

**Review: Did Man Create God? Is Your Spiritual Brain at Peace with Your Thinking Brain?**

by David E. Comings, M.D.

Mother Teresa was famous for her spirituality and religious ideals and yet we now know that for most of her adult life she had intense doubts about her faith. The majority of humans on this earth believes in a personal God and belongs to some form of organized religion. However, like Mother Teresa, at some time in their life many have had doubts and questions about their faith and the tenets of their religion but have lacked the scientific background to answer their doubting questions. Dr. Comings, a physician-scientist who has authored hundreds of articles in the field of human behavior, molecular genetics and neuroscience, has written this book to provide the scientific background to answer such questions in a context that is friendly and compassionate to religion and to man's innate spirituality.

The primary goal of the book is to allow the reader to develop a rational spirituality in which their thinking brain and spiritual brain can live in peace. A basic assumption of most humans is that God created man and divinely influenced the writing of all his sacred books. This book dispassionately explores the possibility that in premodern times our rational brain created the theory of a personal God to answer questions about the physical world like "Where did we come from?" and "Where do we go when we die?" and to satisfy the transcendent yearnings of our spiritual brain. To add believability and authority to our sacred books the rational brain also proposed that God ultimately wrote these works.

In recent years, some of the major questions many people have relate to Intelligent Design (ID). Its proponents want ID to be taught in schools on a par with evolution. ID accepts that the world is 4.5 billion years old and that most living forms on earth are the result of a natural evolutionary process. However, it also proposes that certain aspects of living organisms are so "irreducibly complex" that they had to have been designed by a supernatural force. ID proposes that evolutionary processes were incapable of doing the job without such outside help.

Addressing this issue, *Part I. Evolution*, describes the basic aspects of evolution as originally proposed by Charles Darwin and as expanded upon by later scientists, along with some easy to understand basic concepts of genetics. One of the showpiece questions of ID relates to the sudden appearance of many of the major sub-divisions of modern life in a very short period of time during the Cambrian period, the so-called "Cambrian Explosion." Borrowing from Stephen Gould's book *Wonderful Life*, Comings shows the reader Gould's magnificent drawings of many of these early forms.

*Part II. Intelligent Answers to Intelligent Design*, examines many of the concerns of the ID movement and of evolution skeptics in general by showing how modern molecular genetics has identified a number of mechanisms that allow rapid bursts of evolution, as during the "Cambrian explosion," to occur. Several chapters specifically address the different ID issues of "irreducible complexity" and show how the eyes, ears, energy metabolism, blood clotting, cilia and flagella are not irreducibly complex but evolved naturally without outside help. Other

chapters answer the evolution skeptics' concerns about aspects of the story of the Peppered Moth, the studies of Darwin's finches in the Galapagos Islands, the evolution of man, and the origin of life.

The concept of Intelligent Design is not limited to the evolution of life forms. It also extends to the evolution of the earth and the universe. *Part III. Cosmology* provides the reader with a background relating to quantum physics and the many particles that make up the universe. To address the question "Does the Big Bang and the precision of many of the physical constants of the universe prove that God exists?" Comings proposes that they do not and that based on principles of quantum theory and other aspects of cosmology, hyperinflated bubbles of intense space energy allow for the creation of the universe as the result of natural rather than supernatural forces. Relying on a supernatural force to answer many of man's most difficult questions simply postpones real answers since it does not address the issue of who made the supernatural force, or as Carl Sagan put it, "Who made the bubble maker?"

The book then shifts to an examination of the complexities of the human brain in *Part IV. The Neurology of Reason and Spirituality*. It first addresses the site and mechanism of consciousness. Since this is clearly a product of the brain itself, when the brain dies so does consciousness. In one swoop this fundamental truth of modern neuroscience eliminates the idea of any part of us living on after life such as the "soul" or the "spirit." This carries with it the loss of a heaven and a hell and of any eternal damnation for sins, real or imagined, that we may have committed. In subsequent chapters other aspects of the brain are explored including the miracle of the human frontal lobes, and the sections of the brain involved in pleasure, socialization, rational thought, hope, and happiness. The largest chapter of the book, *The Spiritual Brain*, is one of the masterpieces of the book. Located in the temporal lobes this area of the brain contains the centers for memory of facts and past experience (the hippocampus), the centers for emotional memory (the amygdala), and the centers for the processing of voices and the other sounds that we hear. *Internal* stimulation of temporal lobes by electrical probes during open brain surgery, by temporal lobe epilepsy, by the anoxia of near death, or by psychedelic drugs, can lead to intense feelings of spirituality and of a transcendence beyond one's self. Many of the most influential religious figures in history appear to have had temporal lobe epilepsy, endowing them with intense convictions that they passed on to the less spiritually endowed.

