assumption in current neuroscience. Dennett speaks for a number of neuroscientists when he says, “a brain was always going to do what it was caused to do by current, local, mechanical circumstances.”¹³ Your consciousness, your sense of yourself, is “like a benign ‘user-illusion.’”¹⁴ Anything resembling free will is unlikely or, at best, minimal and problematic.¹⁵

American culture critic Tom Wolfe put the matter succinctly in an elegant little essay he published in 1996, “Sorry, but Your Soul Just Died,” which expounds the “neuroscientific view of life.”¹⁶ He wrote about the new imaging techniques that enable neuroscientists to see what is happening in your brain when you experience a thought or an emotion. The outcome, according to Wolfe, is:

Since consciousness and thought are entirely physical products of your brain and nervous system—and since your brain arrived fully imprinted at birth—what makes you think you have free will? Where is it going to come from? What “ghost,” what “mind,” what “self,” what “soul,” what anything that will not be immediately grabbed by those scornful quotation marks, is going to bubble up your brain stem to give it to you? I have heard neuroscientists theorize that, given computers of sufficient power and sophistication, it would be possible to predict the course of any human being’s life moment by moment, including the fact that the poor devil was about to shake his head over the very idea.¹⁷

Wolfe doubts that any sixteenth-century Calvinist believed so completely in predestination as these hot young scientists. The whole materialist creed that Wolfe outlines hangs off one little word, “Since”—“*Since* consciousness and thought are entirely physical products of your brain and nervous system . . .” In other words, neuroscientists have *not* discovered that there is no you in you; they start their work with that assumption. Anything they find is interpreted on the basis of that view. The science does not require that. Rather, it is an obligation that materialists impose on themselves.

But what if scientific evidence points in a different direction? As we will see, it does. But before we get to the neuroscience, it may be worthwhile to look at some other reasons for thinking that the twentieth-century materialist consensus isn't true. Neuroscience is, after all, a rather new discipline, and it would be best to first establish that there are also good reasons for doubting materialism that arise from older disciplines.

What People Believe

If materialism is true, why don't most people believe it?

In April 1966, *Time* magazine announced that Americans were turning their backs on God. Selecting Good Friday (April 8) to spread the news, the cover story asked "Is God Dead?" implying that the answer is yes. Science was killing religion. Anything that could not be known by the methods of science, as interpreted at that time, was uninteresting or unreal.¹⁸ From then on, the only valid philosophy or spirituality would be existential anguish. The *Time* editors were quite sure of this. And they could not have been more wrong.

A Beliefnet poll taken thirty-nine years later in 2005 asked 1,004 Americans about their religious beliefs—and found that 79 percent described themselves as "spiritual" and 64 percent as "religious." As *Newsweek* pointed out in its September 2005 cover story, "Spirituality in America": "Nobody would write such an article now, in an era of round-the-clock televangelism and official presidential displays of Christian piety."¹⁹ *Newsweek's* Jerry Adler comments:

History records that the vanguard of angst-ridden intellectuals in *Time*, struggling to imagine God as a cloud of gas in the far reaches of the galaxy, never did sweep the nation. What was dying in 1966 was a well-meaning but arid theology born of rationalism: a wavering trumpet call for ethical behavior, a search for meaning in a letter to the editor in favor of civil rights. What would be born in its stead, in a cycle of renewal that has played itself out many times since the Temple of Solomon, was a passion for an immediate, transcendent experience of God.²⁰

How did *Time* get it so wrong? Adler suggests that *Time's* editors may have mistaken the values and lifestyles of midtown Manhattan for America in general. Also, *Time* focused on the problems of prestigious Protes-

tant denominations and ignored the widespread Pentecostal revivals. Those revivals and similar phenomena such as the Jesus movement probably lured away more of those denominations' members than secularism did. Because *Time's* editors in 1966 had the preconceived notion that religion was dying out, they apparently did not either notice these trends or grasp their significance.

There have been important changes in religion in America, to be sure. Possibly as a consequence of multiculturalism, the paths chosen today are much more diverse. Among mainstream Americans, hostility toward other faiths is much lower than a generation ago. But Americans, however they conceive God, are still "one nation, under God."

Atheism

Not many people have enough faith to be atheists. Worldwide, the proportion of atheists has declined in recent years. Although Europe is often thought of as highly secular compared to the United States, similar trends seem to be at work there. The numbers of true atheists in Europe, for example, has declined to the point where they are not numerous enough to be used in statistical research.²¹ It is interesting to reflect that in 1960 half of the world's population was nominally atheist.²² Nothing like that number could be so described today. In 2004, one of the world's best-known apologists for atheism, philosopher Antony Flew, announced that the apparent intelligent design of the universe and of life forms had convinced him that there really was some sort of deity.²³ Flew, it should be noted, did not join a religion, in the usual sense, but rather became a deist—that is, he came to believe in God based on external evidence, not personal experience.