Studies of the psychedelic drug DMT have shown that when highly intelligent subjects are given this short acting drug, these sophisticated individuals are totally convinced they were abducted into "contact" with a non-human being. Although they never left the room and although the sessions lasted only a matter of minutes, it was impossible to convince them that this abduction and "contact" did not happen. This suggested to Comings that the spiritual brain is at times incapable of distinguishing between internally generated "unreal" experiences and externally generated "real" experiences – providing us with important insights about the power and realism of spiritual experiences.

The chapter on *The Meditating Brain*, shows that when humans engage in conscious attempts to have a spiritual experience, as in various types of meditation, many parts of the brain other than the temporal lobes are involved, including the frontal and parietal lobes. This indicates there is a distinction between unconscious internally generated and conscious externally generated spirituality.

The chapter on *The Hopeful Brain* illustrates the enormous curative power of the placebo effect. When an individual has an expectation of benefit and believes in the healing agent, the body marshals endorphins and other healing compounds to control pain and illness. The final

chapter in Part IV on *The Biology of Faith and Reason* illustrates the permanence of early childhood beliefs and the pleasurable and rewarding nature of spirituality.

*Part V. The Genetics of Reason and Spirituality* shows the important role of genes in our spirituality, in our religious attitudes, in our ability to reason (intelligence) and in both our bad and good or altruistic behavior. Genetic studies of the traits of *spiritual and religious* and *spiritual but not religious* indicate spirituality independent of religion is associated with better mental health than the former. Spirituality comes from the inside as an innate trait while religiosity comes from the outside as a learned behavior. The role of genes in spirituality is further explored in *Part VI Natural Selection of Reason and Spirituality*. Combined these chapters indicate that humans are inherently happy and good, independent of religion, and that spirituality played a critical role in the evolution and survival of man. A feeling of being associated with something that transcends one's self became an important, rewarding, comforting, and innate part of the human condition.

Additional important chapters relating to the thesis of this book are presented in *Part VII. Other Aspects of Spirituality and Religion*. One chapter examines the origins of the world's major and minor religions. The fact that all three monotheistic religions so closely project the needs, fears, desires, and even the appearance of man is considered to be consistent with the probability that both the religions and the Gods of the religions, were created by man. Mystics, some of whom displayed the symptoms of temporal lobe epilepsy, along with myth and ritual played an important role in bringing a sense of spirituality to the masses. The chapter *Psychedelics and Religion* reviews the important role of psychedelic mushrooms and other plants is imbuing users with a sense of connectedness with a spirituality greater than themselves. Different psychedelics have played a role in the origins of religion on several continents.

Both the benefits and the evils of religion are discussed. The evils relating to religious intolerance, wars, and terrorism are well known. The benefits have been documented in a number of well-controlled scientific studies indicating a longer life span in religious versus non-religious individuals. The reasons for this are complex and include being a part of a supportive social group. The increased survival of individuals who help others is shown to occur independently of religion. Prayer can be beneficial health-wise, for individuals who pray for themselves. This situation allows the power of placebo effect to play a role. When a placebo effect is impossible, such as when individuals are prayed for by others in a randomized controlled fashion, prayer has been proven to be ineffective. The many internal inconsistencies in all the sacred books are most easily understood if man wrote them without divine guidance.

The problem of evil refers to one of the thorniest issues of religion – how can God allow so much evil to occur, both in the form of humans killing humans and natural disasters. While many explanations have been offered, only one explanation is completely satisfactory – that the theory of a personal God is man made and that man created such a God. A God created by man would be powerless to prevent evil.

The latter portion of the final part of the book, *Summary: Did Man Create God?* asks whether our thinking brain is incompatible with religion and faith. It is concluded that for some belief systems such as atheism or non-theism, agnosticism, secular humanism, Buddhism, and Jainism, the rational and spiritual brains are maximally compatible. For belief systems such as Unitarianism and Universalism, Reform Judaism, and Taoism, the rational and spiritual brain are compatible with only minor qualifications. For systems involving a belief in a personal God but not a belief that the Bible or Qur'an (Koran) are literally true – the rational and spiritual brains are compatible but with major qualifications.

What are these qualifications? If our thinking brain understands that spirituality and reason involve distinct and separate parts of the brain, that both are hard-wired and controlled in part by our genes, that both had survival value and were selected during evolution, that humans sometimes firmly believe things that are not always based on fact, and that both rational thought and spirituality can provide significant degrees of pleasure, then our thinking brain can learn to co-exist with our spiritual brain even if it believed in God. All the above beliefs constitute a *rational spirituality*. However, a belief that the Bible or Qur'an are literally true, that one sacred book is better than another, that one God is better than another, and that one religion is better than another – provides a situation in which the rational thinking brain and the spiritual brain are totally incompatible.

Dr. Comings concludes that religious intolerance, wars and terrorism are based on *irrational spirituality* where there is an incompatibility between the rational and spiritual brain, where individuals believe that one person's God is better than another's and that the sacred books are the literal word of God. By contrast a *rational spirituality* allows individuals of all religions to live in peace. This book is a potentially life changing read for anyone who has ever had doubts about their faith or religion but wanted responses that were sympathetic to their spirituality.