The best-known portion of American society today in which atheism is widespread is elite scientists. For example, whereas 41 percent of American Ph.D. scientists believe in a God to whom one can pray, the picture changes drastically in elite academies such as the National Academy of Sciences (NAS). When polled by historians Edward Larson and Larry Witham in 1996, only 7 percent of members expressed personal belief in God and over 72 percent expressed personal disbelief. The remainder expressed doubt or agnosticism.²⁴

This fact is not apparently very well known, even within that academy itself. In 1998, Bruce Alberts, then president of NAS, urged the teaching of Darwinian evolution in public schools, claiming that “there are many very outstanding members of this academy who are very religious people, people who believe in evolution, many of them biologists.” Larson and Witham commented crisply: “Our survey suggests otherwise.”

By contrast, most humans have never believed in atheism or materialism. Indeed, religion may well have been around as long as humans. Seventy thousand years ago, the Neanderthals, an extinct species of human, buried their dead with tools, apparently to be used in another world. Significantly, many Neanderthal dead were placed in a fetal position, suggesting that Neanderthals expected to be “born again” when they died.²⁵ British archaeologist Paul Pettitt reports:

At the Sima de los Huesos (“Pit of the Bones”) at Atapuerca in Spain, over 32 individuals of *Homo heidelbergensis* dating to over 200,000 years ago were found at the bottom of a deep shaft. It is possible that these bones . . . all got there accidentally—but I doubt it. Caves and sinkholes are dark, mysterious places; they echo with the strange sounds of wind and water. In later periods they were regarded as gateways to the “otherworld.” It seems far more likely that early Neanderthals perceived them in a similar way.²⁶

Why don't most people believe in materialism? Early twentieth-century psychiatrists theorized that spirituality is driven by a desire for a father figure or an unconscious desire to avoid death. Those explanations were plausible attempts to explain spirituality, though, by their very nature, they were untestable. They also tended to be Eurocentric, assuming that developments in European Christianity or Judaism were representative of religion worldwide.²⁷ Unfortunately, the progress of science, far from shedding light, has led to a host of less plausible explanations today. Today's explanations have degenerated into notions that sometimes border on the frivolous, such as the supposed evolutionary fitness of religious people, theotoxins (poisonous chemicals in the brain), brain damage, memes, a God gene, or a God spot in the brain. We will look at many current proposed explanations and show why they are inadequate to the explanatory task. For now, note that all these contending explanations have one feature in common. Like the early twentieth-century psychia-

trists' theories, they are attempts to explain *away* spirituality as something that does not in fact point to a spiritual reality.

Of course, if the materialists are right, spirituality must necessarily be an illusion. But as noted earlier, the materialists have simply assumed that they are right; they have not demonstrated it. They would have been wise to proceed with caution before writing off as an illusion the deepest beliefs that the majority of humankind have always had about *themselves*. We would not write off the horse's view of being a horse or the dog's view of being a dog. But materialist preconceptions require that we write off humans' view of being human. That in itself ought to make us suspicious.

One popular way of writing off spirituality is evolutionary psychology, an attempt to understand human behavior based on theories about the behavior that helped early hominids survive.

Evolutionary Psychology

Has our remote human past deluded us into doubting materialism?

In the later decades of the twentieth century, evolutionary psychology exploded as scientists from many disciplines attempted to tackle the fundamental questions about human nature and the human mind by beginning with a startlingly simple proposition: the higher-primate brain (that is, the human and ape brain)

comprises many functional mechanisms, called psychological adaptations or evolved psychological mechanisms, that evolved by natural selection to benefit the survival and reproduction of the organism. These mechanisms are universal in the species, excepting those specific to sex or age.²⁸

Papers proliferate, claiming that all human behavior, including altruism, economics, politics, sex, love, war, obesity, rape, and religion, is best understood in the light of the qualities that enabled our remote ancestors to survive. But who knows exactly why a given remote human ancestor survived? The farther back we go, the more significant these individual fates become. A widely accepted theory in genetics holds that a single woman, "mitochondrial Eve," who lived between 190,000 and 130,000 years ago, is the ancestor of every living human being. Was she especially fit? Especially lucky? Specially chosen? We just don't know.